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Edited by

Sture Allén, Pierre Corbin, Reinhard R. K. Hartmann,
Franz Josef Hausmann, Hans-Peder Kromann, Oskar Reichmann,
Ladislav Zgusta

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Gregory James

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PREFACE

Parmi les nombreux idiomes du sud de l'Inde, il en est peu qui méritent autant d'être examinés avec soin que le tamoul.
(Burnouf 1828:257)

Although lexicographical tradition in Tamil has an impressive pedigree, extensive research in the discipline is still scarce. Much of what has been achieved is of merit, but a major problem has been that of accessibility to a potentially interested Western readership. It is above all this that I have sought to overcome in my discussion, and if in so doing I appear oversimplistic in presentation, I prey on my readers' indulgence.

Tamil was one of the earliest of the Indian languages to be learned by Europeans, and it was the first language of India to be printed in a book, the *Cartilha ... e lingua Tamul & Portugues* (Lisbon 1554), a 59-page Tamil-Portuguese religious reader, printed in the Roman script, the only known copy of which is held in the library of the National Archæology and Ethnology Museum in Lisbon (Cax. 75).¹ The first book printed in an Indian script was the 16-page Tamil *Doctrina Christiana* by Henrique Henriques and Manoel de São Pedro (Quilon 1578), the only known copy of which is held by the Houghton Library, Harvard University (Typ. 100. 578). Because of its historical importance and its extensive literature, Tamil has been the object of considerable study by foreigners, yet still relatively few non-Indians have penetrated it. The Tamil script is unique, and only those dedicated to achieving a modicum of competence in reading ever learn it. Many morphosyntactic structures of Tamil differ fundamentally from the patterns familiar to speakers of Indo-European languages, to whom also its phonetic repertoire presents singular difficulties. Its lexis is largely - but not exclusively - drawn from the Dravidian stock, and therefore generally presents a heavy learning load for anyone unfamiliar with this language family.

Tamil literature was, at least until the post-missionary period, in great part characterised by the evolution of subject matter generally confined to courtly love, religion and didactics, in metrical compositions of varying degrees of complexity. Works of astrology, eroticism, mathematics, grammar and medicine also exist, and lexicography is one of these specialised, non-literary areas, represented moreover throughout the known history of written Tamil. The corpus is nevertheless restricted, and thus reasonably amenable to study as an entity. In what follows, I have made a deliberate attempt at encapsulating the development of Tamil lexicography, and the traditions this has engendered, for a Western readership I am assuming generally unfamiliar with even the rudimentary facts about the Tamil language and its speakers. If I have thus erred towards excessive explanation of the obvious, I request my readers' patience.

1 A later manuscript copy of this book is held by the Municipal Public Library, Oporto (MS 1135).

My thanks are due to many friends and colleagues for their help, direct and indirect. I should particularly like to mention Thiru Laxman Ganapathy and the late M. Ranganathan, my first Tamil teachers, whose inspiration gave rise to my sustained interest in their language; my erstwhile tutor in the Department of Linguistics in the University of Edinburgh in the heady days of the late sixties, Professor R.E. Asher, who was the first to kindle the spark, and who was kind enough to read and comment upon a first draft of this work; Dr. A. Dhamotharan of the University of Heidelberg; Dr. Jürgen Storz of the Francke Mission Archives in Halle; and Dr. S. Chellappan, Director of the International Institute of Tamil Studies, who afforded me study facilities at that Institute in Madras. In India, I also received valuable help from Professor S. Innasi, Dr. V. Jayadevan, Dr. R. Madhivanan, Thiru K. Ramakrishnan, Thiru M. Shanmugha Subramanian and Dr. P.R. Subramanian in Madras; Thiru P. Aruli, Dr. H. Chithiraputhiran, Dr. P. Mathaiyan, Professor M. Sadasivam, Professor R. Sundaram and Professor V. Veerasami in Thanjavur; Dr. A. Athithan in Madurai; and Dr. E. Annamalai in Mysore. I am grateful too to Ada Fan, Tony Lam, Mary Yuen and Thiru C.M. Arumugam for secretarial help; to Professor Ladislav Zgusta of the University of Illinois for perspicacious comments on my initial presentation; and to Ursula Rieth of Max Niemeyer Verlag, Tübingen, for meticulous editorial advice. Above all I should like to thank my former colleague, Dr. Reinhard Hartmann, Director of the Language and Dictionary Research Centres in the University of Exeter, without whose help, support and loan of books this investigation could not have been conceived.

The staff of the many libraries I have visited have been consistent in their courtesy and helpfulness. I should like to thank in particular the staff of the India Office Library and Records in London, for whom no bibliographical request or enquiry seems too much trouble.

I gratefully acknowledge the financial support afforded me by the British Academy Small Grants Research Fund in the Humanities, the Carnegie Trust for the Universities of Scotland and the Sir Ernest Cassell Educational Trust.

My wife Zelinda and my son Kendrick have valiantly and incredulously tolerated my periodic absences in search of palm leaves in the libraries of Europe; to them I owe a debt of gratitude for their forbearance.

The many shortcomings in this monograph are attributable entirely to my own ignorance or misunderstanding. I have already requested my readers to be indulgent and patient; now I ask them to be generous in their forgiveness.

Niedereimer, North Rhine Westphalia
Michaelmas Term 1989.

Taramani, Madras
Lent Term 1990.

Causeway Bay, Hong Kong
Trinity and Michaelmas Terms 1990.

CONVENTIONS OF TRANSLITERATION

Transliterations of Tamil are given in Times Indian, enclosed in < > brackets, and have no status beyond direct Roman representation of the Tamil spelling. The following conventions are adhered to throughout:

Vowels and Diphthongs

Tamil letter	Transcription
அ	a
ஆ	ā
இ	i
ஈ	ī
உ	u
ஊ	ū
எ	e
ஏ	ē
ஐ	ai
ஒ	o
ஔ	ō
ஔ	au

Consonants

Tamil letter	Transcription	Grantha letter	Transcription
க	k	ஜ	j
ங	ṅ	ஸ	s
ச	c	ஷ	ś
ஞ	ñ	க்ஷ	kś
ட	ṭ	ஹ	h
ண	ṇ	ஸ்ரீ	śrī
த	t		
ந	n		
ப	p		
ம	m		
ய	y		
ர	r		
ல	l		
வ	v		
ழ	ṟ		
ள்	ḷ		
ற்	r̥		
ன்	n̥		
(ஃப)	f		

Subscript point indicates retroflexion (ṭ, ṇ, ṟ, ḷ, ṛ). Nasals are <ṅ> velar, <ñ> palatal, <ṇ> retroflex, <ṉ> dental and <ṁ> alveolar; <y> generally serves to represent a palatal semi-vowel, <j> an affricate, <ś> a retroflex or palato-alveolar fricative, and <ṣ> a retroflex fricative, often popularly transcribed as *ḷ* or *zh*. In spoken Tamil, simple intervocalic voiceless plosives tend to be produced as voiced fricatives; geminate consonants in a similar position tend to be produced as voiceless plosives.

BIBLIOGRAPHICAL NOTES ON SOURCES

The principal reference for Tamil dictionaries is A. Dhamotharan's *Tamil Dictionaries: a bibliography* (Wiesbaden 1978). Works cited here which are listed by Dhamotharan are followed by the letter *D* and the sequential entry number in his list, enclosed in square brackets. Glossaries and dictionaries not mentioned by Dhamotharan, or about which I have provided supplementary information, are preceded by an asterisk in the present text, and full bibliographical details are given in Appendix I. Appendix II includes a selection of emendations to Dhamotharan's entries.

A further bibliography, largely copied from Dhamotharan's, is provided in V. Jayadevan's தமிழ் அகராதியியல் வளர்ச்சி வரலாறு <tamiṭṭ akarāṭiyiyal vaḷarccī varalāru> *History and Development of Tamil Lexicography* (Madras 1985), the main text of which is based on the author's Ph.D thesis submitted to the University of Madras in 1979. The 1985 bibliography is full of glaring inaccuracies of reference and major errors of proof reading, but does give some useful additions to Dhamotharan's compilation, particularly concerning modern editions of early metrical works (cf. Jayadevan 1973) and contemporary journal articles on Tamil lexicography. Works cited here which are listed by Jayadevan are followed by the letter *J* and his sequential entry number, enclosed in square brackets.

Hitherto, treatments of Tamil lexicography have been available in Tamil only. The standard works, in addition to Jayadevan (1985), are Sundara Shanmuganar's தமிழ் அகராதிக்கலை <tamiṭṭ akarāṭikkalai> *History of Tamil Lexicography* (Pondicherry 1965) [D52/J976], Jayadevan's தமிழ் அகராதியியல் <tamiṭṭ akarāṭiyiyal> *Tamil Lexicography* (Madras 1977) [DApp.4/J1025] and V. Veerasami's அகராதிக் கலை <akarāṭik kalai> *History of Dictionaries* (Madras 1989), which includes a section (pp. 9-22) specifically on Tamil lexicographical history. Veerasami's *Tamil Introduction* (pp. xi-xxxix) to Volume 1 of the *GREATER TAMIL LEXICON (Thanjavur 1988) sketches the main features of Tamil lexicographical development.

An abbreviated version of Sundara Shanmuganar's work was published in English (Pondicherry 1967) [D50/J934], consisting merely of an outline sketch of the main lexicographical developments in Tamil. The *Introduction* to the TAMIL LEXICON (Volume 6, 1936) [D55, 366/J311, 940] contains an extensive description in English, by the Chief Editor, S. Vaiyapuri Pillai, of the main currents of Tamil lexicography, with illustrations of the development of dictionary entries over a considerable period. Arunachalam (1976), Joseph (1978), Jayadevan (1980), Thillainayagam (1980), Shanmukham Pillai (1981) and Subramanian (1982) offer little new information to that provided by Vaiyapuri Pillai.

CHAPTER ONE

[In] Southern India there are the dark-skinned Dravidians, whose origin is a mystery to science. The greatest controversy ... centres round the Tamils, a Dravidian people with a distinctive culture.

(Kondratov 1974:122)

1.1 Background

Our odyssey, tracing the development of Tamil lexicography, may even be said to begin not in India, but perhaps in the Pontic-Caspian region, north of the Caucasus mountains, to which belt some contemporary opinion assigns a later, if not earlier, homeland to speakers of proto-Indo-European.¹ It is generally accepted that it was the Dravidian languages which were originally predominant throughout India, but that they were pushed southwards by the invading Indo-Europeans from the north-west - "destroyers rather than creators of Indian civilization" (Childe 1939:15) - between the third and second millennia BC.

That there were Dravidian languages in the north would be mere speculation if it were not for the fact that, to this day, there remains a pocket of Dravidian speech, the language Brahui, spoken ... in the highlands of Baluchistan ... Notwithstanding the meagre nature of the historical evidence, it seems more reasonable to assume a relict status for Brahui, rather than an improbable migration from the plains ... some 800 miles away, and the exchange of a settled agricultural regime for a harsh, and pastoral one.

(Marr 1975:31; cf. Zvelebil 1972)

Brahui may nowadays number around 500,000 speakers (Crystal 1987:308).²

the Dravidians, like the Aryans a millenium later, entered India by the N.W. passes ... Near the Bolan pass are the first Dravidian settlements in India, namely at Mehi, Kulli, Nal and Amri, C. 2900 B.C.

(David 1955a:80; cf. Kondratov 1974:148)

Brahui would thus represent a surviving element of the first Dravidian settlement in India. This view is controversial, however, and touches the sensibilities of Dravidians who feel that their race and languages are native to India: cf. Barnett (1913:33); Lévi (1923); Sessa Iyengar (1925: 24); Purnalingam Pillai (1927: 21); Dikshitar (1951).³ It is surmised that the languages of the Indus Valley cultures (Harappa, Mohenjodaro) of the third millenium BC were Dravidian (but

1 Persuasive, if controversial, arguments are marshalled by Mallory (1989).

2 See Varma (1982) for a discussion of the relationships between Brahui and Tamil.

3 See Emeneau (1956), Subramoniam (1961) and Burrow (1983) for discussions of early Dravidian borrowings into Sanskrit, and Thomas Burrow and Murray Emeneau's *DRAVIDIAN BORROWINGS FROM INDO-ARYAN* (Berkeley 1962) [D369/J295] and S. Vaidyanathan's *INDO-ARYAN LOAN WORDS IN OLD TAMIL* (Madras 1971) [D371/322] for Indo-European words in Tamil. Cf. Walldén (1980).

cf. Hunter 1934:12; Pillai 1979:27), but what would provide evidence of the accuracy of this - seals, inscriptions etc. - have so far resisted decipherment (Zvelebil 1983).⁴ There is almost universal agreement, however, that the Indus people were not Indo-European.

If we accept ... that speakers of Dravidian languages were productive of cultures as far back as the third millennium B.C. ... we are still faced with a gap of 1,500 years during which no certain records of Dravidian were produced ... when, we may assume, [they] were overthrown from their culture-centres in north India and pushed into the centre and south of the peninsula by the Indo-Aryans. (Marr 1975:32)

How the Dravidians came to India has long been a matter of speculation (cf. von Fürer-Haimendorf 1954; Balakrishnan Nayar 1963). Tamil literature has many references to a sea-engulfing legend, associated with the mythical continent of Lemuria (Dikshitar 1951; Joseph 1959; Kondratov 1974; Aravaanan 1978). Natural historians such as Charles Darwin (1809-1882), Thomas Huxley (1825-1895) and Ernst Haeckel (1834-1919) as well as Friedrich Engels (1820-1895) shared the view that a developed race of anthropoid apes had lived in Lemuria, reaching from India to Indonesia and Australia, the cradle of *homo sapiens* and human civilisation, a legend still alive amongst Tamils nowadays (cf. Britto 1986:64-66).⁵ A full epigraphically attested history of Dravidian begins, however, only in the middle of the sixth century AD (Zvelebil 1983:18).

Attempts have been made to link Dravidian with Basque (Lahovary 1964), Indo-European (Gnana Prakasar 1953), Uralian languages (Schrader 1925), Altaic languages (Vacek 1983), Finno-Ugric (Bálint-Ilés de Szentkatolnai 1898; Szabo 1984), Australian languages (Prichard 1843; Schmidt 1919), Sumerian (Kinnier Wilson 1964; Loganatha Muttarayan 1975; Szabo 1984), as well as Korean (Clippinger 1984) or Japanese⁶ (Ohno 1982), but no one theory has gained universal acceptance. Robert Caldwell (1814-1891) - who did not accept that Brahui was Dravidian - and Rasmus Rask (1787-1832), saw an affiliation between the Dravidian and

4 Cf. Pizzagalli (1929); Crown (1971). Rao (1980) claims that Harappan records a form of Sanskrit. Parpola et al. (1969), Aalto (1975), Mahadevan (1975), Rauff (1987) and Mallory (1989) argue for the Dravidian camp. Lal (1960) shows that most of the graffiti on the Deccan megalithic red-and-black ware are similar to signs on the Harappa seals. Cf. Britto (1986:63-64). Malayandi (1980) contends that the Indus script records not only a proto-Dravidian language, but Tamil itself.

5 Cf. Madhivanan (n.d.(b):8): "Westerners do not know ... that Tamil is a highly developed classical language of Lemurian origin and has been, and is being still, suppressed by a systematic and co-ordinated effort by the Sanskritists." This is a restatement of the Dravidian (specifically Tamil) tendencies, which stimulated the work of e.g., Sundaram Pillai (1895), Kanakasabhai Pillai (1904), Smith (1904), Barnett (1913), Richards (1916), Krishnaswami Aiyangar (1923), Slater (1924), Sesha Iyengar (1925), Purnalingam Pillai (1927), Srinivas Iyengar (1929), Shamshastri (1930), Sivaraja Pillai (1932) and Dikshitar (1947), in their quests to demonstrate the cultural development of Dravidian south India was independent from, and in cases influenced, that of the north. Cf. Shanmugam (1973:12): "contemporary speculations identifying the Brahmins with the Aryans, and Tamil with the original Dravidian language, were eagerly seized on by the leaders of the non-Brahmin castes to manufacture an elaborate theory of Brahmin Machiavellianism throughout [the] centuries"; and Jaiswal (1974:135): "the problems of origin and antiquity were the main obsessions of the Tamil historians in the pre-Independence period. The[ir] desire ... to deny all traces of 'foreign' origin and influences and to claim a very high antiquity and a glorious past of their civilization was ... a reaction to the humiliation of long foreign subjection. But the revivalist tendency clouded ... judgement, and ... blind and uncritical reliance was placed in epic myths and ... stories for the reconstruction of the history of the south". Cf. Srinivas (1966:104ff.).

6 See Miller (1986) for a forceful refutation of this claim.

'Scythian' (Altaic/Finno-Ugric) languages, and, indeed, the Nostratic theory of prehistoric language development would trace all languages in the Indo-European, Uralic, Altaic, Hamito-Semitic and Dravidian families to a common ancestor (Bomhard 1984). Claims have been made for a Dravidian connection with the Incas and Mayas as well as the Chinese (Krishna Menon 1937) and it has been suggested that the Tamils descended from Mongolians and Nepalese who migrated south before the fifth century AD and modified the Dravidian language already spoken there (Kanakasabhai Pillai 1904).

Speculative work in etymology is evidenced from surviving manuscripts of nineteenth-century linguists, including those of Niels Fuglsang (1759-1832), *NOTES ON TAMIL VOCABULARY - attempts to relate Tamil lexically to Greek, Latin, French, Danish, English and German, in the Royal Library, Copenhagen (*MS Ny kgl. Saml. 150ba 4^o); Rasmus Rask, *COMPARATIVE VOCABULARY LISTS WITH LEXICAL NOTES, in the Royal Library, Copenhagen (*MS Ny kgl. Saml. 149c 105 4^o); Brian Hodgson (1800-1894), *COMPARATIVE ANALYSIS OF THE HORPA, SOKPA, SIPANESE, TIBETAN, HIMALAYAN, INDO-CHINESE AND TAMULIAN LANGUAGES, in the India Office Library, London (*MSS Hodgson 22 & 23); and Édouard-Simon Ariel (1818-1854), *RADICAUX TAMOULS, in the National Library, Paris (*MSS Indien 160-161).

The theory of an Elamite origin of the Dravidians was hinted at, but not elaborated upon, by David (1955a:78):

Between 4,500 and 4,000 B.C. the Elamites made their first advances towards civilization ... North-east ... but within their influence, lived the Dravidian races. A section of them cherished the Elamite civilization and peacefully extended their colonies into ... Afghanistan and Baluchistan ... But the vast majority ... were nomadic herdsmen [who] roamed the frontiers of Sumer and Elam to ... Turkistan ... [and] learned to develop the city-life ... which their ancestors had seen in their dealings with Elamites ...

Balakrishnan Nayar (1963) also contended that the Dravidians entered India from Mesopotamia, via Iran, in the first millenium BC.⁷ David (1955a) claimed that there was evidence for the presence of Indian merchants in Elam and Sumer with "an alien tongue and religious customs", but perhaps the possibility of affinity between Elamite and Dravidian was not considered.⁸ The thousand-year separation would have generated two cultures, two (or more) languages apparently unrelated. More recently a convincing case has been made for the reconstruction of a proto-Elamo-Dravidian language, which would have disintegrated (into Elamite vs Dravidian) in the fifth millenium BC (McAlpin 1974a, 1974b, 1981).

Whether Dravidian languages ... existed in India from the beginning of man in the sub-continent, or were themselves incursors ... is likely to remain unresolved ... Similarly there remains ignorance of what languages were spoken by the various Stone Age cultures in India ... The most promising ... link with the ... theory of the Mediterranean affinities of the Dravidians is provided by the south Indian megalithic culture. This, however, may not itself be older than about 200 B.C. (Marr 1975:32)

7 Cf. Kondratov (1974:136-138) on the Ubaid, a pre-Sumerian people who inhabited Mesopotamia as early as the fourth millenium BC. "The features which the proto-Indian culture and the Mesopotamian culture have in common may quite possibly be explained by the fact that the people who created the oldest Indian civilisation and the first men to develop the valley of the Tigris and Euphrates were cognate peoples speaking Dravidian languages. Or perhaps they were simply one and the same people." (ibid.:143)

8 See also David (1956a, 1956b); and Rawlinson (1916:5) for references in early Buddhist literature and in the writings of Berosus of Babylon (c.260 BC).

The cultures of south India arose from the Deccan megalithic culture of the first millenium BC - "extremely uniform over time and space" (Hart 1974:157) - and the gradual influence of the sanskritic culture of the north upon it. According to Srinivasan (1946:15), the later limit of the megalithic and urn-field burial customs in South India can be dated to the beginning of the fifth century AD.

[This culture] did not wholly die or become assimilated by the Sanskritic culture ... the two traditions existed side by side in South India, influencing one another but never wholly merging. (Hart 1976:339)

The gradual percolation of Aryan influence into Tamil culture can be perceived from the different strata of early literature, until they are completely intermingled.⁹

While the Dravidians were ... Aryanised in language, the Aryans were Dravidised in culture.
(Slater 1924:63)

1.1.1 *Græco-Roman contacts*

That the Greeks and the Romans knew of the Dravidians is well attested,¹⁰ and trade was established between the Mediterranean and the Malabar and Coromandel coasts of India at an early date.

The antiquity and importance of the sea link between southern peninsular India and the Middle East (and later, via the Middle East, with the Roman Empire) cannot be exaggerated. (Marr 1975:33fn.12)

The anonymous author of the *Periplus of the Erythraean Sea* (C1st. AD) (cf. McCrindle 1879: 125-126; Majumdar 1962; Chattopadhyaya 1980) refers to Λιμυρικη /limurike/, evocative of 'Lemuria', and Ptolemy's *Geography* (vii.1, C2nd. AD) to Δαμιλα /damila/ (cf. McCrindle 1885; Kanakasabhai Pillai 1904:17. In the ?C2nd.-C4th AD imperial Roman road maps, the Peutinger Tables,¹¹ there is found the earliest reference to Δαμιρικη /damirike/ (Sinnatamby 1971). During the second century AD, the Romans had a garrison of some 2,000 men stationed in the west-coast port of Muziris (Cranganore) to protect their extensive maritime trade in the area, and a temple is known to have been erected there in honour of Augustus (Sesha Iyengar 1925:141).

In Sanskrit literature, we find the forms द्रविडि <draviḍi> and दमिलि <damili> (used regularly however for people rather than places; Dikshitar 1951:202-205), and there is a certain linguistic security in relating these.

The etymological association of all of these forms, possibly traceable to an unattested proto-Dravidian source word, is generally accepted nowadays (though not, of course, conclusively

9 Cf. Krishnaswami Aiyangar (1923); Dikshitar (1930); Subba Rao (1962); Asher (1972); Zvelebil (1983:25).

10 Cf. Reinaud (1863); McCrindle (1901); Kanakasabhai Pillai (1904); Smith (1904); Williams Jackson (1907); Reese (1914); Banerjee (1921); Sesha Iyengar (1925); Warmington (1928); Nilakanta Sastri (1939a); Wheeler et al. (1946); Bagchi (1951); Wheeler (1951); Majumdar (1958); Law (1959, 1961); Puri (1963); Gupta (1969); Margabandhu (1983); Rau (1983); André & Filliozat (1986); Tola & Dragonetti (1986).

11 C12th. manuscript, Vienna, National Library of Austria (MS Cod. 324).

proven), with the modern Tamil exponent, தமிழ் <tamiṭ> 'Tamil' being the contemporary descendant.¹²

There is, however, no justification for assuming that, at the period of the classical geographers, the word meant ... Tamil ... as at present differentiated from other south Indian tongues. It seems more likely that there was at that time a relatively undifferentiated non-Indo-Aryan speech in the south to which the term Proto-Dravidian is usually applied. Such a situation must have obtained long before the earliest surviving literary or other records in what is now the Tamil-speaking area ... (Marr 1975:30)

The main trade contacts with south India were established from the time of Augustus (C1st. BC) to that of Constantine (beginning of C4th. AD) (Gupta 1969; Margabandhu 1983). There is evidence that some of the major Indo-Roman commercial centres, e.g., Arikamedu, south of Pondicherry, were abandoned early in the third century, when Roman trade routes were taken over by Arab seafarers. It is not known what languages the Europeans and the Indians used to conduct their trade: certainly there would have been some learning of each other's tongues, to various degrees of proficiency according to perceived requirements. Groups of Greek traders (Kanakasabhai Pillai 1904:25-26; Nilakanta Sastri 1955a:81-82) and Roman military personnel (Reinaud 1863:188; Margabandhu 1983:194) are known to have settled in towns on the Malabar and Coromandel coasts, and the existence of such semi-permanent population groups would naturally have given rise to sustained linguistic interaction with the inhabitants. There are many references to யவனர் <yavanar> 'Yavanas' (= Ionians, or Greeks)¹³ in ancient Tamil literature. In e.g., முல்லைப்பாட்டு <mullaippāṭṭu>, a poem of the third to the fifth centuries AD, we find:

The chief retires within an inner room
Without are coated Mlecchas standing guard.

By Yavanas built ...
They cannot speak, they only gestures show.
(Chelliah 1946:91.73-74; 81-82)

The Greeks were employed as builders, a situation which argues for the existence of linguistic interaction between them and the Tamil speakers, if only through interpreters. The identity of the 'Mlecchas' (மலேச்சர் <milēccar>), or foreigners, is evidently different from that of the Greeks. (By the time of *Tivākaram*, a Tamil lexicon of the eighth or ninth centuries AD (see §

12 Cf. Narayanasami Naidu (1968). See Sanjeevi (1977) and Subramanian (1980) for discussions of the occurrence of this term in early Tamil literary sources. Cf. Colebrooke (1801:226): "Davira is the country which terminates the peninsula of India. Its northern limits appear to be between the twelfth and thirteenth degrees of north latitude. The language of the province is *Támel*, to which Europeans have given the name of Malabar, (fn. A learned *Brāhmen* of *Drávira* positively assures me, that the dialect of Malabar, though confounded by the Europeans within the *Támel*, is different from it: and is not the language, to which Europeans have allotted that appellation.) from *Malaywár*, a province of *Drávira*. They have similarly corrupted the true name of the dialect into Tamul, Tamulic, and Tamulian: (fn. The Romish and Protestant missionaries, who have published dictionaries and grammars of this dialect, refer to another language, which they denominate Grandam and Grandonicum. It appears that Sanscrit in meant; and the term, thus corrupted by them, is Grantha, a volume or book.) but the word, as pronounced by the natives is *Támila* or *Támalah*; and this seems to indicate a derivation from *Támra* or *Támraparni*, a river of note which waters the southern Mathura, situated within the limites of *Drávira*. The provincial dialect is written in a character, which is greatly corrupted from the parent Dévanágari; but which nevertheless is used by the *Brāhmens* of *Drávira*, in writing the Sanscrit language."

13 Cf. Meile (1940); Chelliah (1946:83): "Yavanas were employed for building and artistic work. Originally the term Yavana was applied to the Greeks ... later extended to the Romans."

2.3 below), மிலேச்சர் <milēccar> is given as a synonym of ஆரியர் <āryā> 'Aryan'.) Was it that they were mute? Or was it that they just did not speak Tamil, and had to resort to gestures to communicate? The existence of Dravidian/Greek bilingualism is attested by extant parts of a drama from the *Oxyrhynchus Papyri* (C2nd. AD):

the scene is the coast of a barbarian country bordering upon the Indian Ocean ... the subject is the adventures ... of a party of Greeks chief among whom is Charition, the heroine of the drama ... [who] had not improbably been carried off ... by pirates, and had so come into the hands of the barbarians, whose Greek-speaking king ... is one of the characters of the play ... [The] fragment describes her rescue by her brother and others who had arrived by sea, and who succeed in effecting their escape after making her captors drunk. (Grenfell & Hunt 1903:42)

The apparent nonsense syllables put into the mouths of the Malabar coastal inhabitants with whom the Greeks find themselves having to communicate have tentatively been identified as Kannada (Hultzsich 1904:309), an instance which argues for incipient dialectal differentiation of Dravidian by the period in question.¹⁴ The playwright may have known some words of a Dravidian language, possibly through contact of trade or residence. He was certainly aware of what it sounded like, and he could indicate juncture in it.¹⁵ He was also able to put together some possibly meaningful sentences, translated into Greek, or reacted to through the bilingual characters. There are mixed-code puns and fun-poking by the non-Dravidian-speaking Greeks, very much in the vein of Nym, Bardolph and Pistol in Shakespeare's *Henry V*, Iii. The play was for a Greek audience: the Greeks make fun of the Indians' language; and bilingualism is a characteristic of the upper-class Indians, who (of course) speak Greek as well as their own language. However, Charition's brother apparently understands the Indian language too, but in this fragment confines his exhibition of such knowledge to interpretation into Greek. If the brother had been a professional seafarer, he may have learned something of the coastal language through his maritime activities. Greek was evidently not the exclusive *lingua franca* of Indo-Greek contacts, however much the Greeks might have wished that it should be.

Commerce between the Græco-Roman and Dravidian cultures led to lexical borrowing. (In a similar vein, English contact with Tamil has given e.g., *catamaran*, *cheroot*, *curry*, *mulligatawny*, *pariah* and possibly also *cash* and *coolie*.) Legrand (1954) claimed:

அரிசி	<arici>	>	ὄρυζα	/oruza/	'rice'
பிப்பலி	<pippali> (Skt.)>		πίπερι	/piperi/	'pepper'
இஞ்சி(வேர்)	<iñci(vēr)>	>	ζινγίβερι	/zingiberi/	'ginger'
சாந்தன	<cāntana> (Skt.)>		σάνταλον	/santalon/	'sandal(wood)' ¹⁶

but confused loan words with possible cognates, or coincidences, suggesting, e.g., Gk. γάλα /gala/ 'milk' < Tam. பால் <pāl> 'milk'; Gk. πάλαι /palai/ 'long ago' < Tam. பழைய <paṭaiya> 'old'. More recently, overzealous attempts to raise the consciousness of modern Tamil self-

14 Cf. Chatterji (1956) who identifies 'Ancient Tamil', spoken prior to 500 AD, and 'Old Tamil' as that of 500-1350 AD. He does not commit himself as to the possible period of emergence of the former.

15 Cf. Grenfell & Hunt (1903:43): "The speeches in the barbarian language are usually written continuously, like the Greek, without separation of words; but in one passage ... the words are divided by points."

16 See also Rawlinson (1916) for Tam. *aghil* (? காழ்கில் <kāṭṭakil> 'aloe') > Heb. חֲלִיל 'ā hālīm 'Aquilaria agallocha'; Tam. *karppu* (? காற்பு <kārppu> 'pungency') > Gk. κάρπιον /karpion/ 'screw pine'.

awareness and self-esteem in the face of increasingly dominant Western societal patterns and values (see § 4.3 below) have led to the absurdities manifest in extremes of e.g., Gnana Giri Nadar in *TAMIL - ITS CONTRIBUTION TO THE EUROPEAN LANGUAGES: AN ETYMOLOGICAL SURVEY* (Madras 1972) [D364/J304],

*LATIN WORDS OF TAMIL ORIGIN (Madurai 1981),

*A STATEMENT IN TAMIL-EUROPEAN LINGUISTICS IN THE MATTER OF GREEK AND LATIN WORDS OF TAMIL ORIGIN (Madurai 1982a),

*GREEK WORDS OF TAMIL ORIGIN - AN ETYMOLOGICAL LEXICON (Madurai 1982b); and

*ENGLISH WORDS CONTAINING TAMIL ROOTS (Madurai 1985),

claiming that 39% [!] of English words "dealt with in an [unnamed] Etymological dictionary ... are ultimately of Tamil origin" (1982a:[xiv]).¹⁷ His convoluted rules for etymological development are ingenious, but quite baseless. He manages, for example, to convince himself (1982b) of the plausibility of *inter alia*: Tam. உறுதி <uruti> 'good' > L *probus* 'excellent'; Tam. உரி <uri> 'skin' > Gk. πέσκος /peskos/ 'skin'; Tam. வண்மை <vaṇmai> 'honour' > L *honor* 'honour'; Tam. வரைப்பு <varaippu> 'an enclosed place' > L *hortus* 'garden'; Tam. வாயில் <vāyil> 'door' > L *ostium* 'door'. (Cf. Myleru 1952; Ramachandra Rao 1962; Roy 1962; Devaneyan 1966, †1985.)

That such outlandish theories do have credibility is illustrated by the unfortunate acceptance of Southworth's (1982) spoof article on Tamil 'etymology' by the otherwise reputable *International Journal of Dravidian Linguistics*. Bhat's (1983) subsequent refutation came only after complaints to the editor from readers who saw through the nonsense. The topic of etymology is an important one in contemporary Tamil lexicography, however, and will be taken up below (see §§ 4.3, 4.4). No Dravidian/Indo-European glossaries, or any form of commentary, have survived, if, indeed, any ever existed. The evidence of the languages in contact - apart from a few loans - is of transcriptions of place and personal names from south India, as in the classical geographers' accounts of the area.

No comprehensive Greek-Tamil or Tamil-Greek dictionary has been compiled. J.S.M. Hooper's *GREEK NEW TESTAMENT TERMS IN INDIAN LANGUAGES - A COMPARATIVE WORD LIST (Bangalore 1957) contains a number of Tamil items, including Protestant and Catholic translations of Greek biblical terms. Latin has been better served, with Costanzo Beschi's VULGARIS TAMILICÆ LINGUÆ DICTIONARIUM TAMILICO-LATINUM (1742/1827) [D246, 247/J411, 412] (see § 3.1.6 below);

17 This is probably a reference to Skeat's *ETYMOLOGICAL DICTIONARY OF THE ENGLISH LANGUAGE, ARRANGED ON AN HISTORICAL BASIS* (Oxford 1882), mentioned by Gnana Giri Nadar (1980:309), though which of the many editions of the work is not specified. In spite of his actually citing a letter (ibid.:307) from the Greek Ambassador to India to whom he had sent an earlier version of his 1982b work, in which the Ambassador wrote a perceptive rebuttal of the claims made: "you have not substantiated, neither historically nor otherwise your contention that the Greek words mentioned are of Tamil origin. It may be the other way round or the kinship may be due to a common heritage," Gnana Giri Nadar persists with his contention that his research "has brought to light, that in thousand [sic] of technical terms, the root-words of Tamil have through the Hellenic, Italo-Celtic and Teutonic, passed into the Vocabulary of the modern world and that there is no culture today which does not to some extent express itself with root-word [sic] of Tamil" (op. cit.:309). He claims that 40% of Skeat's (unspecified edition) entries "have been convered [sic] by the Tamil root-words" and "at least ... 50 percent are likely to be covered by the Tamil root-words ... showing English tongue as half-Tamil" (ibid.)!!

Joseph Gury's DICTIONNAIRE TAMOUL-LATIN (Nagapatnam 1852) [D248/J413] (see § 4.1.7 below); and

Sundara Shanmugam's தமிழ் இலத்தீன் அகரவரிசை <tamiṭ ilattīṇ akaravaricai> (Tamil-Latin dictionary) (Pondicherry 1970) [D249/J414].

Multilingual dictionaries have included Beschi's LEXICON LUSITANO-LATINO-TAMULICUM (1742) (Part 2 of DICTIONARIUM TAMULICO-LATINUM) [D353/J539] (see § 3.1.6 below); and

Louis-Savinien Dupuis and Louis-Marie Mousset's DICTIONARIUM LATINO-GALLICO-TAMULICUM (Pondicherry 1846) [D351/J547] (see § 4.1.7 below).

In the eighteenth century, Louis de Bourzes is reported to have compiled a *DICTIONNAIRE TAMOUL-LATIN and a *DICTIONNAIRE LATIN-TAMOUL (see § 3.1.7 below), and Bartholomäus Ziegenbalg a *LEXICON TAMULICO-LATINUM (see § 3.2.1 below). These are no longer extant.

Tamil etymological dictionaries have included the following: S. Gnanaprakasas's ETYMOLOGICAL AND COMPARATIVE LEXICON OF THE TAMIL LANGUAGE, WITH INDEXES OF WORDS QUOTED FROM INDO-EUROPEAN LANGUAGES (Cunnakam 1938-1946) [D365/J305], of which only Volume 1, in six parts, was published;

Thomas Burrow and Murray Emeneau's DRAVIDIAN ETYMOLOGICAL DICTIONARY (Oxford 1961) [D360/J292] with SUPPLEMENT (Oxford 1968) [D361/J293]; and

H.S. David's ETYMOLOGICAL AND COMPARATIVE LEXICON OF THE TAMIL LANGUAGE PART 1 (Jaffna 1970) PART 2 (Jaffna 1972) [D363/J302].

The prolific modern Tamil lexicographer, Dr. M. Sadasivam, Librarian of the Saraswathi Mahal Library, Thanjavur, has prepared a hitherto unpublished *DICTIONARY OF TAMIL WORDS WITH THEIR ORIGINS (cf. Vadivelan 1980:61). (In addition to thirty-six other unpublished compilations (see Appendix I Nos. 77-85, 138, 186-189, 223, 283-286, 306-307, 324, 355, 371-381), Sadasivam has also written: a DICTIONARY OF RHYMING WORDS (Madras 1965a) [D208/J864],

a DICTIONARY OF ANTONYMS (Madras 1965b) [D209/J853],

a DICTIONARY OF ONOMATOPOEIC EXPRESSIONS (Madras 1966a) [D210/J854],

a DICTIONARY OF EPITHETS AND NAMES OF MAHASARASWATI (Madras 1966b) [D670/J865],

a DICTIONARY OF EPITHETS AND NAMES OF MAHALAKSHMI (Madras 1966c) [D671/J865],

a DICTIONARY OF EPITHETS USED FOR SRI VINAYAKAR (Madras 1966d) [D672/J865],

a dictionary of THE THOUSAND NAMES OF SRI VINAYAKAR (Madras 1967) [D673/J865],

a DICTIONARY OF EPITHETS USED FOR RAMA IN KAMBAN'S RAMAYANA (Madras 1969) [D703/J866],

a DICTIONARY OF EPITHETS USED FOR WOMEN IN KAMBAN'S RAMAYANA: SITA (Madras 1970) [D704/J867],

a DICTIONARY OF NAMES AND METAPHORS FOR WOMEN IN LITERATURE (Erode 1972) [D674/J868],

*ஐம்பொறி அகராதி <aṁpoṟi akarāti> (DICTIONARY OF PHRASES AND COLLOCATIONS WITH THE WORDS FOR THE FIVE SENSES IN TAMIL). (Erode 1980); and

with S. Sivaramalingam, A CLASSIFIED ENGLISH-TAMIL DICTIONARY (Madras 1962) [D299/J495]).

The Government of Madras' Tamil Etymological Dictionary Project currently in progress, aims at the publication of a *COMPREHENSIVE ETYMOLOGICAL DICTIONARY OF THE TAMIL LANGUAGE, of which Volume 1 Part 1 appeared in 1985 [J327] (see § 4.3.1 below).

1.1.2 Chinese contacts

There is some evidence of Indo-Chinese contact from the period of the Western Han dynasty of the second century BC; cf. Pelliot's translation of an extract from *Ts'ien han shu* (前漢書) by Pan Kou (班固) (> C1st. AD):

Du royaume de Fou-kan-tou-lou, en allant en bateau pendant environ plus de deux mois, il y a le royaume de 黃支 Houang-tche. Les coutumes du peuple y ressemblent ... à celles de 珠厓 Tchou-yai. Ces îles (州) sont grandes; les habitants (戶口) y sont nombreux; ils ont beaucoup de produits étranges (異物). A partir de l'empereur Wou (140-86 av.J.-C.), ils ont tous offert le tribut. Il y a des chefs interprètes (譯長) qui dépendent ... du palais (黃門 houang-men) ... avec des recrues (應募者) ... ils prennent la mer, et vont acheter les perles brillantes (明珠), le 璧流離 verre ... les pierres rares (奇石), les produits étranges, donnant en échange de l'or (黃金) et les diverses soieries (綺縠).
(Pelliot 1912:xiii.457-458, from *Ts'ien han shu*, Ch. 28, ff.17a/b)

No firm identification of the locations cited has been made, but there is reason to believe that they may refer to sites along the Coromandel coast. Further, a coin find has led scholars to interpret that maritime contacts between China and southern India date from at least the second century BC.¹⁸ What languages the interpreters translated into and from Chinese, and whether these interpreters were Chinese or Indian, remain mysteries: it is just possible that there may have been Chinese who spoke a Dravidian language, notably Tamil as the eastern coastal language, but at the present state of knowledge this is conjecture. By the Eastern Han dynasty of the first century AD, there were Chinese as well as Greek communities in Puhar, at the mouth of the River Kaveri (Sesha Iyengar 1925:147). By the Northern Song and the Liao dynasties of the eleventh century AD, extensive commercial links with China had been established, and three or four embassies were sent between 1015 and 1077 (Nilakanta Sastri 1955b: 129; Karashima 1971:69). Chau Ju-kua (C13th. AD) mentions interpreters with these embassies, but their languages of communication are unknown. Cf. also Lévi (1905).

1.1.3 Middle Eastern contacts

[It] is quite certain that an active sea-borne commerce sprang up about 700 B.C. between Babylon and Farther East and that India had an active share in it.
(Banerjee 1921:6)

According to Rabin (1971:438), there is evidence of some Tamil words in Hebrew even of the

¹⁸ Cf. Banerjee (1921:39-48). The find was of an isolated specimen; see Karashima (1971:70) for a claim that the coin in question dates from the eleventh century AD. In the *Periplus of the Erythraean Sea* there is mention of overland trade between China and the Malabar coast.

sixth, possibly even the tenth, century BC, and Caldwell (1856) noted that the oldest specimen of Tamil is the occurrence of 𑌢𑌶𑌷𑌸 *tukiyim* <தோகை <tokai> 'peacock', in 1 Kings x.22 and 2 Chronicles ix.21.¹⁹ The Bible (Job xxii.24, xxviii.16; Psalm xlv.9; Isaiah, xiii.12) also provides evidence of a Hebrew proverb 'gold of Ophir': Ophir has been variously sited in southern Arabia (Oman, Yemen) or the Malabar or Gujerat coasts. Tradition has it that soon after the destruction of the second Temple in Jerusalem in 68 AD, a large group of Jews fled and settled on the Malabar coast (Oppert 1897; Fischel 1962, 1971; Segal 1983). There is apparently no mention of this Jewish colony in extant Tamil literature, but by 192 AD, the date of some copper deeds still in the possession of the Cochin community, it had evidently become established. The text of the deeds gives the interesting insight that foreigners could use sandals, umbrellas and palanquins only with the specific permission of the king (Kanakasabhai Pillai 1904:62). At the time, then, there were foreigners in the area, and one may surmise that there will therefore have been some degree of bilingualism in Dravidian and other languages, although no obvious evidence survives of this.

1.2 The modern situation

Apart from the speakers of Brahui, in Baluchistan and Sind, Dravidian languages are nowadays largely found in southern India and northern Sri Lanka, approximately in the area south of the eighteenth parallel. There are estimated to be some twenty languages in the Dravidian family altogether, of which three, Gondi, Kurukhi and Tulu, have over a million speakers each,²⁰ and four Dravidian languages are recognised as official languages of the Union under the eighth Schedule to the Constitution of India (Annamalai 1977; James 1983), each with its own distinctive script (Kannaiyan 1960; Meenakshisundaran 1966):

Kannada (or *Canarese*), the official language of Karnataka (cap. Bangalore), with around 25,000,000 speakers;

Malayalam (formerly called *Malabar*), the official language of Kerala (cap. Trivandrum), with around 25,000,000 speakers;

Tamil (also formerly sometimes called *Malabar*), the official language of Tamil Nadu (cap. Madras), with over 50,000,000 speakers; and

Telugu (formerly sometimes referred to as *Gentoo* or *Telinga* or *Moorish* or *Varuga*) the official language of Andhra Pradesh (cap. Hyderabad), with considerably in excess of 50,000,000 speakers.

Tamil, whose speakers worldwide are estimated to number c.60,000,000 (Britto 1986:60), is

19 Cf. Sessa Iyengar (1925:133-136). Some say Heb. *tukiyim* = 'baboons' (cf. Bromiley 1986:773), but see *Encyclopaedia Judaica*, vol. 13 col. 200: "*tukkiyim* ... are most probably to be identified with peacocks ... in Tamil *togai*, *tokai*, an identification found also in ancient [Syriac and Arabic] translations".

20 Figures are from Crystal (1987:308): "New languages continue to be reported - Naiki, Pengo, and Manda have been identified only since the early 1960s." See †G. Devaneyan Pavanar, *செந்தமிழ்ச் சொற்பிறப்பியல் பேரகரமுதலி <centamiṛc corṇipappiyal pērakara mutali> (A COMPREHENSIVE ETYMOLOGICAL DICTIONARY OF THE TAMIL LANGUAGE), vol. 1, part 1 (Madras 1985:lxiv-lxv) for groupings and estimations of populations of speakers of Dravidian languages.

unique amongst Indian languages in being the official language of two other countries: (with English and Sinhalese) of *Sri Lanka* and (with Chinese, English and Malay) of *Singapore*. The Tamil area of India is concentrated in the state of *Tamil Nadu*, with sizeable populations speaking Tamil in neighbouring states. Tamil Nadu was once part of the Presidency of Madras in British India, but was formed as a separate state on linguistic lines within the Republic of India in 1956. Tamil is, thus, mainly found within the area 8°N-14°N and 77°E-81°E, which includes the northern part of Sri Lanka, a majority Tamil-speaking region.

Tamil Nadu has three distinct geographical areas: the Coromandel coast (monsoon forest, mostly deciduous); the inland area (dry tropical forest, mostly semi-deciduous); and the mountain area. It lies in the path of the south-west monsoon in summer and the north-east monsoon in winter. The main crops are bananas and other fruit, tea and rice. The foundation is pre-cambrian, and the principal minerals found are magnesite, thorium, titanium and zirconium.

During the colonial period, in the nineteenth and early twentieth centuries, many Tamils went overseas, principally to work on tea and rice plantations, and numbers of Tamil speakers can still be found in Central and South America, British Guyana, Fiji, Indonesia, Madagascar, Malaysia, Martinique, Mauritius, Reunion, South Africa, Trinidad and Vietnam (Britto 1986: 60). The main Tamil centres (italics = district headquarters in Tamil Nadu) are Batticaloa (Sri Lanka), Chidambaram, Chittur, *Coimbatore*, *Cuddalore*, *Dharmapuri*, *Dindigul*, *Erode*, Jaffna (Sri Lanka), *Kanchipuram*, *Madras*, *Madurai*, *Nagercoil*, *Udhagamandalam* (Ootacamund, Ooty), Pondicherry, *Pudukkottai*, *Ramanathapuram* Ramnad, *Salem*, *Sivagangai*, *Thanjavur* (Tanjore), *Tiruchirappalli* (Trichinopoly, Trichy), Tiruchendur, *Tirunelveli*, Tirupattur, Tiruppur, *Tiruvannamalai*, Trincomalee (Sri Lanka), *Tuticorin*, *Vellore* and *Virudhunagar*.

1.3 *Reading and writing*

In spite of Megasthenes' (C3rd. BC) observation that Indians were ignorant of reading and writing (McCrindle 1877:69; Puri 1963:102n.; Gopal 1977), it is nowadays accepted that writing was indeed known in ancient India (cf. Svarup 1922; Das 1923; Sankaran 1940; Janert 1969; Coulmas 1989). The earliest evidence of writing in Tamil is via rock inscriptions dating from the second century BC (Sivaramamurthy 1952). These were in the Brahmi script that was used to record the edicts of Asoka (264-223 BC) on pillars throughout his empire. Brahmi was of Semitic origin, and well developed by the time of Asoka, a situation which can have been achieved only over a considerable period before the first extant inscriptions. Already at an early period, inscriptions found in the north and south are distinct, the southern being more cursive, and by the fifth century AD, these offer a different set of characters, omitting those differentiating aspirated and voiced consonants and adding ones for certain retroflex consonants - reflecting the phonemic repertoire of Dravidian speech. By the eleventh century, each dialect of Dravidian had developed its own script. Alberuni (c.1030 AD) noticed

the Karnâta, used in Kârnâtadesa, whence those troops come which in the armies are known as Kannara;
the Andhrî, used in Andhrâdesa; the Dirwarî, used in Dirwardesa ... (Sachau 1910:173)

These scripts are still used to record the major languages of the Dravidian family. Alberuni also describes how books were made.

The Hindus have in the south ... a slender tree like the date and cocoa-nut palms, bearing ... leaves of the length of one yard, and as broad as three fingers one put beside the other. They call these leaves târi ... and write on them. They bind a book of these leaves together by a cord on which they are arranged, the cord going through all the leaves by a hole in the middle of each. (Sachau 1910:171)

(According to the tradition of Diodorus (C1st. BC) the ancient Cretans had made use of palm leaves for writing: David (1955b:173) takes this as evidence of Minoan-Dravidian contact.) If paper had been introduced to south India in classical times, its use was lost over time. Until the arrival of the Europeans in the sixteenth century, it was not generally available there, although it was in the north, having been introduced in the thirteenth century by the Muslims. Even in the eighteenth century, European missionaries found that writing on palm leaves was still the norm.

In 1706, when the mission started its work ... writing with pen and ink on paper was not practised by the Tamils although these writing materials had been known for a fairly long time. The explanation no doubt is to be found partly in the deep respect among the Tamils for the traditional ... and partly in purely economic considerations. Paper was rather expensive and sometimes scarce, while palm-leaves always were readily available without cost. (Nordstrand 1969:365)

Permanent records were kept on metal plates,²¹ and books were still being made from strips of palm leaves in just the way that Alberuni had observed. Of the palm family (*Palmaceae*), three members, found in abundance in south India and Sri Lanka, have commonly provided the contingent material for the medium of writing there: the talipot palm (*corypha umbraculifera*, *corypha taliera*) which can grow up to a hundred feet high and which has the largest fan-shaped leaf in the world, with a span of up to sixteen feet - this is the most durable type of palm leaf for writing (Vinson 1903:xxxfn.1); the palmyra or deleb palm (*borassus flabellifer*), one of the most versatile trees in India "which is to them what rice is in Bengal, or wheat in England - the staff of life" (Caldwell 1857:30) with, indeed, dozens of domestic and commercial uses attested for its products - its hard timber is highly valued for construction, and its sap for making arrack; and the lontar palm (*corypha utan*), a similar tree to the palmyra, growing to some fifty feet high and whose fan-shaped leaves can reach a length of eight to ten feet.

[Slips] of the young leaf form the ordinary stationery of the Hindus in ... Southern India ... the "leaf" on which people write is literally a leaf. Each ray, or vein ... comprises two long slips, and each of those slips will suffice as writing material for an ordinary letter: a collection of leaves strung together constitute a book. The leaf requires no smoothing or pressing, or other process of preparation. Just as it comes from the tree it may be used for writing upon ... with ... a graver, an instrument with a sharp steel point, with which the penman rapidly graves or scratches the characters. (Caldwell 1857:32)²²

21 Examples of writing on gold are held in the State Archives, Copenhagen. The British Library and the India Office Library, London, Cambridge University Library, the Bodleian Library, University of Oxford and the National Library in Paris all hold examples of Tamil writing on copper plate: cf. Vinson (1903:xxix); Gaur (1979:24-25).

22 But cf. Riekamp's (1740:66-67) description that the leaves had to be worked with a knife and prepared with oil before being written on with ink made from various substances, including fish-gall; and Gaur (1979:14): "Unlike wood and bamboo, palm leaves require a simple manufacturing process to render them suitable for writing. Each leaf has to be separated from the central rib, cut to size, and then soaked, boiled (in milk and/or water), dried, usually several times, until it is finally rubbed smooth with a cowrie shell or a stone."

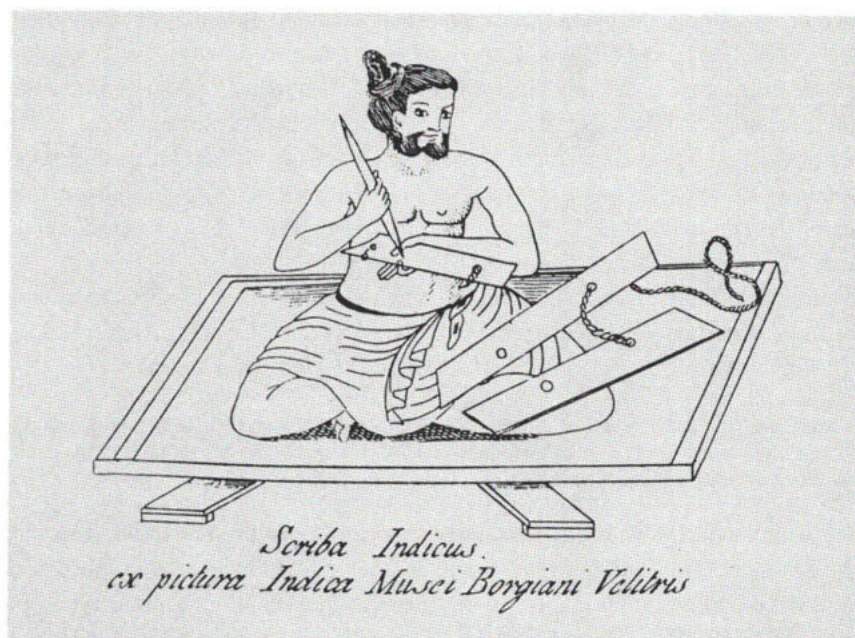


Figure 1: Illustration of writing on *olas*, reproduced from Paulinus a S. Bartholomeo (1796:113) by courtesy of the Council of the Société asiatique, Paris.

The palm leaves would be cut into strips, or *olas* (ஒலை <olai>), of about 27 cm x 3 cm, and pierced with a hole in the centre, or with two holes, each about one third of the way along the leaf from the ends, through which a cord would be threaded to bind the leaves together. Gaur (1979:14) notes the influence of the shape of the palm leaf on other writing materials:²³

For instance copper plate charters ... were mostly shaped in this way and strung together with a metal ring. When in the 13th century the Muslims began to introduce paper into India, manuscripts retained for a long time the characteristic oblong palm-leaf shape; even the blank space in the text originally left by the scribe to provide room for the cord, remained, and since it no longer served any practical purpose it became a focal point for minor decorations.

Writing would be done with a metal stylus (எழுத்தாணி <eṟuttāṇi>), with which the letters would be delicately etched onto the leaf. Care would be taken not to cut too deeply, nor to puncture the leaf, as both sides would be used, recto-verso, so that as the leaves were turned over, they could be read continuously. A dark substance - soot, powdered charcoal, lampblack (Barnett 1913:228), even cow dung (Dubois 1817:281; Cronin 1959:136) - would be rubbed over each leaf and then washed off. Where it had lodged in the grooves of the etchings, it remained, making the writing visible and reading possible. Talipot leaves have a cross-vein marking, and are suitable for writing on in ink (Sarma 1985:186). Numbering was on the recto side only. The title of the work was often placed at the end, sometimes with the date of

²³ Cf. Barnett (1913:230); and McArthur's (1986:28) characterisation of the palm-leaf book as one of the "reference styles that failed" in the face of the development of paper and printing technology.

completion of the manuscript and the scribe's name. Commonly the author of the work was not mentioned. Often two pieces of wood, trimmed to the size of the olas, the arris chamfered, would be placed as covers. Cf. Mohapatra (1980). Occasionally, olas are embellished with designs or diagrams, but this is the exception, apart from medical or mathematical texts.²⁴ It is only very rarely that one comes across a European language written on palm leaves. One, possibly unique, record of an entire ola manuscript in a European language is that in the library catalogue of the Wilhelm Pieck University, Rostock (MS Orient. 233) a German translation from Tamil. The manuscript has, unfortunately however, been lost.²⁵

Evidently, the writing and construction of palm-leaf books was a laborious process, and as such it became associated with propitiation and thanksgiving. Gnanapragasam (1965:31) notes that the Christian communities prized sacred or doctrinal texts written on leaves.

Their value was so much appreciated that the Christians when praying to God for a particular benefit would make a vow that if their prayer be granted they would transcribe one or more of the oleis and present them to some poor church or chapel.

According to Percival (1854:122), even in the nineteenth century it was not uncommon for those who could not afford printed works to obtain the loan of the text they wished to possess, and copy it out onto olas, "multiplied ... very much as musical compositions are in Europe". Michaud's (1833:379-380) description of how young Tamil children were taught to read and write recounts a process that had not changed for centuries:

L'instituteur rassemble ses écoliers à l'ombre d'un palmier, devant la porte de sa maison, et place devant chacun d'eux un petit monceau de sable; après l'avoir aplani sur la terre, il y écrit avec le doigt une lettre de l'alphabet. L'enfant l'imite, et lorsqu'il en connoît la forme, il répète sa leçon pendant la journée, en prononçant toujours ce qu'il trace dans le sable. Après avoir appris l'alphabet, le maître lui enseigne comment, par un léger changement dans la forme d'une lettre, on en peut composer une syllabe; comment, par un changement semblable, le genre, le nombre, le cas ou le tems d'un mot radical se trouve déterminé, sans qu'il ait été tourmenté par de longues règles de la grammaire, que les Indiens n'ont pas dans leur langue. Lorsque l'enfant sait tracer ses mots dans le sable et par conséquent lire, il apprend à en faire autant avec un poinçon sur des feuilles de palmier, qui servent de papier aux Indiens.

The evidence of some of the early illustrations is that writing on palm leaves was often effected from a standing position, and it was the leaf that was moved rather than the stylus, the writer gradually pulling it along with one hand, after etching a group of letters.

The format of the palm leaf as a medium of recording in writing lends itself to techniques of multiple comparison and classification.

Though classification is a universal tendency, ancient Tamil works reveal it as a dominant feature ... Almost any type of work ... tend[s] to give classificatory pattern ... (Vadamani Manuel 1972:637-638)

24 Lesser known examples include animals in MS Sanscr. Schr. 187 in the Lower Saxony State and University Library, Göttingen; a ship in full sail in MS Dorn. 896 in the M.E. Saltykov-Shchedrin State Public Library, Leningrad; and elaborately costumed gods in MS O Okat. 98 in Uppsala University Library.

25 An example of a German translation accompanying a Tamil text on olas is MS Leber 839 in Rouen Municipal Library (James 1989:125). There is a Portuguese-Tamil text in the British Library, London (MS Sloane 1403D), two English-Tamil texts in the Wellcome Institute for the History of Medicine, London (MSS Tam. 3 & 43) and some Tamil and German Bible verses in Uppsala University Library (MS O Okat. 87).

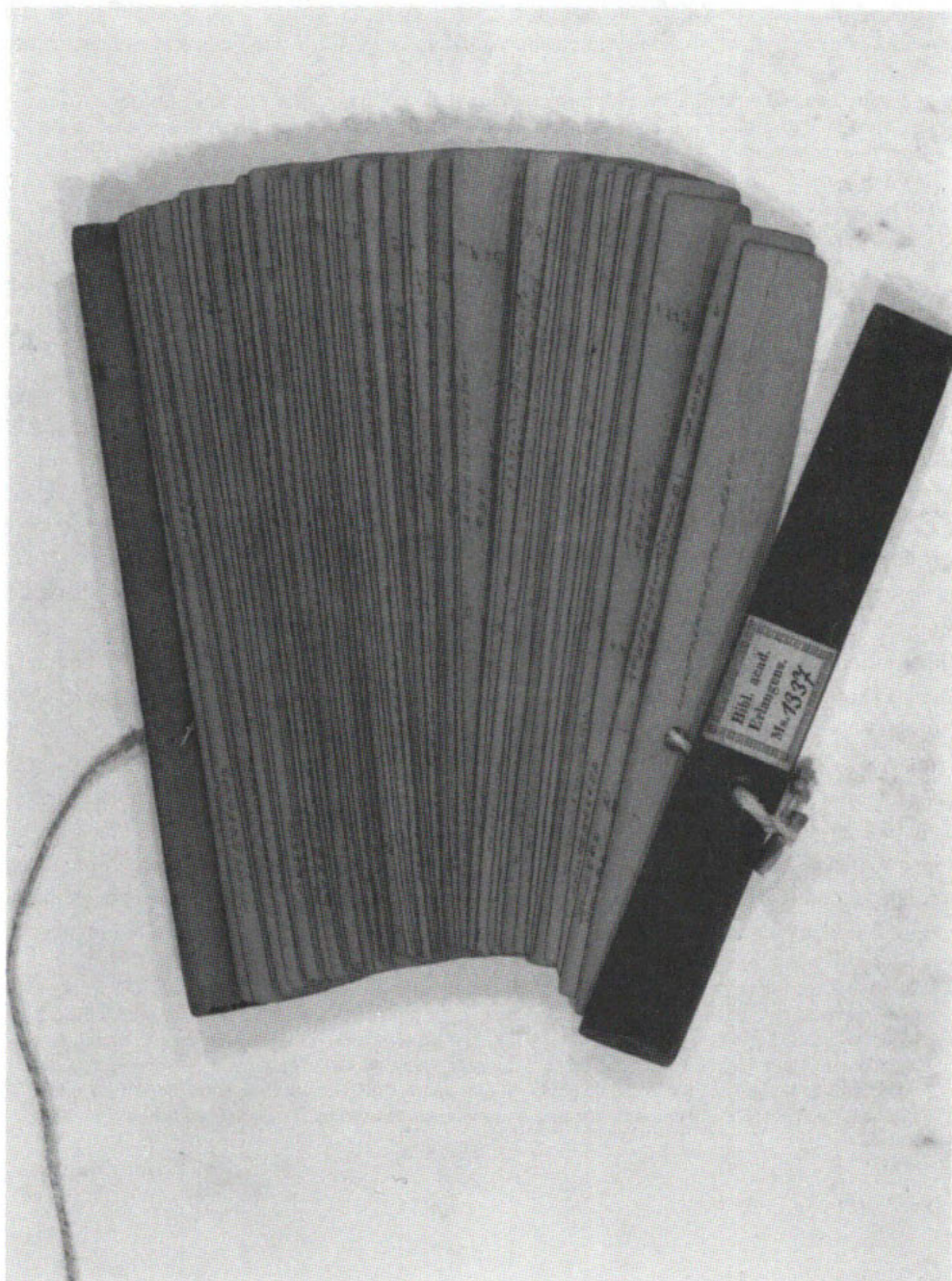


Figure 2: An example of a Tamil palm-leaf book, with shaped wooden covers at each end and a cord strung through each leaf to bind the whole together. Palavāratta pustakam, an alphabetical wordlist, reproduced by courtesy of the University Library, Erlangen-Nuremberg (Cm. B 6 MS 1337).

Indeed, amongst the principal features of the lexicographer's craft are those of stratification and classification, analytical activities which shape, and are shaped by, one's cultural environment.

Classification and thematization have many forms, but the key forms appear to be ... first the making of categories or groups, and then the creation of a hierarchy ... through which to systematize the categories or groups. (McArthur 1986:34)

An optimum example of lexicographical classification can be considered that of *alphabetisation*.

Alphabetization did not become a standard procedure for organizing textual material until after the advent of the printing press. One of the reasons was ... the high cost of paper or parchment. The standard way to create an alphabetic listing is to list each item on a card and then order the cards. There seems to be no evidence of this technique before printing. (Logan 1986:190)

It is not difficult to surmise, however, that the convenience of the format of the *ola* for use as an index file should not have been lost on south Indian lexicographers. Individual items could be recorded, and ordered, in the creation of the metrical vocabularies that became the traditional form of lexicon. The *ola*'s dimensions offered not only the opportunity for efficient filing, but also for the development of literary techniques with the visual and tactical constraints imposed by these dimensions (cf. Krishnamurthy 1981). The 'palmyra effect' (cf. Logan's (1986) 'alphabet effect') is the sustaining effect of this medium on the development of analytical thought. Logan hypothesises that the alphabet affected the evolution of Western civilisation along rational, scientific and primarily monotheistic lines, whereas what he terms a concrete, ideographic writing system, typical of Chinese, is allied to a holistic, intuitive and polytheistic culture. He does not discuss India, where, of course, such a culture has developed with primarily syllabic and alphabetic systems. He also pays insufficient attention to the significance of the physical medium, a feature which can have a contingent effect upon the development of a script as well as the types of intellectual activities that can be achieved. I feel, too, he appears somewhat over-dismissive of syllabic systems in general, which he perceives as intermediate, and thus inferior, stages between the ideographic and alphabetic, rather than (as in the case of Tamil, cf. James 1985) as appropriate adaptations to the genius of particular languages.

Distinguer entre le simple et l'intelligible ... revient, en somme, à concevoir la simplicité alphabétique non comme *le* type d'intelligibilité, mais comme un type nullement exclusif, postérieur ou parallèle à [d']autres types, autrement intelligible ... Il s'agit ... d'acquérir une conscience réelle de la pluralité si abondamment attestée, de systèmes d'écriture qui sont autant de systèmes supérieurs d'action ... Sans doute n'est-ce point d'une recherche de principes tout internes qu'il convient de partir, mais l'étude des systèmes, et, d'abord, de chaque système, pris en sa plénitude historique. (David 1954:102-103)