

The
SRI LANKA JOURNAL
of the
HUMANITIES



UNIVERSITY OF PERADENIYA

VOLUME XII

NUMBERS 1 & 2

1986

(Published in 1988)

Digitized by Noolaham Foundation.
noolaham.org | aavanaham.org

The Sri Lanka Journal of the Humanities is a bi-annual issue of the University of Peradeniya. It is devoted to the publication of articles based on original research in the Humanities and Social Sciences, which pertain mainly, though not exclusively, to Sri Lanka. The Journal is designed to reach a readership of specialists as well as non-specialists.

EDITOR
Merlin Peris

MANAGING EDITOR
E. W. Marasinghe

EDITORIAL BOARD

R. A. L. H. Gunawardena
Ratna Handurukande
A. D. P. Kalansuriya

S. Thillainathan

U. P. Meddegama
P. D. Premasiri
W. I. Siriweera

Articles and other communications submitted for publication and all correspondence relating to editorial matters should be addressed to

The Editor
Sri Lanka Journal of the Humanities
University of Peradeniya
Peradeniya
Sri Lanka

Annual Subscription is Rs. 50/- in Sri Lanka. The overseas rate is U.S. \$ 8.50 or the equivalent in convertible currency, and includes postage. Booksellers are entitled to a trade discount of 20%. All cheques, bank-drafts and other forms of remittance should be drawn in favour of The Registrar, University of Peradeniya and forwarded to the Managing Editor. All inquiries by institutes and libraries for obtaining the Journal on exchange must be addressed to The Assistant Librarian (Periodicals), The Library, University of Peradeniya, Peradeniya, (Sri Lanka). This information supercedes anything to the contrary in preceding issues of the Journal.



சென்னை நூலகம்
மாநகர் நூலகம்
மாநில நூலகம்

CONTENTS

Page

"But how shall I read that smile." The Sigiri Graffiti and the Modern Reader <i>Ashley Halpé</i>	1
Transport and Communications in Pre-Colonial Sri Lanka - <i>W.I. Siriweera</i>	17
Daśakusalakarmapatha - The Path of Ten Good Actions - <i>Ratna Handurukande</i>	39
The Role of the Curtain in the Sanskrit Theatre - <i>E.W. Marasinghe</i>	45
The Death of an Elephant (On Elara's Mahapabbata) <i>Merlin Peris</i>	71
How the 'Song of God' correlates with the 'Drama of Life' - <i>R.A. Gunatilaka</i>	105
Mica Zones and the Early Iron Age Sites in Sri Lanka: An Exploratory Study <i>Sudharshan Seneviratne</i>	121
Recent Archaeological Research on a Sri Lankan City Complex (Kandy). <i>Leelananda Prematilleke</i>	133
Apropos the Naughty Jataka <i>Gnanasiri Gunaratne</i>	155
Medicine and Society in Sri Lanka <i>Ralph Pieris</i>	159
 BOOK REVIEWS	
<i>Piyaseeli Wijemanne: Amāvatura: A Syntac- tical Study</i>	177
<i>Tikiri Abeysinghe: Jaffna under the Portuguese</i>	182
<i>Gopal Gandhi: Saranam: A Novel of Refuge</i>	184

2419 LP) C. C

சென்னை நூலகம்
மாநகர் நூலகம்
மாநில நூலகம்



CONTENTS

Page

"Buddhism and I read that article"
Theravada Buddhism and the Modern Reader
1

Theravada and Communism in Pre-Colonial
Sri Lanka
17

Dhammadharma - The Path of Ten Good
Actions
39

The Role of the Chariot in the Samas
Theatre
45

The Dharma of an Elephant (On Elara's
Dharma)
71

How the Song of God, correlates with the
Dharma of Life
103

When Xmas and the Early Days of
Sri Lanka: An Exploratory Study
121

Recent Archaeological Research on a Sri
Lankan City
133

Approach the Navagraha
153

Medicine and Society in Sri Lanka
169

BOOK REVIEW

Pythel W. ...
175

Tikiri ...
183

Gopal ...
191

சென்னை நூலகம், பிரிவு
மாண்புமிகு நூலக சேவை
யாழ்ப்பாணம்

'BUT HOW SHALL I READ THAT SMILE?' -
THE SIGIRI GRAFFITI AND THE MODERN READER

Reading the graffiti has its basis in scholarship, but it is ultimately an activity of the imagination and a mobilization of sensibility. Clearly, there is still room for patient scholarship - Paranavitana himself regretted that more effort had not been forthcoming. While the major contribution to our understanding of the graffiti remains that of Paranavitana, the work of P.E.E. Fernando, P.B. Meegaskumbura, A.V. Suraweera, A.S. Kulasuriya *et al* suggests that new readings and substantial reinterpretations are distinctly possible. The theme of this essay, however, is interpretation as poetry, by poets and readers of poetry, rather than the scholarly determination of the text or the critical exegesis; it is concerned with the words and phrases, the echoes of passion, the play of wit, the perceptions and self-revelations which remain afloat in one's mind after an immersion in the Paranavitana *opus* and other responses to the poetry. They constitute, in the widest sense, a world of discourse, a dynamic system of signals to the imagination of modern readers, evoking a past and enriching the present.

Illuminations can arrive in unexpected ways. Professor E.F.C. Ludowyk, by no means a Sigiri specialist, saw a precious nugget buried in the notes to No. 381 - the comment on the word මියෙලන්දි (*miyelandhi*). Paranavitana himself had missed the vibrancy of the word he had deciphered, rendering it *sweet-heart* in his translation, though in note 2 to the graffiti he says "the word, therefore, literally means 'little honey-heart'." Fresh and rich - and buried for a thousand years - "this word occurs nowhere else." *Sweet-heart*, after all, is abstract, hackneyed and loose: *honey-heart* is a truly metaphoric melding of experiences.

Professor Ludowyk's celebrated gift for - and commitment to - "close reading" enabled him to restore Parānavitana's discovery to our reading of No. 381, replacing Parānavitana's own more commonplace rendering 'O sweet-heart.' But is මියළුම් unavailable to the modern Sinhala poet and reader (or is it that the commonplace has proved more influential?) since Prof. Nandasena Mudiyanse's Sinhala modernization has ගෙයුරු? It is interesting that even in his note to No. 381 in his පිහිටි මි Prof. Mudiyanse omits any effort to render Parānavitana's gloss "The word, therefore, would literally mean 'little honey-heart'. Modern English provides us with 'honey-heart' - has modern Sinhalese no place for මියළුම් and no equivalent for it?

Putting back the word, Professor Ludowyk put back the poetry - or at least some of it. Here are two renderings of No. 381 in modern English. But first the Parānavitana:

'O sweet-heart, O golden-coloured one,
everything that has been ordered by you
(to be done) by me has been done by
myself in an infatuated manner.' Pray
tell (this), what has been said by me,
to the golden-coloured one?¹

Now, the two later versions, both based on Parānavitana

Hail! I speak, a worker in iron:
'little honey-heart,
Golden girl.

1. *Sigiri Graffiti*, vol.II, Oxford, (1956) p. 237
(hereinafter *SG II*).

All you asked of me,
 Passionately, senselessly,
 I myself have done.¹
 Pray tell the gold-hued one
 What I have spoken.²

(Ludowyk)

Little honey-heart, golden one,
 All you demanded I have done:
 I am intoxicated!
 Please tell the golden one
 What I have said.³

Perhaps these various versions only illustrate Oscar Wilde's point that a translation cannot be both beautiful and faithful, or - to look at it the other way round - *traduttore traditore*. Each has its virtues - none of them is wholly 'true'. But they all, in their different ways, suggest something of the drama of the original experience, the passing over of aesthetic encounter (with the frescoes) into human response, the arousal of the visitor's imagination to a creative *geste* of its own, an act by which he takes possession of his experience of Sigiri and its paintings. The modern reader, receiving a modern version, can find his sensibility rising to the possession of both the graffito and the experience that evoked it. The word *miyelandhi* and the inditer's attitude of willing enslavement belong within the graffito, the "golden-coloured one" and her silence are the 'events', as it were, which evoked the graffito.

We await modern Sinhala renderings which can bring the graffiti alive for the ordinary reader. Modern European literature abounds in examples of such creative encounters of poets with their pasts. Modern Sinhala poetry does not often seem to have been impelled to such exploration.

-
2. Ludowyk, E.F.C. *The Story of Ceylon*, London, (1962) p.88.
 3. Halpe, Ashley, 'Sigiri Verses' in *The James Thevathasan Rutnam Felicitation Volume*, ed. K. Indrapala, Jaffna, (1975) No. X, p. 97.

It would of course be absurd to maintain that all, or even most of the graffiti are of the highest poetic excellence. Many are of purely sociological interest, or only illustrative of cultural history, while not a few moralistic aphorisms and plain statements remind one rather forcibly that not all verse is poetry, especially in an age where, being the standard form of written expression, it could have an all-purpose character. However, although imaginative leaps of the order of 'little honey-heart' don't occur in every line, there are innumerable points at which the careful elucidations of Parnavitana are lit by a visionary gleam, a coruscation of wit, a glimmer set off by chiaroscuro, the arresting radiance of a bold image. No. 334 has long been admired:

නිල් ක(ටි) රොළ මලෙකැ ඇවුණු වැටිකොළ මල සෙය්
 සැකැගැ සිහි වෙන්නෙය් මහතෙල් වෘ (භ)ය් රත්වත් හුන්⁴

which might be rendered:

A *vatkola* flower entangled with a blue
katrola flower,

A golden one beside one blue as *mahane*¹:

I will remember them as evening falls.⁵

The Irish poet, Richard Murphy, dipping into the translations was struck by

.... I have come to you, O long-eyed ones
 Like the gentle breeze to the moonlight⁶

4. *SG II*, p. 205.

5. Halpé, *op.cit*, No. XXXIII, p. 100.

6. *ibid*, No. V, p. 97.

in No. 175, and by the (admittedly conjectural) reading of No. 207:

She returns look for look,
With eyes like blue water lilies,
But she has lingered long on the mountain -
The stone has gone into her heart.⁷

Prof. Meegaskumbura draws our attention to *ඉයුත මිකවිටිති* in No. 50, insisting that the sharpness of the image could never be brought out in a translation.⁸ One of my own favourites is *අයුත් පිහිනෙන අහස් ලද වෙයි.*⁹

- 'the sky has been yours - in a dream' - in 609.
The whole poem might be rendered

Gold will not buy back the girl you had
Long ago; and here, today,
What have you gained?
The sky has been yours -
In a dream.¹⁰

There is an admirable meeting of the conventional with the inventive in No. 331:

The woman, whose smile is (like) the seeds
of the melon and whose drooping hair
is (like) the cool dark cloud, enticed me,
having given me a look (with a) gentle smile.¹¹

-
7. *ibid.* No. XVII, p. 98.
8. Meegaskumbura, P.B. *The Language of the Sigiri Poems.* Paper read to the Ceylon Studies Seminar, University of Peradeniya. p. 25. (Cyclostyled) 1984. Accepted for publication in *The Sri Lanka Journal of the Humanities*, Peradeniya.
9. *SG II*, p. 376.
10. Halpé, *op.cit.*, No. XXXVI, p. 101.
11. *SG II*, p. 203.

(She whose smile shows teeth like melon seeds,
Whose downswept hair is like a cool dark cloud,
She enticed me with a gentle smile.¹²⁾

There is the delicately ironic imaginary encounter of
No. 320:

And one like this! You gods, couldn't I have
her?

'You may admire my hands, if that gives you
pleasure,

Thus she denies me her lips, disdainfully
cruel.

'These flowers around my neck, are they not
beautiful?

- May you find happiness.¹³

One could multiply examples. Professors Parnavitana, Kulasuriya, Ludowyk and Meegaskumbura all have their own lists of poetic excellences and foci of human interest, while Prof. Suraweera, Martin Wickramasinghe and Dr. C.E. Godakumbura are among these who have drawn attention to attractive qualities of the poetry. Their comments show that a good many of these 'records', as Parnavitana calls them, are capable of evoking reader responses of a heightened kind.

The later readers have not seriously questioned the value attached by Prof. Parnavitana to the records, and on the whole the emendations or reinterpretations proposed by later scholars tend, if anything, to increase our appreciation of the immediacy and subtlety of the poetry. Thus Prof. P.E.E. Fernando suggests that the

12. Halpé, *op.cit.*, No. XII, p. 97.

13. *ibid*, No. XXIV, p. 99. I offer a new version of the 1st line as being truer to the spirit of the original.

letters read by Prof. Parnavitana as 'favour' in No. 319 can be better read as *touch*, making the whole utterance much more concrete.¹⁴ A more interesting example, perhaps, is Prof. Meegaskumbura's reinterpretation of No. 595 - a very highly regarded poem. Parnavitana's rendering is

The wind blew. Thousands and hundreds of thousands of trees, which had put forth buds, fell down. The curlew uttered shrieks. Torrents came forth in the Malaya mountain. The night was made to be of the glow of tender copper-coloured leaves by fireflies beyond count. O long-eyed one, the message given by you - what sustenance does it afford?¹⁵

Prof. Meegaskumbura's suggested version is:

The wind blew. Thousands and hundreds of thousands of buds burst forth. In the forest the jackal cried. Torrents came forth from the mountain. Countless fireflies gave a glow to the tender copper-hued leaves. O long-eyed one, the message given by you this night - what sustenance does it afford.¹⁶

He argues his case very ably in the work under reference.¹⁷

Scholarly integrity must necessarily counsel caution at certain points, as when Prof. P.E.E. Fernando concludes that the Parnavitana reading of, for instance, 196, are not entirely justifiable. (He discusses several

14. Fernando, P.E.E., *Samskriti*, Colombo, (1972) (Special Parnavitana volume). ed. R. Gunawardene and J. Liyanaratne.

15. *SG II*, p. 367.

16. Meegaskumbura, *op.cit.* p. 10.

17. *ibid*, pp. 9 - 11.

other readings as well).¹⁸ But the body of comment available to us does not suggest that Prof. Paranavitana's Ossianic exploit, *The Story of Sigiri*,¹⁹ was anticipated to any substantial extent in his rendering of the graffiti.

As the reader situates himself in and habituates himself to the world of the graffiti, it might occur to him that that world was, in one sense, not as accessible to the individuals who inscribed the graffiti as they can be to us today after the publication of *Sigiri Graffiti* and the critiques of it that have followed. The early visitors obviously enjoyed the privilege of encountering the 'wonders of Sihigiri' - the five hundred ladies of No. 560, 'his Lordship the Lion' (No. 45), the pleasure gardens, the palace; perhaps even the fountains of paradise embodied by Arthur C. Clarke in the Sigiri section of his novel by that name.²⁰ But how many would have paused to read more than a few of the inscriptions before adding their own? The modern reader can dwell with the 'records' in all their variety, treating them as a corpus and also sifting them and perceiving them in interaction. He is sometimes seduced away from, sometimes reminded of, the extraordinary and perhaps unique thing about the graffiti: that they arise from an aesthetic encounter with the frescoes and with Sigiriya. He can translate them into his own idiom - indeed, transmutation is inevitable as the graffiti encounter modern sensibilities.

At times, in fact, one might feel that of all our pre-modern literature it is the graffiti that are closest to modern readers, though they are the earliest poems

18. Fernando, *op.cit.*, p. 63-68.

19. Paranavitana, S. *The Story of Sigiri*, Colombo, 1972. The authenticity of the narrative offered in this work has been questioned by most scholars.

20. Clarke, Arthur C., *The Fountains of Paradise*, London, (1979).

extant in Sinhala. There is the refreshing directness combined with a vividly visual and sensuous quality of poems like

Who would not yield to such delights:
 Those rosy palms, that rounded shoulder,
 That golden necklace, those copper-coloured lips
 And those long eyes?²¹

The writer of No. 69 achieves poetic intensity by sheer force of explicit statement:

... My body thrills to you, its hair
 stiffening with desire.²²

It is interesting to note how Parnavitana and some other commentators are sometimes unable to 'take' the force and directness of the utterance, softening it down in their renderings. Thus ලියවීම becomes the circuitous *in an infatuated manner*, and "loving embrace" has hardly the force of විස වස. I have already noted how විසවි becomes සොඳුර and "sweetheart". It is to be hoped that narrow notions of moral and aesthetic decorum will not get between the graffiti and contemporary readers.

The reader who allows his imagination to range over the whole poetic territory opened out by the scholars can pass from the encounter with individual poems to juxtapositions, cross-references and imaginary sequences. Thus the graffiti of Friar Sen (No. 540) can be read as Prof. Ludowyk suggests, as a comment on No. 536, the song of Dapul of Siripura:

When the loving embrace of this long-eyed
 one is obtained by me I shall become happy.²³

21. Halpé, *op.cit.*, No. XIX, p. 98.

22. *ibid*, No. XXV, p. 99.

23. *SG II*, p. 329-330.

The comment being:

Having been infatuated in form, when desire comes into being, (this damsel) has been considered (by you) in this manner as an (object worthy of) embrace. When (desire) passes away, the infatuation will itself fall, as does what is cast up into the sky. By the abundance of (their) splendour, we know the store of their merit. ²⁴

Reading No. 515 one might think back to poems like Nos. 351 and 69: the first (515) moralistic

Be not enamoured of dalliance;
Pleasure is the path to pain, and pain is
pleasure. ²⁵

placed against

..... among the golden ones
Was one whose cloth was loosened at the waist.
Will she be mine? ²⁶

and

Women like you
Make men pour out their hearts;
My body thrills to you, its hair
Stiffening with desire. ²⁷

24. *SG II*, p. 331-2.

25. Halpe, *op.cit.*, No. XXVI, p. 99.

26. *ibid*, No. IX, p. 97.

27. *ibid*, No. XXV, p. 99.

One could juxtapose

'The king is angry with us,' they think,
The long-eyed ones with tender lips
Standing on this rock
In the sky.²⁸

and

'My lord's not dead, he comes,
Anguished with absence,
Now, yes now, my friend! Come, women, come,
Lean out and look,
My lord is come!'²⁹

A juxtaposition can be quite amusing:

.... my mind in tumult
From the sidelong glances of the golden ones,
I swooned upon the rock³⁰

and

We, being women, sing on behalf of this lady;
'You fools! You come to Sihigiri and recite
These verses hammered out with four-fold efforts.
Not one of you brings wine and molasses,
Remembering we are women!'³¹

One could read Parnavitana's 26, 270 and 347 in relation to each other:

The golden ones within their mountain niche
Vouchsafe no speech
Except the gaze of those unmoving eyes.³²

28,29. *ibid*, Nos. XXXI, XXXII, p. 100.

30,31. *ibid*, Nos. XXII, XXIII, p. 99.

32. *ibid*, No. I, p. 96.

'But how shall I read that smile? Ah
 How did your heart become a stone?'
 'I smiled but to greet you.
 The king who won me is gone.'³³

As you stand there
 Brightening the summit with your radiance,
 I cannot contain myself,
 Oh long-eyed noble-coloured one.³⁴

Or one could explore the treatment of various topoi -
 for instance that of speaking and not speaking, and of
 voiceless communication:

Lovely this woman, excellent the painter!
 She will not speak, but when I look
 At hand and eye
 I do believe she lives.³⁵

Golden-skinned, a gold chain on her breast,
 A *veena* in her hand,
 She speaks to no one, for her lord is dead.³⁶

Champak and lotus buds held in her hands,
 She looks at me, I seem to know her thought:
 But when I look at her she will not speak.³⁷

A petal from her ear has leaped to her breasts
 In one bound: thus it speaks
 Though she herself is dumb.³⁸

33,34. *ibid*, Nos. II, III, p. 96.

35,36,37,38, *ibid*, Nos. XIII, XIV, XV, XVI, p.97-8.

Another way of responding to the poems is to take them in relation to their creators, hearing them as a multitude of voices suggestive of distinctive personalities and varying moods, perceptions and self-revelations. We have already set 'Friar Sen' against Dapul of Siripura, and the over-heated poet swooning upon the rock against the writer who spoke on behalf of the ladies. The graffito of the 'novice from the monastery of Hunagiri' suggests the hair-trigger emotions of adolescence pulsating against the religions neophyte's regard for discipline:

The person who has been spoken about, resides
(here); (therefore) place the wakefulness of
mind (in the door of) hearing and guard it
thoroughly. As her broad smile spreads,
having caused me (fright) my mind trembles
exceedingly.³⁹

So different from the cry 'ye gods! Couldn't I have her?'⁴⁰
or the sensuality of

When I think of you my heart aches,
My blood rages, I cry aloud. Your waist
Fetters me utterly.⁴¹

or the courtly compliment:

The moonstone wall gleams but in your radiance!⁴²

There can be a sophisticated awareness of the aesthetic
dimension of eroticism -

Is it not to delight love's devotees
That these nymphs have been painted here?⁴³

39. *SG II*, p. 53-4.

40. See 13 above.

41,42,43. Halpé, *op.cit*, Nos. XX, VIII, V, p. 98, 97.

or a simple appreciation of craft - "lovely this woman, excellent the painter!"⁴⁴

The Sigiri graffiti thus give us the experience of a number of exquisite poems as well as of a world of discourse, and they are vibrant with echoes of their age as well as of the permanent evocative power of art-experience. That power would perhaps be less, and the poems less meaningful, of course, if the graffiti were not taken in the whole context of Sigiri. For example, shorn of context, some of the poems would be quite effective love poems or erotic poems, but *in* context the same poems are something much finer - the creative imagination arousing the memories or dreams of passional experience in tribute to the aesthetic dynamism of the original frescoes.

In these and other possible ways the graffiti 'exist' for modern readers with great subtlety and ambience - more subtly and comprehensively, one might say, than in their own centuries. Discussing their literary merit Prof. Parnavitana suggests several frames of reference, e.g. citing both the Sanskrit criterion of *dhvani* and the Coleridgean concept of the imagination.⁴⁵ My last example echoes the quotation I chose for my title

O long eyed one
I read your message, but
What does it hold for me?⁴⁶

44. *ibid*, No. XIII, p. 98.

45. *Sigiri Graffiti*, vol. I, e.g. p. cxcvii-viii, cxcii.

46. Halpé, *op.cit*, No. XXXVI, p. 101.

சிவ நாலகப் பிரிவு
மாண்புமிகு நூலக செவ்வக
யாழ்ப்பாணம்

We cannot ever hope to "read" the message or the smile in the sense of deciphering them finally: they are neither objects nor pure historic events to be accounted for or classified. Like all art, like Sigiriya itself, they are signals or beckonings to the imagination, inviting those who have ears to hear or eyes to see to shape responses appropriate to themselves in terms of the experience of their own generation.*

ASHLEY HALPÉ

* This article is based on a paper presented by the author at the First National Archaeological Congress held on November 1986 at Colombo.



NAVASILU 7 & 8

Journal of the English Association of Sri Lanka and the
Association for Commonwealth Literature and
Language Studies, Sri Lanka

March 1987

Editor : Ashley Halpe

Rs. 60.00

Contents include

- Ashley Halpe: Brief Chronicle: Some Aspects of Recent
Sri Lankan Literature in English - 173
- Lilani Jayatilaka: Love, Sex and Marriage in the Poetry
of Lakdasa Wikkramasinha - 142
- Tissa Jayatilaka: Gamini Gunawardene's 'Rama and Sita' -
119
- S.W. Perera: The Treatment of Class Relationships in the
Novels of Lucien de Zilwa and S.J.K. Crowther - 149
- J.S. Ryan: Ceylon in 1860, as recalled by Rolf Boldrewood
113
- Carmen Wickramagamage: 'Curfew and Full Moon': A Message
for Our Times - 127
- Sarathchandra Wickramasuriya: An English Romantic Poet
with a Sri Lankan Disciple: Shelley, 'Queen Mab', and
Anagarika Dharmapala (Part II) - 127
- REVIEWS: Lakshmi de Silva on *Relative Merits* by Yasmine
Gooneratne - 181; Rajiva Wijesinha on *The Desert Makers*
by P.B. Rambukwelle - 186

and poems, stories and a play by new and established Sri
Lankan writers, including Prof. E.R. Sarachchandra, Gamini
Seneviratne, Jean Arasanayagam, Anne Ranasinghe.

TRANSPORT AND COMMUNICATIONS IN PRE-COLONIAL SRI LANKA

The aim of this study is to understand the system of transport and communications in Sri Lanka from the earliest times upto the sixteenth century A.D. The study will attempt to identify the network of ancient roads and to examine the operations pertaining to the construction of roads connecting the political centres with provincial administrative centres and seaports as well as the nature of the modes of conveyance including water transport. The study is also directed towards examining the functional aspects of the transport and communications system particularly in administration and warfare and in social relations. The implications of political power wielded by the authorities and the manner in which the transport system was tied up with trade will also be investigated.

The Pali chronicles use the terms *mahāmagga* and *mahāpatha* to denote main roads. In the context of ancient Sri Lankan history, defining these terms is somewhat difficult because they have a wider connotation in the present context. For convenience wide roads connecting political centres, ports and market towns can be identified as main roads. It is reasonable to believe that some of these were better maintained and well paved closer to political centres, ports and market-towns but certain stretches in remote areas were nothing more than gravel roads.

Obviously in the early stages of state formation there were only a few roads, but in course of time new roads were added to the communications network. Some of these roads were constructed to facilitate human movements and commodity transport from port-towns to political centres, and some from political centres to regional centres and market-towns for purposes of administration.

During times of warfare some new roads were constructed and existing tracks were enlarged to facilitate the movement of armies. With the development of state-sponsored large irrigation schemes some of the bunds of the larger reservoirs such as Kalavewa also turned out to be main roads and were added to the communications network.¹

One of the earliest main roads joined Anuradhapura with Jambukōlapattana, a port in the northern tip of the Jaffna Peninsula. On this road a bridge spanned the Malvatu Oya. At the ends of the bridge were stone posts fixed in rocks on the bed of the river, a few of which were visible at the banks until recently. The road passed immediately below the embankment of a large and very early reservoir called Pāvatkulam. Across the water, which escaped over the waste-weir or flood-escape, the road was carried by means of another bridge consisting of stone beams laid on stone posts, part of it still remaining at the spot.² It is known that Omantai was a halting place when the Tooth Relic was brought from Jaffna to Anuradhapura.³ From these scraps of information it can be gathered that this highway probably ran via Rambāva, Pāvatkulam, Omantai, Vavunikulam and onto Jaffna.⁴ Indian armies landing at Jambukōlapattana had invariably followed this route in proceeding to Rajarata. It seems that this road had been well established by the third century B.C., for it is recorded that during the time of Devanampiya Tissa (250-210 B.C.) a branch of the sacred bodhi tree, placed on a beautifully decorated chariot, was brought in a

-
1. UHC Vol.I, Pt. I, p. 15.
 2. H. Parker, *Ancient Ceylon*, 2nd AES Reprint, Delhi, (1984) p. 243; Wilhelm Geiger, *Culture of Ceylon in Mediaeval Times*, Wiesbaden, (1960) p. 106.
 3. R.L. Brohier, *Ancient Irrigation Works of Ceylon*, Colombo, (1935) p. 21.
 4. M.Z. Ismail, *Spatial Interraction between Settlements in the Northern Dry Zone Lowlands of Ceylon, A Study in Historical Geography*, Unpublished M.Phil Thesis, University of Colombo, (1982) p. 214.

procession to Anuradhapura along this road.⁵ This road did not lose its importance when Jambukolappattana lost its prominence after the tenth century and was connected to Urātota, modern Kayts, the port in the Peninsula which replaced Jambukolapattana.⁶

Another main road connected Anuradhapura with the great port, Mahatittha or Mantai, on the north-western coast. This was an important commercial route through which the bulk of the imports was transported to the capital and export commodities were despatched to the port. The lucrative trade between Sri Lanka and the Tamil kingdoms of South India in pearls, precious stones, spices, elephants, horses and cloth through the port of Mantai helped the development of this route from early Christian times. Besides, this route was extensively used by South Indian invaders advancing from the seaport towards the capital.⁷ Local rulers sending forces to help their allies in South India also followed the same route from Anuradhapura to Mahatittha.⁸

Many more roads have radiated from the capital to the immediate suburbs. The capital city, Anuradhapura, had four gates, of which those in the northern and southern walls are still traceable. The eastern gate was approached from the ancient road running from Mihintale to Anuradhapura. This road crossed the Malvatu Oya just near the middle of the eastern wall by a stone bridge, the remnants of which are still visible.⁹ The road from

5. *MV*, XIX, 23-29.

6. K. Indrapala, "The Nainativu Tamil Inscription of Parakramabahu I, *U.C.R.* (April, 1963) p. 63-70; K.A.N. Sastri, *The Colas*, Vol. II, Pt. I (1936) p.3.

7. *MV*, XXV, 79-80; *CV*, LVIII, 13-14; 44-45; LXI, 26-27.

8. *MV*, XXV, 1-52; *CV*, LXXVI, 85.

9. H. Parker, *op.cit.*, p. 272.

the northern Peninsula joined the city at the northern gate, and likewise, the western and southern gates would also have been connected by main roads approaching the city from the suburbs.

Although Polonnaruva became the capital only in the eleventh century, its proximity to the east coast had resulted in the establishment of settlements around the area from ancient times. The region was agriculturally developed at least as early as the fourth century A.D. and Polonnaruva was an important military post long before that due to its strategic location. The strategic importance of Polonnaruva lay in the fact that it controlled access into Rohana, and from Rohana into the northern plain through the passes at Dāstota (*Sahasatittha*) and Magantota (*Kaccakatittha*) along the Mahaveli river. From about the seventh century A.D. Polonnaruva also served as a secondary capital for the kings of Anurādhapura. Thus it is reasonable to conclude that communications between Anurādhapura and Polonnaruva were relatively developed from ancient times. In fact, the description of the campaigns of Dutthagāmani against Elāra clearly indicates that there had been a main road from Anurādhapura to Polonnaruva and from there, *via* Dāstota ford along the right bank of the Mahaveli river, to Mahiyangana, Yudaganava, Buttala and Kataragama up to Tissamaharama or Mahāgama.¹⁰ This was the main approach road from the north-central regions to the southern principality. In the twelfth century Nissankamalla (1187-96) improved this road and caused inscribed pillars to be erected at each *gavuva* to indicate the distance from one area to another.¹² Some of these pillars have been discovered and inscriptions on them published, while some lie in places such as Ratkinda temple and in the Bintenna area coming under the

10. *MV*, XXV 1-52.

11. *Gavuva* is equivalent to 2.84 miles

12. *CJSG*.II, p. 129-34; *EZ*.II, No. 15.

Mahaveli system C.¹³ This ancient road was in use until the modern network of roads was constructed, and in 1815 major Davy too took this route to Kataragama.¹⁴

At least in the twelfth century there were two other roads leading to the north-central plains from the southern coast. One was called the "high-road of the sea coast" (*Velamahapatha*)¹⁵ traces of which have been recognized by Geiger in a southerly direction.¹⁶ It started at Ambalantota (*Mahanāgahula*) and Tissamahārama (Māgama) and went along the eastern coast on to Cagāma which has been identified by Nicholas as Sakaman to the west of Tirukkovil,¹⁷ and up to Mahiyangana, and from there to Polonnaruva.

The other road started from Ambalantota and went along the southern coast through Dondra (*Devanagara*) Valigama (*Valukagama*) to Bentota (*Bhimatittha*) Totagamava (*Thitthagama*) Kalutara (*Kalatittha*) and via Dakkhinadesa through Nuvarakela near Hettipola (*Muhunuaru*), Batalagoda (*Badalatittha*), Manikdena South of Dambulla (*Buddhagama*), Magalla or Nikaveratiya (*Mahagalla*), Mahamadagalla near Polpitigama (*Mandagalla*) to Anuradhapura.¹⁸ Certain

-
13. I am grateful to Mr. Piyasena Gamlath for this information, which was later verified by me.
14. John Davy, *An Account of Interior of Ceylon*, first published in 1821, Tisara Press Reprint, Colombo, (1983) p. 305-314.
15. *CV*, LVIII, 41.
16. Wilhelm Geiger, *op.cit.*, p. 105.
17. C.W. Nicholas, "Historical Topography of Ancient and Mediaeval Ceylon" *JRASCB*, N.S., VI, (1963) p. 30.
18. *CV*, LVIII, 42-44; LXXV, 36-61; *UHC*, I, Pt. II. p. 426; Geiger, *op.cit.* p. 105, Nicholas, *op.cit.*, p. 71-72.

stretches of this road were widely used in and after the twelfth century as the period coincides with the settlement expansion in the region. It is also likely that the southern direction of this road was improved and connected to commercially important centres such as Beruvala, Colombo and Wattala in the thirteenth, fourteenth and fifteenth centuries.

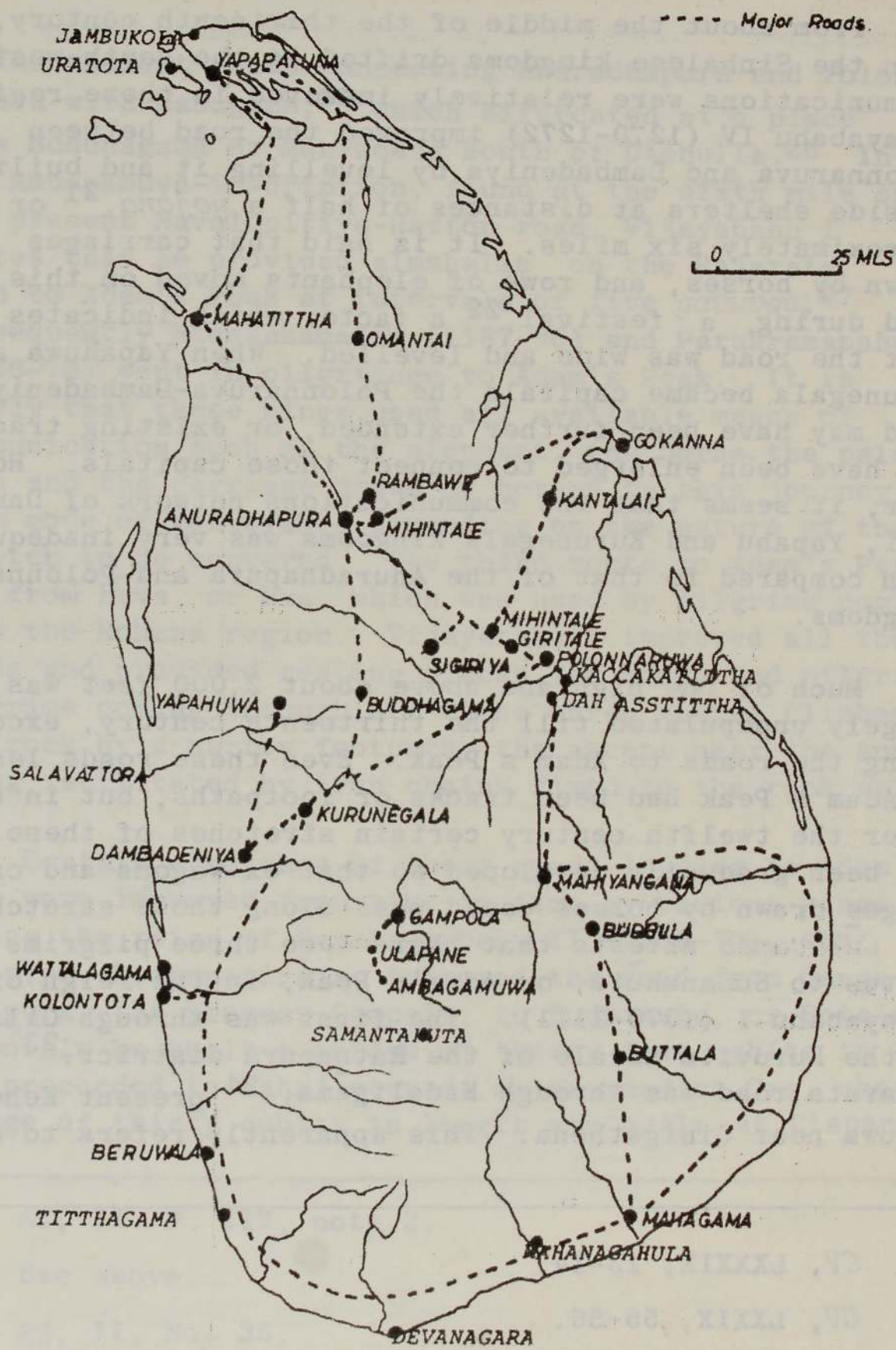
Anuradhapura and Polonnaruwa were also connected with Trincomalee (the ancient Gokanna) by two main roads. The remains of two ancient stone bridges have been found near Mahakanadarava tank and on the Yan Oya near Ratmale. These probably marked the ancient road to Trincomalee which almost follows the present one. Thus, this road ran by way of Mihintale, Mahakanadarawa, Pankulam and then reached on to Trincomalee.¹⁹ Panduwasudeva, who succeeded Upatissa as the king in the fifth century B.C., landed at Gokanna²⁰ and proceeded interior perhaps along this road. The road from Polonnaruwa to Trincomalee would have followed the present road *via* Giritale, Minneriya, Kantalai and on to Trincomalee. However, the ancient port of Gokanna, although important as a landing place, was not so important commercially, and so this road would not have been used as frequently as that between Anuradhapura and Kantai.

It is likely that when Sigiriya was the capital under Kassapa I (473-91) some routes of communication existed between Sigiriya and the important political, commercial and military centres in the north-central plain, but unfortunately the available evidence does not help us to understand the manner in which Kassapa and his court maintained administrative and communication links with the rest of the country.

19. M.Z. Ismail, *op.cit.*, p. 216-17.

20. *Vamsatthappakāsini*, ed. G.P. Malalasekara, P.T.S., London, (1935) p. 269.

MAJOR ROUTES IN ANCIENT AND MEDIEVAL SRI LANKA



From about the middle of the thirteenth century, when the Sinhalese kingdoms drifted to the south-west, communications were relatively improved in these regions. Vijayabahu IV (1270-1272) improved the road between Polonnaruva and Dambadeniya by levelling it and built wayside shelters at distances of half a *yōjana*,²¹ or approximately six miles. It is said that carriages drawn by horses, and rows of elephants moved on this road during a festival,²² a factor which indicates that the road was wide and levelled. When Yapahuwa and Kurunegala became capitals the Polonnaruva-Dambadeniya road may have been further extended, or existing tracks may have been enlarged to connect those capitals. However, it seems that the communications network of Dambadeni, Yapahu and Kurunegala kingdoms was very inadequate when compared to that of the Anuradhapura and Polonnaruva kingdoms.

Much of the highland above about 2,000 feet was largely unpopulated till the thirteenth century, except along the roads to Adam's Peak. Even these roads leading to Adam's Peak had been tracks or footpaths, but in and after the twelfth century certain stretches of these roads had been gradually developed so that ox-wagons and carriages drawn by horses could pass along those stretches. The *Cūlavamsa* attests that there were three pilgrims' routes to Sumanakūta, or Adam's Peak, in the reign of Vijayabahu I (1070-1111). The first was through Gilimale in the Kuruvita Korale of the Ratnapura district.²³ The Rajarata road was through Kadaligāma,²⁴ present Kehelgamuwa near Ginigathena. This apparently refers to one

21. *CV*, LXXXIX, 13-14.

22. *CV*, LXXIX, 55-56.

23. *CV*, LXXV, 36-61; C.W. Nicholas, *op.cit.* p. 71-72.

24. *CV*, LX, 64-66.

of the ancient roads connecting Anuradhapura and Polonnaruva with Mahāgama,²⁵ which bifurcated at a place like Buddhagama or Manikdena south of Dambulla.²⁶ In the Ambagamuva inscription, found at the sixth mile on the present Navalapitiya-Hatton road, Vijayabahu I states that he provided almshalls on the Rajarata road to Adam's Peak at intervals of five *gavvas*.²⁷ Subsequently Nissankamalla (1187-96) and Parakramabahu II (1236-70) went in pilgrimage to Adam's Peak. It is likely that these kings used all available means of communication such as the elephant, the horse, the palanquin and the carriage drawn by horses in this journey, each mode of conveyance depending on the nature of the stretch to be covered. The third route to Adam's Peak was from Hūva, or Uva, which was used by pilgrims coming from the Rohana region. Vijayabahu I improved all these roads and provided resting places for monks and pilgrims.²⁸ Pilgrims coming through all these three routes climbed the rock by a narrow footpath, the ascent near the summit being facilitated by iron chains fixed to the rock wall.²⁹

Certain stretches of these roads leading to Adam's Peak were improved from time to time by various kings. During the reign of Parakramabahu II (1236-70), the minister, Devappatiraja, improved the road from Gangasiripura, the present Gampola, to Bodhitale, or Botale. At Botale he built a bridge of thirty five cubits in length and proceeded to Kahajjotanadi or Kanamadiri Oya, where a bridge of thirty cubits in length was built at Ulapane

25. *EZ*, II. P. 217, note 2.

26. See above.

27. *EZ*, II, No. 35.

28. *CV*, LX, 64-66.

29. (Ed.) Henry Yule, *The Book of Ser Marcopolo*, London (1871-75) p. 298.

(Ulapanagāma). Devappatiraja also built a bridge of thirty five cubits in length and a bridge of thirty four cubits in length at Ambangamuva (Ambagāma).³⁰ Perhaps some of these roads and bridges, particularly those around Gampola, were further developed during the time of the Gampola kingdom (1341-1408).

According to the *Visuddhimārga Sannaya* there were three kinds of bridges, namely *dandakasetu*, *jamghasetu* and *sakata setu*.³¹ The *dandakasetu*, otherwise known as *edanda*, was a single or double tree trunk or log passing from bank to bank of a small stream. The *jamghasetu* was a bridge which could be used by four or five people walking abreast, and the *sakatasetu* was a bridge built to take a cart across. It is most likely that most of the bridges of this sort were wide bridges on which bullock carts could pass easily. These wide bridges were mainly of wood, but as mentioned earlier, on important main roads there were stone bridges or even bridges made of iron. It is said that an army commander of Parākramabāhu I (1153-86) built a long solid bridge, twenty cubits or thirty feet broad, across the Kala Oya, passable by elephants, horses and carriages drawn by horses. In the construction of this bridge iron bands and nails and timber had been used.³²

The construction of roads and bridges was initially unplanned and undertaken when necessary. The earliest tracks or roads were prepared by settlers and migrants, and later on some of the roads were constructed owing to military requirements. But subsequently an institutional setup which could organize labour resources for road-works emerged.

30. CV, LXXXVI, 18-24; *Pujavali*, 34th chapter ed. M. Medhankara, Colombo, 1932, p. 37; C.W. Nicholas, *op.cit.*, p. 117.

31 *Visuddhimārga Sannaya*, Vol.IV, ed. K.A. Dharmmaratana, (B.E., 2486) p. 302.

32. CV, LXX, 127-29.

For example, at least by the ninth and tenth centuries there is evidence to suggest that the *raja-kariya* services were utilized for work on roads. A pillar inscription from Mihintale, datable to the ninth century, uses the term *mang mahavar*.³³ An inscription on a pillar fragment at the Gonnava Devale, datable to the tenth century, uses the term *mahavar*.³⁴ According to Paranavitana *var* (skt. *vara*) means 'turn' and may denote the corvee labour which was exacted from the peasants at regular intervals or turns. *Mahavar* may therefore be rendered as the 'principal turn of service' and *mangmahavar* as the 'principal turn of service on the roads'.³⁵ It is perhaps by utilizing such corvee duty that Vijahabahu IV gathered together a large number of people from various parts of the island for improving the road from Polonnaruva to Dambadeniya.³⁶ As stated earlier, certain kings even caused the roads to be surveyed and distances from one place to another marked by erecting inscribed pillars.³⁷ This further establishes the fact that there was a properly organized machinery for the construction and maintenance of roads.

Communications in large towns were facilitated by well-laid out streets. According to Fa-Hsien, the roads and streets in the city of Anuradhapura were excellently laid out and beautifully maintained. He further states that there were four principal streets in Anuradhapura and that these streets were wide and well paved with bricks and lined with walls built of bricks.³⁸ Terracotta

33. *EZ*, V, No. 29.

34. *EZ*, IV, No. 33.

35. *EZ*, IV, p. 191, note 2, *EZ*, V. Pt. III, p. 325.

36. *CV*, LXXXIX, 13-14.

37. *EZ* II, No. 15, *CJSG*, II, p. 129-34.

38. S. Beal, *Buddhist Records of the Western World*, London, (1869) p. 101 ff.

drains were laid under the streets for drainage purposes.³⁹ Some of the streets were known by names such as *Candavanka vīthi*, *Mahaveli vīthi*, *Singuruvak vīthi* and *Raja vīthi*.⁴⁰ One of the main streets, the ceremonial street, started at the southern gate near the Thupārama, and it is said to have veered eastwards and then northwards.⁴¹

The other centres of political power such as Polonnaruva, Mahāgama, Dambadeniya, Yapahuwa and Kurunegala and large market towns such as Mantai, Padaviya and Vahalkada were also divided into different quarters by streets. According to the *Cūlavamsa*, in Polonnaruva Parākramabāhu I "had different kinds of streets laid down, many hundreds in number adorned with many thousands of dwellings of two, three and more storeys and provided with various bazaars where all commodities were available."⁴² The *Cūlavamsa* further states that there was incessant traffic of elephants, horses and carriages drawn by horses in these streets.⁴³ Although the *Cūlavamsa* account may be exaggerated, Polonnaruva was undoubtedly a developed city in the twelfth century.

Reference has been made to *Mangul Maha vīthi* and *Talaveli vīthi* in Mahāgama; and *Parivāra vīthi*, *Setthi vīthi* and *Agampadi vīthi* in Dambadeniya.⁴⁴ Obviously

-
39. S. Paranavitana, *Excavations in the Citadel of Anuradhapura*, Colombo (1936) p. 8-9.
40. *Sahassavatthupakarana*, ed. A.P. Buddadatta, Ambalangoda, (1959) p. 102, p. 107.
41. *Sumangalavilāsini*, vol. II, P.T.S. London, (1931) p. 572-73.
42. CV, LXXXIII, 148-50.
43. *ibid.*
44. *Sahassavatthupakarana*, *op.cit.*, p. 102, p. 117, *Dalada Pujavali*, ed. Kanadulle Ratharamsi, (contd.)

towns were focal points of spatial mobility and were linked with far-away places in the countryside by routes of communication which tended to radiate from the city to the agricultural hinterlands that surrounded or skirted them. There were people living in the periphery of cities, who moved in and out of them daily on various kinds of business. Thus, communications within the city and the immediately surrounding area were very much better than in the countryside.

In addition to roads, streets, footpaths and tracks, rivers were also used as a means of communication, but the geography of the island posed sharp limitations on their use. There is no doubt that, during the early stages of settlement expansion, numerous rivers and streams were crossed by rafts (*pahuru*), barges (*paru*) and small boats (*oru*)⁴⁵ and that these means of water-transport continued to be in use even after road transport systems developed. Rafts and barges were made of the lopped-off branches of the bamboos or pieces of wood,⁴⁶ and boats were usually carved out of wooden logs. The *Cūlavamsa* refers to the anchoring of small ships (*nābayo*) in the Mahaveli river,⁴⁷ which indicates that up to a point the river was navigable, although navigation was not possible in most parts of the Mahaveli or any other river.

Colombo, (1954) p. 54, *Saddharmatānkāra*, ed. Bentara Sraddhatissa, Panadura, (1934) p. 460, p. 500, p. 505, p. 520, p. 553, *Visuddhimaggaśāsanāya*, vol. I, *op. cit.*, p. 166.

45. *Jataka Atuvā Gatapadaya*, ed. D.B. Jayatilaka, Colombo, (1943) p. 159. *Dhampiya Atuvā Gatapadaya*, ed. D.B. Jayatilaka, Colombo (1932) p. 144.
46. ed. Mahdi Hussain, *The Rehla of Iban Batuta*, Baroda, (1953) p. 218.
47. CV, LXXVIII, 29.

One of the chief means of conveyance on land was the cart drawn by bullocks, which was commonly called *sakata* in Pali and *gala* in Sinhala. These were drawn by oxen and were used for passenger transport as well as for commodity transport. As indicated by the Madirigiriya pillar inscription and the pillar inscription from Mahakalattawa, even buffaloes had been used in carts in ancient Sri Lanka.⁴⁸ But mostly small quick zebu oxen would have been used as draught animals. The cart was the most commonly used means of transport for long distance travel, and therefore some main roads and tracks were known as 'cart-road' or *gal manga*.⁴⁹ Mercantile groups, who transported commodities in bulk, depended on the bullock-cart for such travel and they even travelled from the northern Dry Zone plains to the hill country to fetch commodities of trade such as ginger and turmeric.⁵⁰ Perhaps the cart was similar to the modern two-wheeled bullock-cart, which is protected from sun and rain by a thatch of plaited palm leaves. The cart drawn by buffaloes would have been designed differently.

Apart from being used in carts, bullocks were also used as pack animals or draught animals. According to the Badulla pillar inscription of the tenth century A.D., transporting commodities to market towns was largely done by using pack animals.⁵¹ Undoubtedly there would have been wayside stop-overs all over the country for groups of *tavalam*, or pack animals, and ox-wagons from very

48. EZ, II, No. 16, EZ, V. No. 31.

49. EZ, I, No. II.

50. MV, XXVIII, 24-35; *Sinhala Thupavamsa*, ed. Vataddara Medhananda, Colombo, (1950) p. 166; *Rasavahini*, ed. Sarnatissa thera, Colombo (B.E. 2434) p. 109.

51. EZ, V, Pt. II, No. 16.

ancient times. One such stop-over known as *Tavalama* close to Bentota, and a caravan leader, *Sattuna*, are referred to in the Galapata vihara inscription of Parakramabahu II.⁵²

Irrespective of the movement of trade commodities on bullock-carts or pack animals between commodity-producing areas and towns and urban centres, the pattern of economic activity and the nature of communications in the countryside restricted mobility. The limited needs of the villagers for products that were not available locally were supplied by itinerant traders operating from market towns and cities that were close to them. These itinerant traders operated along main roads, tracks, river crossings and footpaths and a pingo, or *kada*, was commonly used by them to carry small quantities of merchandise.⁵³

The majority of the ordinary people walked even when travelling long distances, usually carrying their own food.⁵⁴ Therefore wayside shelters known as *agantukasala* or *sala* in Pali and *ambalama* in Sinhala.⁵⁵ were a common feature on widely used roads and tracks. These ancient wayside shelters would not have been very different from those of the eighteenth century described by Coomaraswamy. According to him, the pillars of *ambalamas* were of stone, supported on carved wooden brackets and had open timbered roofs covered with tiles. The smallest *ambalama* consisted of a foundation of four beams with four posts at the

52. *EZ*, IV, No. 25.

53. *Jataka Atuva Gatapadaya*, *op.cit.*, p. 13

54. *Elu Attanagalu Vamsa*, ed. Munidasa Cumaratunga, Colombo (B.E. 2404) p. 34; *Saddhamalankara*, *op.cit.*, p. 722.

55. *CV*, LXXIX, 20-22; 63-64, 80; LXXXIX, 15; *Khankavitari Pitapota*, ed. K. Pannasekara, Colombo, (1936) p. 58.

corners, and a thatched roof; the better ones had more pillars, and were sometimes divided into compartments for the convenience of those having to spend the night there.⁵⁶

The modes of conveyance of the nobility were diverse. Horses, mainly imported from Sind, apart from being used in the king's stables, were utilized for travel by members of the royal family, army commanders, ministers and similar dignitaries. Although sparingly used, horses had also been utilized in warfare⁵⁷ and cavalry constituted a section of the traditional four-fold army. (*senacaturāni*).⁵⁸

Carriages drawn by horses too were used in warfare but not frequently and that too depending on the geographical conditions of the battlefield. Rakkha, a general of Parakramabāhu I, having defeated Gajabāhu's (1132-52) armies at Aligama (present Alagamuwa on the Navula-Elehera road) is said to have captured carriages drawn by horses along with implements of war.⁵⁹ In another instance, a general of Gajabāhu, having been defeated by Parākramabāhu, is said to have left the horse-carriage and umbrella and fled into the forest.⁶⁰ Carriages drawn by horses, perhaps different from those used in warfare, were also used on certain festive occasions. It is said that Parākramabāhu II, in the celebrations of the Tooth and the Bowl relics, placed the two relics on a vehicle (*ratha*) adorned with many kinds of ornaments.⁶¹ Vijayabahu IV (1270-72) brought the Tooth and the Bowl relics on a vehicle from Jambudoni to Pulatthinagara.⁶²

56. A.K. Coomaraswamy, *Medieval Sinhalese Art*, 2nd ed. New York, (1956) p. 116.

57. *MV*, XXIII, 71; XXXI 38; *CV*, L, 26-28; LXX, 299.

58. *EZ*, II, Nos. 14, 23; *CV*, LXX, 226-27; LXXXII, 220.

59. *CV*, LXX, 122.

60. *CV*, LXX, 85.

61. *CV*, LXXXV, 25.

62. *CV*, LXXXIX, 55-56.

The Galpota inscription refers to a designation titled Vahananayaka.⁶³ Parnavitana renders the term Vahananayaka as 'Commander of Vehicles' or 'the Chief of the Department of Vehicles'. Further, he equates the title Vahananayaka with the office of Yan-tan-navan of the same inscription. Most probably the horse-drawn carriages and such other vehicles of the king were in charge of the officer who held this title, but the manner in which this office functioned cannot be determined in the light of the available evidence.

In addition to carriages drawn by horses, in exceptional circumstances the elephant also had been used in drawing vehicles. The *Dalada Sirita* states that a vehicle drawn by an elephant was used in a procession in which the Tooth Relic was taken.⁶⁴ Perhaps in transporting large stone slabs for the construction of reservoirs and sometimes for the setting up of slab inscriptions, elephants, or wheeled platform drawn by elephants, were used. The postscript of the Polonnaruva Galpota slab inscription of Nissankamalla states that the slab in which the inscription is engraved was brought there from Sagiri⁶⁵ by the soldiers of Nissankamalla. According to Burrows and Wickramasinghe the Sagiri referred to in this instance is Mihintale⁶⁶, while Muller is of the opinion that the original home of the slab was not Sagiri but Sigiri, which is situated only about fifteen miles from Polonnaruva.⁶⁷ In any case this huge slab was brought to Polonnaruva from a considerable distance. Most probably a wheeled platform or a carriage drawn by elephants was used by the soldiers of Nissankamalla to transport this slab.

63. EZ, V. no. 17.

64. *Dalada Sirita*, ed. Vajira Ratnasooriya, Colombo (1949) p. 50.

65. EZ, V. No. 17.

66. S.M. Burrows, "A Year's Work at Polonnaruva", *JRASC* X, No. 34, (1889) p. 46-49; EZ, II, p. 99.

67. ed. E. Muller, *Ancient Inscriptions of Ceylon*, London, (1882-83) p. 66.

The king sometimes rode an elephant during festive processions and in war.⁶⁸ The chronicles describe how elephants sheathed in protective armour were goaded on to break down city walls and gates, while the defenders stationed on the top of the wall counteracted by hurling weapons and pouring down molten pitch on the attackers.⁶⁹ The elephants formed the first category of the traditional fourfold army and were used particularly to break up the fortress walls of the rivals. But the number of animals used in each battle would have been rather small and in certain wars fought in the thickly wooded areas the elephant, the horse and the horse-drawn chariot would never have been used.

The palanquin or litter known by terms such as *sivikā*, *sivige*, *idoli*, *doli* and *kūncam*⁷⁰ was an important means of conveyance and was mostly used by the king, ladies of the court and high dignitaries, including Buddhist monks. The chronicles refer to instances of the king and his officers being carried in palanquins even in war.⁷¹ The *Dambadeni Katikavata* warns that monks in monasteries should not use palanquins as their private property.⁷² John De Marignolli refers to palanquins made of coconut wood and palanquin bearers of Ceylon.⁷³ According to Iban Batuta, the Aryacakravarti had given him a *dōlā*, or a palanquin, to proceed to Adam's Peak, which was carried

68. MV, XXV, 67-70.

69. MV, XXV, 26-40; *Sinhala Thupavamsa* ed. W.A. Samarasekara, Colombo, (1914) p. 132-33.

70. MV, XXXII, *Vesaturudasanne* ed. D.E. Hettiaracchi, Colombo, (1950) p. 20; *Saddharmalankara*, *op.cit.*, p.442 .

71. MV, XXXII, 7; CV, Pt. I, p. 328, note 2, CV, LXVII, i, XC.5.

72. *Dambadeni Katikavata*, ed., Dhammindasabha and Denagama Pragnasara, Colombo (1927) p. 18.

73. ed. Henry Yule, *Cathay and the Way Thither*, Hakluyt Society, London, (1866) p. 366.

by the king's slaves on their shoulders.⁷⁴ This implies that there were people who were assigned the *rajakariya* duty of bearing the palanquins, as it was in the Kandyan period.⁷⁵ The Mankanai inscription of Gajabahu II indicates that the royal palanquin department had been well established by the Polonnaruva period similar to the *kunam maduwa*, or the royal palanquin establishment of the Kandyan period. The Mankanai inscription refers to a land grant made to the overseer of the palanquin bearers of the king.⁷⁶

In the Kandyan period none below the royal family could sit while an *adikarama* or a chief minister was standing, nor could a person ride on an elephant, horse or in a palanquin while an *adikarama* was on foot; he was also obliged to give way to the *adikarama* when passing. When a *disave* or a chief of a province entered his province, he could ride in a palanquin, but not when attending the king.⁷⁷ Probably similar customs prevailed in earlier periods as well.

The foregoing study of the routes, ways and means of communications indicate that mobility in ancient and mediaeval Sri Lankan society was limited to a considerable extent. The communication process was relatively slow when compared to the countries in which the horse was a regular means of conveyance. Nevertheless there were organized communication links connecting the capitals, ports, market towns and large and small villages.

-
74. *The Rehla, op.cit.*, p. 218.
75. Ralph Peiris, *Sinhalese Social Organization*, Colombo, (1956), p. 17, 116, 122.
76. K. Kanapati Pillai "Mankanai Inscription of Gajabahu II" *UCR*, XX, No. 1 (1962) p. 12-14.
77. Ralph Pieris, *op.cit.*, p. 22-23.

The capitals like Anuradhapura and Polonnaruva were served by reasonably good roads connecting them with major ports, market-towns, as well as with the settlements of the immediate suburbs. Immediate suburbs of the capital were dependent on it with regard to educational and health facilities. The capital was also the centre of administration, religious ritual, entertainment, trade in luxury commodities such as fine cloth, perfumes and wines, and therefore attracted outsiders throughout the year.

It is possible that imported luxury commodities were conveyed from port towns and the capital to the other towns where there was a demand for such commodities. Towns such as Padaviya and Vahalkada were large centres with urban functions and had separate market sectors with shops selling a variety of goods. To those centres people moved from surrounding areas for specialized services. Entertainment and religious functions were better organized in these places, for many festivals were celebrated at them and on a grander scale than in the villages.⁷⁸

Those who lived in cities, market-towns, port-towns and closer to *mahapathas* or important roads were undoubtedly exposed to greater outside influence, including ideas. Their needs were also better supplied, as some of the luxury commodities entered their markets. Local goods from the villages moved upwards from the countryside on ox-wagons and pack-bullocks to the towns, the capital and the ports, and these operations too benefited those living closer to the *mahapathas*. But at the same time they came under the stronger administration of the king and his officers.

78. M.Z. Ismal, *op.cit.*, p. 201-208.

Only the pedlar and the hawker helped to link the numerous village communities into some sort of trading network. The majority of the villagers, it would seem, have been confined to their own localities except on the occasions when they went on pilgrimages or flocked to a nearby large village or a town to witness festivals. To a large extent the villages were spatially restricted societies, where close interaction was only among the villagers themselves and among other nearby settlements. These considerably self-sufficient local units existed with close cooperation and interdependence among the inhabitants within a locality. On the other hand, in times of distress, such as famines and plagues, very little outside help came to them. This explains why several regional famines are referred to as major famines in the chronicles.⁷⁹

Administratively the village was ruled by a village headman, known by various designations such as *gamika* and *gamabhōjaka* in the early Anuradhapura period, and later by a *gamanayaka* assisted by village committees.⁸⁰ These villages enjoyed a greater autonomy on account of the poor communication system but were answerable to the central administration through royal officers who went on circuit once a year.⁸¹ There are also instances of people living in remote areas refusing to pay taxes when the king's authority was weak,⁸² and rebels collecting

79. *MV.* XXXII, 29-30; *CV*, XLI, 75-80.

80. *UHC*, I, Pt. I, p. 235; *CV*, LXVIII, 53.

81. *UHC*, I, Pt. I, p. 373; Wilhelm Geiger, *op.cit.*, p. 142-43.

82. *CV*, LXI, 70-71.

forces in inaccessible regions. Thus, in theory, the suzerainty of the king extended to the remotest village but, in practice, the degree of state control over any region was in inverse ratio to its distance and accessibility from the administrative centre.

W.I. SIRIWEERA

* This research was funded by a grant from the University of Peradeniya. The author is grateful to Mr. S. Selvaratnam and Mr. M.D. Nelson for their help.

DĀŚAKUŚĀLAKARMAPATHA -
THE PATH OF TEN GOOD ACTIONS

That the avoidance of bad action constitutes good action appears to be a common concept in Buddhist literature. Attention has been drawn to this notion by the well-known scholar, Franklin Edgerton. Discussing the term *karmapatha* (course of action) in his *Buddhist Hybrid Sanskrit Dictionary*¹ he states that it seems to be a fundamentally Buddhist one, and that, as in Pali, it almost always applies to a set of ten good actions (*daśakuśāla*) consisting of the avoidance of ten bad actions (*daśākuśāla*), namely three of body (taking life, theft, fornication or adultery), four of speech (lying, harsh speech, spiteful speech, idle or silly or disconnected speech), and three of mind (covetousness, malevolence and heresy). Noting texts where the ten good (*kuśāla*) or bad (*akuśāla*) actions are listed, Edgerton makes special reference to the *Śikṣāsamuccaya*, which describes the torments suffered in hell by those guilty of each of the ten sins. The *Śikṣāsamuccaya*,² a compendium of Buddhist teaching compiled by Śāntideva, probably

-
1. Edgerton, Franklin. *Buddhist Hybrid Sanskrit Grammar and Dictionary*. Vol. II: Dictionary. New Haven: Yale University Press (1953) p. 170.
 2. a) Bendall, Cecil. ed. *Śikṣāsamuccaya*. A Compendium of Buddhist teaching. Compiled by Śāntideva chiefly from the earlier Mahāyāna Sūtras, St. Pétersbourg (1897-1902) *Bibliotheca Buddhica* I.
b) Vaidya, P.L. ed. *Śikṣāsamuccaya* of Śāntideva. Darbhanga, The Mithila Institute of Post-graduate Studies and Research in Sanskrit Learning (1961) Buddhist Sanskrit Texts No. 11.
c) Bendall, Cecil and Rouse, W.H.D. transl. (contd.)

as early as the middle of the seventh century A.D.,³ consists almost entirely of quotations and extracts from sacred texts,⁴ chiefly the earlier Mahāyāna-Sūtras. The extract describing the ill-effects of the ten bad actions, included in the *Sikṣāsamuccaya* is from a text called the *Saddharmasmṛtyupasthāna-sūtra*.

In a recent contribution to *Kalyāṇī*, the Journal of Humanities and Social Sciences of the University of Kelaniya, Sri Lanka,⁵ I gave the Sanskrit text and English translation of a fragment of a manuscript which refers to the ten-fold classification of bad action made by the Buddha in the *Saddharmasmṛtyupasthāna*. This text also categorises the ten bad deeds into those of body, speech and mind, and describes the torments suffered in hell as the result of evil action without specifying a particular evil.

The *Supriyasārthavāha-jātaka* (SSJ, hereafter), a metrical composition of the *avadānamāla* genre usually dated to about the sixth century A.D. or later,⁶ the text

Sikṣāsamuccaya. A Compendium of Buddhist doctrine. Compiled by Śāntideva chiefly from earlier Mahāyāna Sūtras. London (1922) Indian Text Series.

3. Winternitz, *A History of Indian Literature*. Vol. II, translated from the original German. University of Calcutta (1933) p. 366.n.2.
4. *ibid.* p. 366.
5. *Kalyāṇī*. Journal of Humanities and Social Sciences of the University of Kelaniya. Volumes V and VI (1986-1987) in press.
6. Winternitz, *op.cit.* p. 291.

of which has not yet been published,⁷ contains four verses,⁸ which again categorise the ten bad actions into those of body, speech and mind and state their ill-effects concisely. The *SSJ.* is an adaptation of the prose *Supriyavadana*, the eighth story of the *Divyavadana*,⁹ a compilation said to have come in to existence in its present form between the years 200 and 350 A.D.¹⁰ This *avadāna* narrates the story of Supriya, a merchant of Benares, who went to a city called Badaradvipa to bring a wish-fulfilling jewel (*cintamani*), so that he could practise generosity and satisfy the desires of all mendicants. At the end of an arduous journey undertaken at the suggestion of a goddess, with whose help and also that of Magha, a merchant of the city of Rohitaka, Supriya reached Badaradvipa, where there were four *Kinnara* cities. On Supriya knocking at the door of each of these cities, four, eight, sixteen and thirty-two lovely *Kinnara* maidens appeared at each in turn and tried to lure him to become their husband, whereupon he could lead a life of ease and comfort. But, as advised by the goddess earlier, Sypriya not only resisted their lustful enticement but also preached to them the good doctrine and received the wish-fulfilling jewels from them.

In his doctrinal discourse at the first *Kinnara* city, Supriya having spoken of the ten evils and their

-
7. I have prepared an edition of the *Supriyasārthavāha-jātaka* based on seven manuscripts found in Tokyo and Kyoto and intend publishing it shortly. The text runs into 777 verses.
 8. Verses 464-467 of the edition referred to in note 7 above.
 9. Cowell, E.B. and Neil, R.A. ed. *The Divyāvadāna* Cambridge University Press, Cambridge (1886) p. 91-123; Vaidya, P.L. ed. *Divyāvadāna* Darbhanga. The Mithila Institute of Post-graduate Studies and Research in Sanskrit Learning (1959) p. 58-76.
 10. Vaidya, P.L. ed. *Divyāvadāna. op.cit.* p. XI.

ill-effects asked the *Kinnara* maidens to abandon them and to practise the ten good deeds, which here too, as in instances pointed out by Edgerton, implicitly involve the avoidance of the ten bad deeds. I give below the text of the relevant stanzas of the *SSJ*. and an English translation of them.

śarīraṃ trividhaṃ pāpaṃ vaṇībhavaṃ caturvidhaṃ /
trayaṃ manasikaṃ tadvad daśakuśalikaṃ smṛtam //

sādattādānahimsā ca kāmamithyā śarīrajaṃ /
dīnasvalpayuṣau vamaḥinam ante ca durgatiḥ //

mṛṣāvādaś ca paśūnyam raudraṃ bhinnam ca vācikaṃ /
kuṣṭhakayaś ca murkhaś ca bhartsyamano janojjhitaḥ //

abhidhyā ca paradrohaṃ mithyādrṣṭiś ca mānasam /
sarvapriyatvadrohatvaṃ hināṅgaṃ tatphalaṃ viduḥ //

Bodily evil is three-fold; that arising from speech four-fold; and that of mind three-fold. The ten evils are known as being of that manner.

Injury to life, theft and improper behaviour relating to the senses arise out of one's body, (their ill-effects being) shortness of life, poverty, not having a wife, and birth in an evil state in the end.

False speech, slander, harsh (words) and loose talk are (the evils) of speech, (their consequences being) a leprous body, dumbness, being reviled and being shunned by others.

Desire, malice towards others and false views are (the evils) of the mind. Being subject to the aversion and hostility of all and defectiveness of limb, are known to be their results.

The *Divyāvadhāna* version of the legend does not list the ten evils or speak of their ill-effects at the corresponding point of the story or elsewhere but merely states

that Supriya condemned the ten bad paths of action and praised the ten good paths of action.¹¹

However, the ten evils are listed and the advantages of refraining from them discussed in the *Badaradvīpayātrāvadāna*, a version of the Supriya legend found in Ksemendra's *Avadānakalpalatā*,¹² a work attributed to the eleventh century A.D.¹³ The text of the relevant stanzas as printed in Vaidya's edition of the *Avadānakalpalatā* is as follows.¹⁴

paracittam viṣam yeṣam jananyaś cānyayoṣitaḥ /
parahiṃsātmaḥiṃsaiva pakṣas teṣam niratyayaḥ //

paśūnyāsatyapāruṣyābhinnavācojjhitam vacaḥ /
sadaiva vadane yeṣam teṣam sarvāśiṣā diśaḥ //

abhidhyārahitam ceto vyāpāraparivarjitam /
mithyadr̥stivihinam ca yeṣam te satpatham śritāḥ //

daśākūśalamārgebhyo nirgatānām nisargataḥ /
ete kūśalavargasya mārgaḥ svarge nirargalāḥ //

The *Badaradvīpayātrāvadāna* has been translated into English under the title *Buddha's Journey to Badaradvīpa*

11. *ibid.* p. 72, lines 20, 21: *Supriyo mahāsārthavāho dasakūśalan karmapathan vigarhati dasakūśalan karmapathan samvarnayati.*

12. Das S.C. and Pandit Hari Mohan Vidyābhūṣana ed. Ksemendra's *Avadānakalpalatā* with its Tibetan version, Bibliotheca Indica. 2 vols. Calcutta (1888 and 1918) vol. I. p. 177-299; Vaidya, P.L. ed. *Avadānakalpalatā* of Ksemendra, 2 vols. Darbhanga, The Mithila Institute of Post-graduate Studies and Research in Sanskrit Learning (1959) vol. I. p. 51 - 64.

13. *ibid.* p. VII-VIII.

14. *ibid.* p. 62, verses 173 - 176.

by Satis Chandra Banerjia.¹⁵ I give below his translation of the verses¹⁶ quoted above.

"Invincible is the party of him who holds another's wealth to be poison, regards another's wife as his mother and considers envy of others equivalent to envy of himself.

Constantly is he blessed by all the sides, whose speech is free from guile, untruth, harshness and heresy.

They are on the right path, whose hearts are free from lust of other's gold, exempt from all (mundane) concerns, and safe from looks of vain (longing).

To those blessed ones that have naturally escaped from the ten kinds of unhappiness (sins), the way to heaven is free from bar."

RATNA HANDURUKANDE

15. Banerjia, Satis Chandra. *Badaradvīpayātravadāna* of *Avadanakalpalatā* (Pallava 6) translated as *Buddha's Journey to Badaradvīpa*. Calcutta. Journal of the Buddhist Text Society of India. Vol. III (1893) Part I. p. 1 - 11.

16. *ibid.* p. 10.

THE RÔLE OF THE CURTAIN IN THE SANSKRIT THEATRE

The Sanskrit theatre is perhaps the first theatre in the world to have benefited by the effective use of a curtain in the sense we know it today. In the Greek theatre the curtain was used only to form part of the background of the Attic, Megarian and Syracusan comedies¹, but seems never to have been used as a movable mechanical device for producing any stage effects. This is quite understandable, because the Greek dramas were staged in absolutely open-air theatres with an auditorium with gradually rising tiers of seats running more than half way round the orchestra circle, or dancing-place, which separated it from the stage. In such a theatre a curtain could not have served any useful purpose. But in the Sanskrit playhouse, we know for certain, the curtain was used to the fullest advantage for bringing about all sorts of stage effects, though it is difficult to say how exactly an open-air theatre made use of it, with an audience surrounding most probably three sides of the arena. Whatever may have been the case with the open-air theatre, one thing appears certain - that in so far as textual evidence goes, Sanskrit plays were doubtless written to be presented on a stage equipped with at least one curtain.

The commonest Sanskrit term for the curtain is *javanikā*. It is also called *yavanikā*, a term which has led some scholars to believe that the curtain was borrowed from the Greeks (*Yavanas*). This view, however specious it appears, has no firm ground to stand upon, the most serious objection to it being that the ancient Greeks, as we have just observed, never employed a curtain in their theatre. Anyway, the theory of direct Greek influence on the Sanskrit theatre has now been rejected by many scholars

1. T.B.L. Webster, *Greek Theatre Production*, London (1956), p. 20, 101, 141.

as wholly untenable. The view that the curtain was called *yavanikā* because the tapestry imported from Persia was brought by Ionian merchants, also fails to convince us, not only because there is no evidential proof to support it but also because the word *yavanikā* has no special application to a stage curtain, and may as well be applied to any piece of cloth which serves to cover something. In two of Bhasa's plays we come across the word *yavanikā* used in the sense of a piece of cloth spread over a dead body². However, any attempt to trace in the word *yavanikā* a vestige of Greek influence on the Sanskrit theatre will face a serious challenge from the existence of pure indigenous terms for the stage curtain, such as *apaṭi*, *paṭi*, *tiraskariṇi* and *pratisīra*. The attempt made by the commentator on the Amarakoṣa to trace the derivation of the term *javanikā* from the root *ju*³ must be considered far-fetched, for it is divorced from any connection with the idea of a curtain for covering or concealing something. It is perhaps a Prakritized form of the term *yavanikā*, whose genuineness is in turn to be doubted. S.K. De is the first to draw our attention to still another term, *yamanikā*, which has been accepted by many as a variant of *yavanikā*. This term is, as De points out, as widely used as *javanikā* and perhaps more frequently than *yavanikā*⁴. *Yamanikā* may have, as he suggests, been derived from the root *yam* (to restrain), and the word is already found in the Yajurveda in the same sense⁵. It seems, therefore, more plausible to look upon *yamanikā* as the archetype of the term *yavanikā*, which eventually almost supplanted it.

-
2. *Pratimānāṭaka*, ii; *Urubhaṅga*, prose after Verse 65.
 3. *Amarakoṣa*, Haridas Sanskrit Series, Varanasi (1964), com. on II. vi. 20.
 4. S.K. De. 'The Curtain in Ancient Indian Theatre', *Bharatīya Vidyā*, Vol. IX, Bombay (1948), p. 125-131.
 5. *Vājasaneyīsamhitā*, xiv. 22.

There can be no doubt that the function of the stage curtain was to reveal persons or things to and from the audience. *Tiraskariṇī* means a veil or that which hides something⁶. That it was made of cloth is evident from its synonym *paṭī* or *apaṭī*.

Although Bharata refers to a curtain several times in his *Nāṭyaśāstra*, it does not seem to have drawn his attention as much as the stage or the auditorium, and has been completely ignored in his discussion on the playhouse. All we can gather from the sporadic references in the *Nāṭyaśāstra* to a stage curtain is that the first nine items of the *purvarāṅga*, or pre-play concert, such as arranging of the orchestra, setting of musical instruments and rendering of some airs by the orchestra, were performed behind a curtain, after removing which the rest of the programme was conducted in full view of the audience⁷, that a curtain was drawn aside before the entry of a character⁸, that a character in an agitated state of mind, however, entered without its removal⁹ and that the intimation speeches, known as *culikas* were made behind the curtain¹⁰. He does not expressly state where it was located or whether there were more than one curtain.

Commenting on Verse 11 in the fifth chapter of the *Nāṭyaśāstra*, Abhinavagupta remarks that there was a curtain between the *raṅgapīṭha* and the *raṅgāsīrṣa*¹¹ behind which

-
6. See. *Mālavikāgnimitra*, ii.1.
 7. *Nāṭyaśāstra*, Gaekwad's Oriental Series, (Vol. I) v. 11 f.
 8. *op.cit.*, (Vol. II) xii, 2 f.
 9. *op.cit.*, (Vol. IV) xxxii. 413.
 10. *op.cit.*, (Vol. II) xix. 113.
 11. *tatra yavanikā. raṅgapīṭhatacchirasormadhye*, *NS*. Vol. I, p. 210, com.

the musicians performed the nine so-called preparatory items of the *purvarāṅga*¹². We do not know for certain whether this was the location the curtain was assigned to by Bharata, but we cannot at the same time reject Abhinavagupta's statement. It stands to reason that there might have been, in his days at least, such a curtain behind which the first part of the pre-play functions was carried out¹³. (Fig.)

If we, on the authority of Abhinavagupta, accept that the Sanskrit theatre had a curtain running breadth-wise and dividing the stage into two halves, we must ask ourselves the question: Could this have been the only use of this curtain? If we should believe that there was a curtain, then we should also believe that it was designed to serve a greater and more practical purpose than concealing a group of musicians from the audience but for a short spell of time. If it played some part in the dramatic preliminaries, it must definitely have had a more specific function to perform in the play proper.

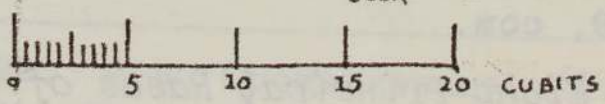
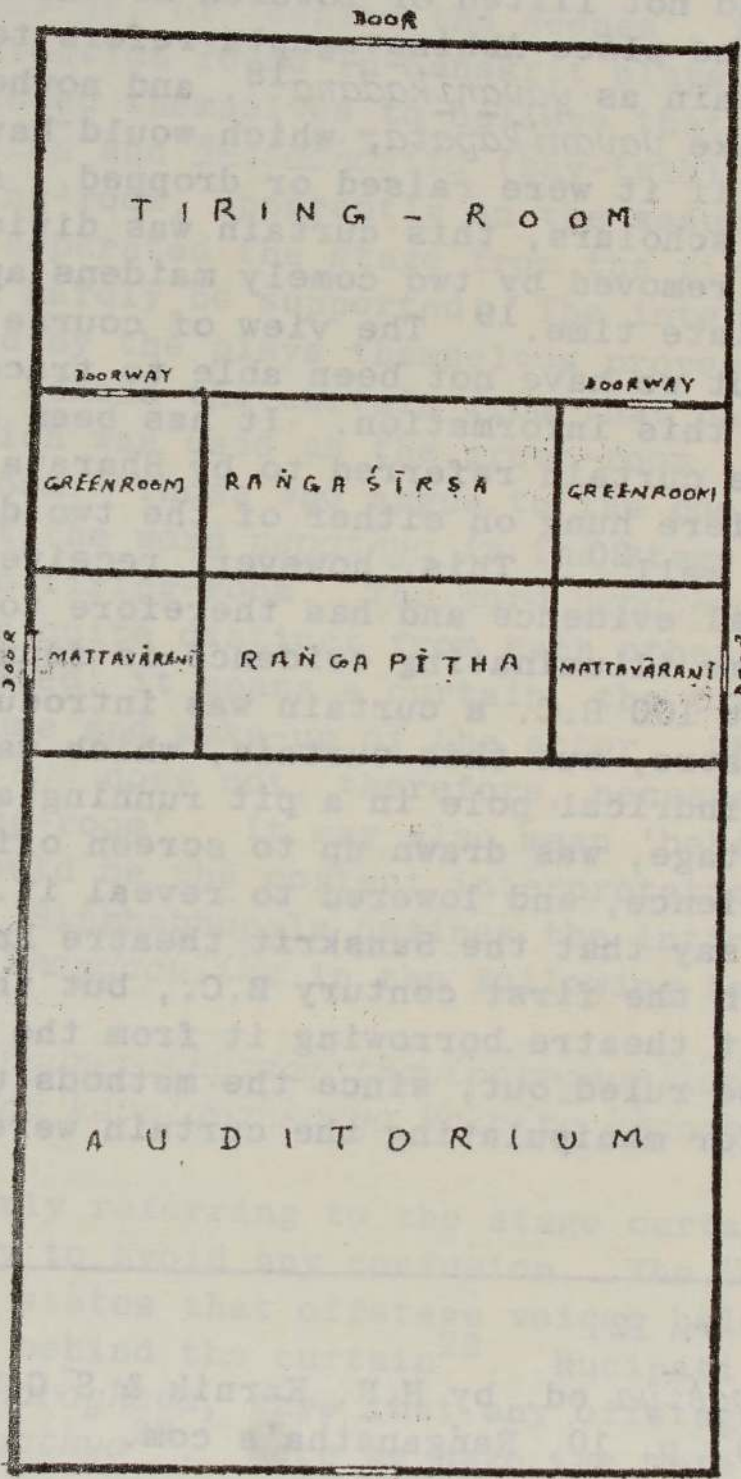
One thing we know for certain is that this curtain was not permanently fixed, but an adjustable one that could be drawn in and aside when required. But it should be clearly understood that it was by no means a drop-curtain, as some have hastily declared. The phrases like *paṭe capakarṣite*¹⁴, *apanītatiraskarīṇī*¹⁵, *javanikam*

12. *NS*. (Vol. I) v. 11.

13. It may be noted that a similar curtain which divided the stage into two acting areas and, when removed, exposed the whole stage to view, was known to the Elizabethan theatre as well.

14. *NS*. (Vol. II) xii. 3.

15. *Kuṭṭanīmata*, 910.



Plan of the medium type of rectangular play-house described by Bharata.

*vighāṭya*¹⁶ and *apasāraṇa*¹⁷ would suggest that it was pulled to a side and not lifted or lowered as the modern drop-curtain. In one place Abhinavagupta refers to the removal of the curtain as *yavanikādāna*¹⁸, and nowhere do we find a phrase like *yavanikapāta*, which would have been the apt expression if it were raised or dropped. According to some modern scholars, this curtain was divided in the middle and was removed by two comely maidens appearing at the appropriate time.¹⁹ The view of course looks quite plausible, but we have not been able to trace the original source of this information. It has been suggested by some that the curtain referred to by Bharata is nothing but a portière hung on either of the two doorways in the tiring-room wall²⁰. This, however, receives no support from factual evidence and has therefore to be set aside until some illuminating evidence is found to validate it. About 100 B.C. a curtain was introduced into the Roman theatre, but this curtain, which was rolled about a cylindrical pole in a pit running across the front of the stage, was drawn up to screen off the stage from the audience, and lowered to reveal it. We cannot definitely say that the Sanskrit theatre knew the use of a curtain in the first century B.C., but the question of the Sanskrit theatre borrowing it from the Roman theatre may well be ruled out, since the methods used in the two theatres for manipulating the curtain were entirely different.

16. *NS*. (Vol. I) v. 12.

17. Cf. *Vikramorvaṣīya* ed. by H.R. Karnik & S.G. Desai, Bombay (1959), p. 10, Raṅganātha's com.

18. *NS*. Vol. IV, p. 449, com.

19. S.M. Tagore. *The Eight Principal Rasas of the Hindus*, Calcutta (1879), p. 58 f.; E.P. Horowitz. *The Indian Theatre*, London (1912), p. 17; A.B. Keith: *The Sanskrit Drama*, Oxford (1924), p. 359 f.

20. M. Ghosh. *The Hindu Theatre*, *IHQ* (1933), Vol. IX(contd.)

Nepathye, or 'behind the scenes', is a very common stage direction found in Sanskrit plays. Many scholars have allowed themselves to believe that back-stage sounds like *cūlika* and *ākāśabhaṣita* (sky-talk) proceeded from the tiring-room, apparently on the assumption that the curtain separated the stage from the tiring-room. This view can hardly be supported. The internal evidence furnished by the plays themselves proves that they were produced behind the curtain from that part of the *raṅga-sīrṣa* which was used as the green-room, and not from the tiring-room. Those who argue to the contrary mistakenly interpret the word *nepathya* in the stage direction *nepathye* as the tiring-room. The word *nepathya* has three connotations quite distinct from each other, though loosely interrelated; it means a curtain, the tiring-room, or the costume and make-up of the actor. The stage direction *nepathye* does not, therefore, necessarily mean 'in the tiring-room'. It may also mean 'behind the curtain', which should be the correct interpretation in the present context. *Singhabhūpāla* defines the intimation speech known as *khaṇḍacūlika* in the following terms:

*raṅganepathyasaṁsthāyīpātrasaṁllāpavistaraiḥ
adau kevalamaṅkasya kalpita khaṇḍacūlika* 21

thus clearly referring to the stage curtain (*raṅganepathya*), apparently to avoid any confusion. The *Nāṭyadarpaṇa* expressly states that offstage voices belong to persons stationed behind the curtain²². *Rucipati*, commenting on the *Anargharāghava*, says that any offstage place could be called *nepathya*²³. Here we have the more reliable author-

p. 592. A.K. Coomaraswamy, 'Hindu Theatre', IHQ (1933), Vol. IX, p. 594.

21. *Rasārṇavasudhākara*, iii. 185.

22. *Nāṭyadarpaṇa*, GOS, Baroda (1959), p. 35.

23. *Anargharāghava*, Kāvya-mālā Series, Bombay (1937), p. 25, com.

ity of the *Nāṭyaśāstra*, which states that the *cūlikā* (intimation speech) is that which is made by a character from behind the curtain²⁴. It is common sense that the persons who made such offstage sounds should follow the progress of the play closely and that they would be unable to do this if they were stationed in the tiring-room, as they would be at a loss as to what was going on on the stage. The several offstage voices, found towards the close of Act V of the *Mṛcchakaṭīka*, show how important it would be for the actors who made such sounds to watch closely the progress of the play. We may also compare Act IV of the *Nāgananda*, where the musicians who beat the drums as the Garuda seizes upon Jīmūtavāhana, have to watch the movements of the former to strike the drums at the right moment. Hence we have to accept that the production of back-stage sounds and ethereal voices (*ākāśabhaṣita*) was done by persons standing on the *raṅgaśīrṣa*, concealing themselves behind the curtain.

Singing praise of kings or the announcing of the time of the day by bards behind the scenes is a feature commonly found in Sanskrit plays. These were not merely recited but sung, in all probability to the accompaniment of music, and so it required the bards to be on the *raṅgaśīrṣa* with the musicians. The *dhruvā* and *akṣiptikā* songs²⁵, which were sung behind the scenes were most probably accompanied by music. It is ludicrous to imagine that the songs were sung in the tiring-room, while the instruments were played on the *raṅgaśīrṣa*. As the tiring-room was on a lower level, it may have been all the more necessary for the back-stage sound producers to be on the *raṅgaśīrṣa* (i.e., green-room). But a sound like that indicated by the stage direction 'far off in the nepathya'

24. *NS.* (Vol. III) xix. 113.

25. Two types of song extraneously introduced into a Sanskrit play to heighten dramatic situations. They were generally composed in Prakrit and sung by a chorus stationed offstage, to the accompaniment of music.

(*nepathye dūrataḥ*)²⁶ may probably have been produced in the tiring-room, and this must be considered a special case. In the final act of the *Balaramayana*, songs and instrumental music are heard from behind the scenes. In Act III of the *Caitanyacandrodaya*, a *muraja* is being played in the *nepathya*, and in the last act of the same play, singing and instrumental music (*mahavāditranirghoṣa*) is heard. In Act I of the *Vidagdhamadhava*, a flute is played behind the scenes. What an absurd idea it would be if, once the *purvarāṅga* was over, the musicians with their instruments were made to retire to the tiring-room!

That portion of the *raṅgaśīrṣa*, which was immediately behind the *raṅgapīṭha*, could not have been used during the performance of a play by those who made back-stage sounds or by the orchestra, for it was used as an additional acting area. Instead they must have taken their stand on either end of the *raṅgaśīrṣa* used as green-rooms, which were screened off by the folds of this curtain. There is nothing to prevent us from presuming that they occupied some place even in front of the curtain, provided they were not visible to the audience, for a sound produced from the stage by any person not visible to the audience could be said to have come from the *nepathya*.

In Rājasekhara's *Karpūramañjarī*, a ninth century work, we come across another stage direction '*javanikantare*' used in place of *nepathye*. In the opening act of this Prakrit play, the Vidūṣaka, having fallen into an altercation with a maid, leaves the stage in a huff and begins to shout in a loud voice behind the curtain, "Oh no, I will not come". This time the direction is *nepathye*. Rājasekhara here uses both *javanikantare* and *nepathye* indifferently to mean 'behind the curtain', and we must not in the least hesitate to accept that *nepathye*,

26. *Vidagdhamadhava*, Kāvyaṃālā Series, Bombay (1937), p. 159.

when used as a stage direction, always signifies some space behind the scenes, as distinguished from the tiring-room. The *Kuṭṭanīmata* of Damodaragupta, which gives a vivid account of an actual enactment of Act I of the *Ratnavālī*, records that two maids, after conveying the queen's message to King Udayana, made their exit by withdrawing behind the curtain²⁷.

Was there any other use of this curtain? It is a pity that none of the works on dramaturgy throws any light on this very important question. Only a handful of Sanskrit dramaturgists have made some genuine and serious efforts at documenting the more important practical aspects of the drama, while the majority took pride in repeating almost parrot-like only what their respective schools taught about dramatic theory and conventions. We are, therefore, driven to depend and base our conclusions mainly on the stage directions occurring in the plays, for they shed some light on certain practical purposes that appear to have been served by the curtain. It seems to have been used to advantage by almost all the dramatists from Bhasa downwards for producing stage effects and also for maintaining what may be called 'dramatic economy'. One such stage direction is the *asanastha-praveśa* (entering while seated), which usually runs as "then enter (so and so) seated". Now the question is, how can a character enter while seated? Some scholars, having the ancient Greek theatre in mind, interpret the word *praviśati* in a literal sense, and try to prove that the characters who entered seated were actually carried to the stage on wheeled chairs, a view that has now been reduced to absurdity. Some try to explain this maintaining that the characters came as usual on the stage and then took their seats. This too has to be rejected, for it is our firm belief that the dramatists did not mean

27. *Kuṭṭanīmata*, 909.

praviśya upaviśati when they wrote *upaviṣṭaḥ praviśati*. Incidentally, Bhavabhūti has prescribed the stage direction *praviśya upaviśati* for Kalahaṃsa in the *Mālatīmādhava*, who is supposed to take his seat after entering the garden²⁸. It is, therefore, very important that we should be careful not to confuse the two stage directions. Furthermore, such stage directions as *tataḥ praviśati kṛtasanaparigraho bhagavan nityanando jamadanandaśca* as we find in the *Caitanyacandrodaya*²⁹ strongly support the view that the actors were behind the curtain, who, on its removal, were revealed in their respective postures. Entry of characters seated, without a curtain being removed, could be possible only on a revolving stage, which could have hardly been known to the Sanskrit theatre.

In the opening act of the *Nāgananda*, there is a scene of a penance-grove, where the hero and the Vidūṣaka hear some young lady singing sweetly somewhere to the accompaniment of a lute. She must be a votaress, they discern, of the deity whom she is propitiating. Desiring to catch a glimpse of the deity, they remain there hiding themselves behind a *tamāla* grove in order to avoid the sight of a woman. Then occurs the stage direction "with a maid enter Malayavati, seated on the ground playing a lute", which means nothing but that a curtain is removed revealing the two actresses who have taken up their positions as mentioned above. In the *Kundamāla*, at the beginning of Act II, enters Sītā, in a pensive mood, seated on the ground. Similarly, in Act III of the *Śakuntala*, Duśyanta peers through the branches and informs us that his sweetheart is reclining on a slab of stone bestrewn with flowers, attended by her two friends. He is curious to know what they are talking about. At this moment "enters

28. *Mālatīmādhava*, Nirnaya Sagar Edition, Bombay (1936) p. 20.

29. *Caitanyacandrodaya*, ed. by Pandita Kedaranatha, Bombay (1917), p. 119.

Sakuntalā as described above, with her two friends". Sometime later, Priyamvadā and Anasūya make their exit leaving the lovers to themselves. They do not actually leave the stage but must be considered as remaining behind the curtain-fold, for they have to be there to inform the lovers, in metaphorical language, of the arrival of Gautamī, giving the king sufficient notice to quit the scene. In Act VI of the *Mṛcchakatīka*, Vasantasenā enters asleep with her body covered up. In the *Viddhaśālabhañjikā*, too, the fourth act opens with a scene where the Viduṣaka and his wife appear. The wife enters asleep, which means they are discovered while the Brāhmaṇi is in a sleeping posture. In the middle of Act III of the *Uttararāmacarita*, Rāma is discovered fallen prone on the ground.

Bhāsa does not seem to have made extensive use of this stage device. In him we do not come across the stage direction in more than two places - once in the *Svapnavāsavadatta* (Act I), where a female ascetic enters seated and once in the *Avimaraka* (Act II), where the hero is introduced in a seating posture. Among the Sanskrit dramatists of note it is Viśākhadatta who makes the maximum use of this curtain mainly for the purpose of maintaining dramatic economy. His stage directions are instructive, elaborate and descriptive. The following stage direction from the *Mudrārākṣasa* will illustrate his style:

*Tataḥ praviśati āsanasthaḥ svabhavanagataḥ
kopanuviddham cintam natayamś caṇakyaḥ*³⁰.

Here Cāṇakya is not just revealed but is revealed in his own house (*svabhavanagataḥ*). Thus, the stage area behind the curtain served as a quite different *kakṣya* or acting locale. In the fourth act of the same play, a man in the guise of a way-farer enters and seeks access to Minister

30. *Mudrārākṣasa*, iii.

Rākṣasa's house. The scene is supposed to represent the compound of Rākṣasa's residence. The stranger seeks an interview with the minister. He learns from the door-keeper that the minister is indisposed but gets an assurance that an interview will be arranged at an opportune moment. "Then the minister is discovered on a seat in his bed-chamber, in the company of Śakatadāsa". When the curtain is drawn aside, the stage area revealed behind would serve as Rākṣasa's bed-chamber. By successfully making use of this artifice in his play, which has a most complicated plot of political intrigue, Viśākhadatta has been able to cut down the number of scenes to a minimum. In Act II, a spy in the guise of a snake-charmer arrives at the gate of the house of Rākṣasa and desires to see him. Immediately afterwards enters Rākṣasa seated in his room. Likewise, in Act III, King Candragupta wishes to pay a call to his preceptor, and Caṇakya is shown seated in his own house. In the same way, the entry of Śakuntalā reclining on a stone slab³¹, the entry of Queen Dhāriṇī (who is suffering from a sore foot) resting on a bed³² and of the female ascetic in the *Svapnavāsavadatta*³³ signify the introduction of new scenes.

Another equally important stage business effected by the manipulation of this curtain is the *apaṭikṣepapraveśa*, also called *paṭikṣepa* or *paṭakṣepa-praveśa*. Although not expressly mentioned by Bharata, it is a conventional artifice recognized even by such great dramatists as Śūdraka and Kālidasa, and therefore needs to be dealt with here at some length.

The stage direction usually reads *tataḥ praviśatya-paṭikṣepena* so and so, and has been often rendered into

31. *Śakuntala*, iii.

32. *Mālavikāgnimitra*, iv.

33. *Svapnavāsavadatta*, i.

English as "Entering with a toss of the curtain so and so". Kālidāsa employs the device in all his plays, twice in one and the same act in his masterpiece. In Act VI of the *Śakuntala*, the enraged chamberlain enters with *apaṭik-ṣepa* to admonish the two maids, who have forgotten the king's order banning the Spring Festival. A little later the king's personal attendant, Caturikā, with a tablet in her hand enters in the same manner. In the opening act of the *Vikramorvaśīya*, hearing the distress cry of the nymphs, Purūravas, accompanied by his charioteer, makes a dramatic entry. In Act IV of the *Mālavikāgnimitra*, Bakulāvalikā rushes in to prevent the king from coming out, as she suspects that there is a serpent outside. In his play *Śudraka* uses the device twice in the second act. With his pursuers at his heels the Saṃvāhaka darts on to the stage with *apaṭikṣepa*. Later in the same act Karna-puraka similarly enters Vasantasena's house in a jubilant mood.

Although a few commentators have essayed to explain how this curious stage direction was actually carried out, their explanations do not show that they had a first-hand knowledge of the Sanskrit stage technique. Rāghavabhaṭṭa seems to have understood the direction as referring to a normal withdrawal of the curtain, for he explains it simply as 'removal' (*kṣepa*) of the curtain (*apaṭi*)³⁴. Kaṭayavema appears to hold the same view. He says that an actor, (playing a character) in a confused state of mind due to emotions like joy and grief, enters with *apaṭik-ṣepa*³⁵. And Raṅganātha follows suit. Since theatrical convention does not generally permit the entry of a character without prior indication to it (a convention which has

34. 'tiraskariṇītiraskāreṇetyarthah', *Śakuntala*, Nirnaya Sagar ed., Bombay (1958), p. 198; cf. *ibid.*, p. 215.

35. *Vikramorvaśīya*, Lahor Edition (1929), p. 13.

of course not been rigidly followed by any dramatist), says, he, a sudden entry should be effected by *apatikṣepa*. He also records a view held by some that *apatikṣepa* is the absence of *patikṣepa* or removal of the curtain³⁶.

Whatever these commentators say, judging from the instances where the stage direction has been employed, it appears quite certain that *apatikṣepa* (or *patikṣepa*) means something more than a mere removal of the curtain. There is at least one commentator, Śaṅkara, who seems to have believed that the stage direction did not mean a normal entry, for he says that *apatikṣepa* implies 'suddenly'³⁷, and in support of his view quotes a line which he attributes to Bharata. This line, which reads "There should be no *patikṣepa* in the case of the entry of a king or of an agitated person"³⁸ is, however, not found in the present text of the *Nāṭyaśāstra*. There is only a casual reference to such a convention in Chapter XXXII of the *Nāṭyaśāstra*. The verse in question says that, in the case of characters entering hurriedly under stress of emotions like excessive joy, anger and grief and without the curtain being removed, a *dhruva* song in progress should stop at once³⁹. And in another place Bharata says that such entries are made without being indicated by *praveśikī-dhruvas*⁴⁰. That Bharata here

36. *Vikramorvaśīya*, ed. by Karnik & Desai, Bombay (1959), p. 10.

37. *apatikṣepena akasmādityarthah; Śākuntala* with commentaries of Śaṅkara & Narahari, Darbhanga (1957), p. 235.

38. *patikṣepa na kartavya ārttarājapraveśayoriti bharatah*, *ibid.*

39. *Nāṭyaśāstra*, xxxii. 413.

40. *Ibid.*, 327.

definitely means "without removing the curtain" is made quite clear by Abhinava, who explains it as *paṭākṣepa-syakaraṇena*⁴¹.

To sum up: *paṭā* or *paṭī* means the curtain; *kṣepa* is throwing or pushing aside. So *paṭīkṣepa*, or *paṭākṣepa*, is the throwing or pushing aside of the curtain. It is now clear that it means a regular withdrawal of the curtain, and *kṣepa* is just another synonym for *apakarṣaṇa*, *apanayana* or *akṣepa*. We must now clearly understand what is meant by 'removing' or *kṣepa*. From the above-quoted references by Bharata and Abhinavagupta and also from the line attributed to Bharata by Śaṅkara, we can safely conclude that *paṭīkṣepa* means a regular drawing aside of the curtain to reveal characters to the audience. *Apaṭīkṣepa* is the absence of *paṭīkṣepa*, or regular withdrawal of the curtain. We have already noted that certain characters walked into the stage and others took up their positions behind the curtain which, when removed, revealed them to the audience. In the case of the *paṭīkṣepa* entry, the curtain was not removed by stage-hands. The rule regarding the entry of a character in a flurry is scrupulously adhered to by all dramatists. It would be undramatic to indicate such an entry beforehand, for if it was done, the desired effect would be lost. Such characters did not enter by the proper way by which the characters normally entered, but made a lightning entry, hurriedly pushing the curtain aside. It seems, therefore, that *apaṭīkṣepa* is the correct form. If those ancient authorities who have accepted the forms *paṭīkṣepa* and *paṭākṣepa* (in preference to *apaṭīkṣepa* or *apaṭākṣepa*) as well as those who have interpreted *apaṭī* as 'curtain', had any idea of this device, they must definitely have meant this hurried pushing aside of the curtain by the character himself. As there was no complete withdrawal of the curtain, the direction was termed *apaṭīkṣepa*, those cases of ordinary removal of the curtain

41. *Abhinavabhāratī*, Vol. IV, p. 387.

(employed mainly for opening scenes), which had been accepted as an established convention, requiring no indication.

There are no indications that this stage device was employed by dramatists prior to Śūdraka and Kālidāsa. It is not found in the dramas ascribed to Bhāsa, except once in the *Cārudatta*⁴², but the same direction occurs in the same act of the *Mṛcchakatika* too. Which of the two plays is the original and whether the *Cārudatta* was actually written by Bhāsa has not still been settled. On the contrary, in the other Bhāsa-plays the stage direction does not occur even when its use is warranted by convention. In Act II of the *Pratijñayaugandharayana*, for instance, the Kañcukin, who even forgets in his excitement the order of the sentence he is to utter, is introduced in the normal way.

In Bhavabhūti we come across a somewhat similar yet different stage direction, *nepathyārdhapraveśa* (half-entering from behind the curtain). In Act II of the *Mālatīmadhava*, Mālatī enters seated, with Lavaṅgikā. Some time later, the female door-keeper enters, hiding herself partly behind the curtain. And so does the female door-keeper in the second act of the *Mahāvīracarita*. Addressing Mālyavan, who is already present on the stage, she says, "This palm-leaf written on with *tamāla* juice was brought by the messenger sent by Your Honour to Parāsurāma" gives the palm-leaf and goes off. In Act V of the same play the female door-keeper again enters in the same way. A parallel to this stage direction is found in the *Anargharāghava* of Murāri, in which a man half-enters from behind the curtain (*nepathye 'rdhapraviṣṭaḥ*)⁴³ This has been explained by Rucipati as *javanikapatoḍghaṭitardhaśarīraḥ*⁴⁴.

42. Act ii.

43. Act iii.

44. *Anargharāghava*, Kāvya-mālā Series (1937), p. 159.

The significance of these stage directions is, however, dubious, but we may assume that these characters had to hide themselves partly, as their full appearance on the stage was not required or desirable, because, in all the four cases, they were lower characters.

Besides revealing characters in sitting and lying-down postures and introducing those characters who are excited or in a state of flurry, this curtain was also used in the case of ordinary entries, even when the employment of such a device is not hinted at by the dramatist. It appears that stage-managers sometimes changed certain stage directions given by the playwright for the sake of stage effect or practical convenience. Thus, in the description given in the *Kuṭṭanīmata* of Act I of the *Ratnavālī*, we find that before Queen *Vasavadattā* appeared (*abhavat*) on the stage with a maid, the curtain was removed (*apanītatiraskarīṇi*)⁴⁵, though the direction given by the dramatist is "then enter *Vasavadattā*" etc., without any allusion to a curtain being removed. The curtain was no doubt in the middle of the stage, for *Vasavadattā*'s entry took place in the middle of the act, even while the king and the *Vidūṣaka* were on the stage.

Did the Sanskrit stage have any other curtain besides the one which was employed between the *raṅgapīṭha* and the *raṅgaśīrṣa*? The unanimous answer given by most scholars to this question has been in the negative. The strongest and perhaps the only sensible ground on which this view is based is the dramatic convention laid down by Bharata that all the characters should leave the stage at the close of an act⁴⁶, a rule which is believed to have been necessitated owing to the absence of a front curtain. We shall return to this point later, but let us now examine a few

45. *kuṭṭanīmata*, 910.

46. *Nāṭyaśāstra*, (Vol. II) xviii. 23.

facts which should not be allowed to be passed over without being given some consideration.

These facts furnished by dramatic compositions as well as by treatises on drama lead us to believe that the Sanskrit stage had more than one curtain. Damodara-gupta seems to have known a stage with several curtains. We have seen earlier, in his *Kuṭṭanimata*, that, in the enactment of the first act of the *Ratnavali*, Queen Vasavadatta entered the stage drawing the curtain aside. This must have been the curtain which we discussed above, and in front of which the king, the Vidūṣaka and the maids were participating in a revelling scene. According to the text of the play, the king and the Vidūṣaka enter seated on top of the terrace of the palace and no alteration must have been done of the stage direction in the performance recorded in the *Kuṭṭanimata*, for it says, *atha viśatiṣṭa narendrah prāsādagataḥ samam vayasyena* ("Then entered the king seated in the palace in the company of his friend" [i.e., the Vidūṣaka]), though the withdrawal of the curtain is not explicitly mentioned. We now see that two curtains were used in one and the same act, one to reveal the king and the Vidūṣaka, the other to introduce the queen. The two maids who came a little later entered gesticulating in dance movements, through the usual way (*nr̥tyantau praviśataścetyau*)⁴⁷

The entracte to Act V of the *Nāgānanda* consists of a soliloquy delivered by a female door-keeper. The act proper commences with the entry of Jimutaketu seated, accompanied by his wife and the daughter-in-law, and a curtain has to be removed to reveal the three characters. A little later the Garuda enters seated, with the hero lying before him, which would only be possible by means of another curtain, which, when removed, discovered the actors in their respective positions. A number of similar cases, where the use of two curtains can be

47. *Kuṭṭanimata*, 896.

inferred, may also be cited from the works of other great dramatists like Kālidāsa and Viśākhadatta. If we are prepared to accept that there were two curtains, we shall have to locate the one in front a little away from the edge of the *raṅgapīṭha*, for an unlocalized narrow stage is sometimes necessary as in the case of the above two instances in which the minister Yaugandharāyaṇa and the female door-keeper respectively engage in monologues in front of the curtain.

It may be argued that the introduction of characters mentioned above may well have been done by means of a single curtain. But we have sufficient evidence to prove that there was a curtain directly intervening between the audience and the actors, which appears to have served a purpose somewhat different from that served by the curtain that divided the stage. Let us take, for example, Act II of the *Mālavikāgnimitra*. It begins with the entry of the king, the Viduṣaka, the queen and the Parivrajikā, all seated. The king, impatient to see Mālavikā who is about to appear on the stage, whispers in the Viduṣaka's ear, "Friend, my eye, eager to see her who is behind the curtain (*nepathyagata*), has, as it were, become ready to draw away the curtain (*tiraskariṇī*)⁴⁸. That the king and the party had a curtain before them is quite evident. Kalhaṇa compares the cloud of dust that obscures the warriors engaged in battle to a curtain that conceals the dancers performing a dance⁴⁹. This curtain alluded to cannot be taken as one separating the stage from the tiring-room. The comparison of fighting soldiers to a group of performing artistes suggests that Kalhaṇa had in his mind the picture of a front-curtain that screened off a live performance from the audience. Needless to point out that a performance is given on the stage and not in the tiring-room.

48. *Mālavikāgnimitra*, ii. 1.

49. *Rājatarāṅgiṇī*, viii. 1519; cf. *ibid.*, vii. 1731.

We cannot also assume that the same curtain was brought to the stage by stage-hands whenever it was required, because it is firmly established by Abhinavagupta's evidence that the curtain between the *raṅgapīṭha* and the *raṅgaśīrṣa* was a regular feature.

The Tamil classic *Sīlappadikāram* also speaks of three stage-curtains, viz, a single-curtain which was pulled to one side, a double-curtain divided at the middle and shrinking to either side and a front-curtain rolled upwards and downwards⁵⁰. We have, however, no evidence in the *Nāṭyaśāstra* or in the existing dramatic literature for the existence of a rolled curtain but one which was drawn sideways. The double-curtain mentioned there must have been the one which was located between the *raṅgapīṭha* and the *raṅgaśīrṣa* by Abhinavagupta, and the single-curtain must have been hung over the tiring-room wall to serve as backdrop if and when required.

What could have been the occasions on which this front curtain was drawn off and drawn in? It follows from the initial stage direction of the act discussed above that the curtain must have been drawn in at the close of the previous act, i.e., Act I, thus leaving a possibility of acts being closed by the drawing in of a curtain. Bharata's rule requiring the actors to leave the stage at the end of an act does not, in any way, rule out the possibility of the existence of a front-curtain. We may note that the stage direction *niṣkrāntaḥ sarve* (*exeunt omnes*) has been used even when the number of characters who are sent off the stage is two, in which case it should have been in the dual instead of the plural. Act V of the *Sākuntala* closes with the usual stage direction *niṣkrāntaḥ sarve*, when there are only two characters, the king and the Pratihari, left on the stage. Again, there are only two characters, Carudatta and the maid, left at the end of Act III of

50. See V. Raghavan, "Theatre Architecture in Ancient India", *Triveni*, Vol. VI, No. 1 (1933), p. 48 ff.

the *Cārudatta*, though they are sent away by the same direction in the plural. The *Tapasavatsaraja*, a ninth century work, has two acts (III & IV) which end with the exit of the king and the Vidūṣaka in both cases, though the stage direction is "all leave the stage". At the end of Act II of the *Kundamāla*, only Sītā and Vidavatī are left, but the direction is again *exeunt omnes*. The opening act of the *Vikramorvaśīya* closes with the same stage direction, when only the king and the charioteer are left on the stage. From these examples we can see that the stage direction at the end of an act is a mere formula which can scarcely be construed literally.⁵¹

There are also other instances where the close of an act must have been marked by drawing the curtain in. The second act of the *Pratimanāṭaka* ends with the death of King Daśaratha. The two queens, Kauśalyā and Sumitrā, the charioteer Sumantra and the Chamberlain (Kañcukin) are present on the scene. The Kañcukin spreads a cloth over the corpse. Now, if the actor playing the rôle of Dasaratha is not to be embarrassed by making him get up and walk out, we shall have to accept that the curtain should be drawn in to cut the scene off. Again, in the *Abhisekanāṭaka* (Act II) there is a similar scene where Valin dies, being hit by Rama's arrow. The act comes to a close here and the closing has to be done by drawing the curtain in. In the finale of the one-act play *Urubhaṅga* ascribed to the same author, the dead body of Duryodhana is covered with a shroud. The curtain was most probably drawn in before all the actors came in to sing the Epilogue. It is important to note that as soon as death is depicted, the acts are cut off, evidently because the dead body has to be removed before the next

51. Raṅganātha, however, remarks that, when the direction is in the plural where it should be in the dual, it means that the day's performance being over, all including the audience left the house. This statement has some sense, at least in this particular case.(contd.)

act opens. Similarly, Act II of the *Abhiṣekanāṭaka* opens with the entry of Sita surrounded by a number of Rākṣasīs. After Ravana has gone away, the Rākṣasīs fall asleep. This gives Hanuman an opportunity to have a confidential talk with Sita, at the end of which both retire leaving the sleeping Rākṣasīs on the stage. This calls for a close of the act by drawing the curtain before the next act commences.

Both Abhinavabhāratī and the Nāṭyadarpaṇa explain the 'exit' (*nirgama*) at the end of an act as "the screening off by the curtain of the actors who have finished their business after entering the stage"⁵². This shows that even as early as Abhinavagupta's time, the curtain had come to be used to mark the close of an act. The acts of the Prakrit play, *Karpūramañjarī* of Rājasekhara, are styled *javanikantaras* instead of the regular term *aṅka*. During Rājasekhara's days, too, an act must have definitely opened with the removal of the curtain⁵³. This must have been the front curtain, because the rear curtain had to open and close in the course of an act as the situation demanded. As we have seen earlier, the plays of Viśakhadatta, Harṣa, Bhavabhūti, Kālidāsa and even Bhasa seem to have been written for a double-curtained stage, and the practice of using the front curtain to change acts may thus be traced back to a very

Most part of the first day's performance was generally covered by the long Purvarāṅga and perhaps only the first act from the play was shown on that day. (See *Vikramorvaśīya*, Bombay (1959), p. 26 f., com.)

52. *bijāṛtheti upakṣepātmano bijasya yatpatrayojanam tena ya yuktih sambandhas tatra yuktam upayabhūtam karyam prayojananusarī viśiṣṭarāśasampadopetam vidhaya tatparisamāptau javanikaya tirodhanarupam niṣkramanam darśanīyam.* A. Bh. Vol. II, p. 420: *nirgamo raṅgapravaiṣṭāpātraṇam svakaryāṇi kṛtva niṣkramo javanikaya tirodhanam*'. ND. p. 32.
53. Cf. *Nāṭakalakṣaṇaratnakōṣa*, 3200 f.

early phase in the evolution of the Sanskrit theatre. Even Bharata refers to the closing of an act as *aṅkaccheda*. Incidents which have taken place within a month or a year, he says, should be intimated after cutting off the act (*aṅkacchedaṃ kṛtvā*)⁵⁴. When a long journey is to be represented, too, the act should be cut off (*tatra'pi aṅkacchedaṃ kāryaḥ*)⁵⁵. Is there anything to prevent us from assuming that this 'cutting off' was to be done by the curtain? We have also Bharata's authority that the curtain should be drawn aside before introducing characters to the stage⁵⁶. A similar opinion has been expressed by the *Viṣṇudharmottara-purāna* which states that each character should be introduced after removing the curtain (*tato javanikākṣepaiḥ pratipātrapraveśanam*)⁵⁷. After all, if a curtain did not intervene, how could two acts be clearly distinguished from one another? The interlocutors who took part in the introductory scenes (i.e., *praveśakas* and *viṣkambhakas*) may have delivered their parts standing before the front curtain, for such scenes involved little action. But it must be borne in mind that the curtain was sometimes used in the course of introductory scenes as well. Thus, in the entracte to the fourth act of the *Tapasavatsaraja*, *Samskṛt-yayani* enters seated and leaves the stage at the end of the scene with the stage direction *iti niṣkramati*. But we do not actually know whether the curtain was drawn in to cut off the scene or whether she stood up and walked out. Apparently the curtain came in, for we find the act proper begin with the entry of the sorrow-stricken king seated.

54. *NS.* xviii. 31.

55. *ibid.*, 32.

56. *ibid.*, xii. 2 f.

57. III. xx. 9.

The drawing in of the curtain at the close of an act may also have been required for still another reason, however unimportant it may seem. That is the arranging of stage paraphernalia. Although no elaborate and heavy accessories were used on the Sanskrit stage, certain indispensable articles like seats and armour have been allowed by Bharata, without which no representation of a dramatic spectacle would have been possible. While the curtain remained drawn in, the stage may have been made ready for the next act.

E.W. MARASINGHE



MODERN SRI LANKA STUDIES

VOLUME 1

1986

NUMBER 2

Articles include:

The Foreign Policy of Sri Lanka, 1948-1956

B. GAJAMERAGEDARA

'English Literature' in Nineteenth-Century
Sri Lankan Schools; a Survey of Courses of Study,
Prescribed Texts, and Methods of Teaching

SARATHCHANDRA WICKRAMASURIYA

Adoption of New Varieties by Rubber Smallholders
in Sri Lanka: Trends, Problems, and Prospects

H.M.G. HERATH

The Simla Conference and the Sino-Indian Border-Dispute

MAHINDA WERAKE

Influence of Natural Experience on the Growth of
Mathematical Concepts - A Piagetian Study with Sri
Lankan Children

MOHOTTIGE U. SEDERE

A.W.P.M. WIJEKOON

Invisible Labour: A Study of Women's Contribution to
Agriculture in Two Traditional Villages in the Dry
Zone of Sri Lanka

W.M. SIRISENA

Available from Book Sales Centre, University of Peradeniya,
Peradeniya. Price including postage, Rs. 60/=.

THE DEATH OF AN ELEPHANT

(On Elāra's Mahāpabbata)

Puradakkhiṇadvāramhi ubho yujjhim̐su bhūmipā;
 tomaram̐ khipi Elāro, Gamani tam̐ avañcayi,
 vijjhapesi ca dantehi tam̐ hatthim̐ sakahatthina,
 tomaram̐ khipi Elāram̐, sahatthi tattha so pati.

(Near the south gate of the city the two kings fought; Elara hurled his dart, Gamani evaded it; he made his own elephant pierce (Elara's) elephant with his tusks and he hurled his dart at Elara; and this (latter) fell there, with his elephant.)¹

With a brevity which is remarkable by any standards the *Mahāvamsa* tells the story thus of the encounter between Dutugemunu and Elāra, which resulted in the death of the Damila king and his elephant, Mahāpabbata. Climaxing as this single combat did the battle of Anuradhapura, which was itself the culmination of a series of twenty eight battles which Dutugemunu had fought to defeat the Damilas in Sri Lanka, it completed the victory over them with the death of the king at the hands of the conqueror himself.

What better episode could an epic poet have asked to elaborate upon, and what better opportunity could there have been to glorify the individual prowess of his youthful hero, who, as we are told, had reserved for himself the glory of doing battle with the enemy monarch - and did so in single combat? Here was a theme which, within

1. *Mhv.* 25. 69-70; W. Geiger transl. *The Mahāvamsa* (P.T.S.) Oxford (1912) xxv. 69-70, p. 175. Chapters indicated in Roman numerals in the case of the *Mahāvamsa* refer to the Geiger translation.

proportions, was worthy of the treatment Homer gave the duel between Achilles and Hector in the *Iliad*, or Virgil that between Aeneas and Turnus in the *Aeneid*. Here was occasion for epic elaboration descriptive of the flight of Elāra from the field of battle and Dutugemunu's hot pursuit of him round the walls of the great city, Elāra's inability to escape and his decision to turn around and fight at the southern gate, the charge of the huge elephants, the ram of their foreheads and the clash of their tusks amid the trumpeting, while upon their backs the kings hurled their weapons at each other or evaded those that came at them - until finally, and at the same moment that his elephant thrust his tusks into Mahāpabata, Dutugemunu pierced Elāra with his spear, toppling him from the back of the elephant, even as the elephant himself sank to his knees and fell over, both mortally wounded. What we have instead is a classic anticlimax - a deliberate attempt to play the encounter down, even after the promise of something more sensational, when Dutugemunu had it proclaimed by beat of drum that none but he shall engage the enemy king.² It may be to assuage this disappointment that we are feasted beforehand with the curious episode of Sūranimala's killing of the acrobatic Dīghajantu,³ and immediately afterwards with the dramatic archery engagement between Dutugemunu and Bhalluka.⁴

Admittedly the *Mahāvamsa* is a more cursory and terse narrative, especially when it deals with war, than are the great literary epics of antiquity, with portions that are absolutely sketchy and thread-bare even for such a work. But even for writing such as this, the treatment meted to the Dutugemunu-Elāra combat, which administered the *coup d'grace* to Damila domination and completed the

2. *Mhv.* 25.67.

3. *Mhv.* 25. 58-64.

4. *Mhv.* 25. 88-93.

victory of the hero of the chronicle is, to say the least, downright niggardly. Why? I have heard it said nowadays by those who, for some reason or other, seek to play down the victory of Dutugemunu over his rival or extend some partiality to the latter in a pretence of ethnic impartiality, that it was nothing remarkable for a prince in the prime of youth to have killed in combat an ageing monarch with as much as forty-four years of rule behind him. But this is not very much to the point when the fight was one with spears from elephant-back and did not involve the pitting of the strength of one against the other at any time; besides, Elāra did have his throw first, and missed. Nor could the nature of the *Mahavamsa* description be attributed to the possibility that the chronicler, knowing nothing about the combat except that Dutugemunu killed Elāra (or perhaps doubting even that?) sought to keep the action to the minimum required to achieve that result, of course without discredit to Dutugemunu. There is much in the tradition of epic everywhere in the world that justifies the intermingling of fantasy and romance with fact, especially in the case of events which belonged to the distant past, which the several hands which continued the compilation of the *Mahavamsa* were not chary to use, even with respect to contemporary happenings and much that could well have evoked quite other emotions than those that were conducive to the "serene joy of the pious".

The reason for this terse and lacklustre account of the single combat between the two kings may well be the result of a combination of factors. On the one hand, it may have been an unwillingness on the part of our chronicler to exult in the death of a noble monarch, whose penchant for justice, even if somewhat eccentric, had won his love and approbation.⁵ On the other hand, this may have been the way tradition had said the event took place, and the chronicler, from doubts of his own, thought it

5. *Mhv.* 21. 13-34.

wise not to improve upon it. But brief as the account of the encounter is - just three lines of Pali - it still holds within it an element or two which must be suspected of being mythic with a view to the dramatic. This has to do with the death of Elāra's elephant, Mahāpabbata.

For, while a question does occur about the kings themselves, there is nothing remarkable either about the way Dutugemunu pierced Elāra or the death of Elāra itself. On the other hand, questions do occur about Kandula's piercing of Mahāpabbata and the death of Mahāpabbata, which suggest that the chronicler (or his source at one or more removes) has created a parallel with the mounts to match the encounter between their masters, which will not as easily stand up to the application of factual standards as the latter. And if this is so, we must be prepared to accept even less of this brief account that the chronicler gives of the Dutugemunu-Elāra single combat at face value, relegating to the mythic the drama of Mahāpabbata's death.

The *Mahāvamsa* clearly seeks to establish a sentimental link between Dutugemunu and Kandula, as there had been between another hero and his famous mount, of which our chronicler may well have known. I mean that of Alexander and Bucephalus. For, even though it is an elephant we are dealing with here that was left, as if as a gift for the new-born prince, by his parent (an elephant of Chaddanta caste),⁶ a story of the recognition by a horse of a warrior worthy of riding him had already just been told about Velusumana in the preceding chapter,⁷ and the parallel of this to the Alexander-Bucephalus anecdote remarked by Geiger himself.⁸

6. *Mhv.* 22. 61-63.

7. *Mhv.* 23. 71-74.

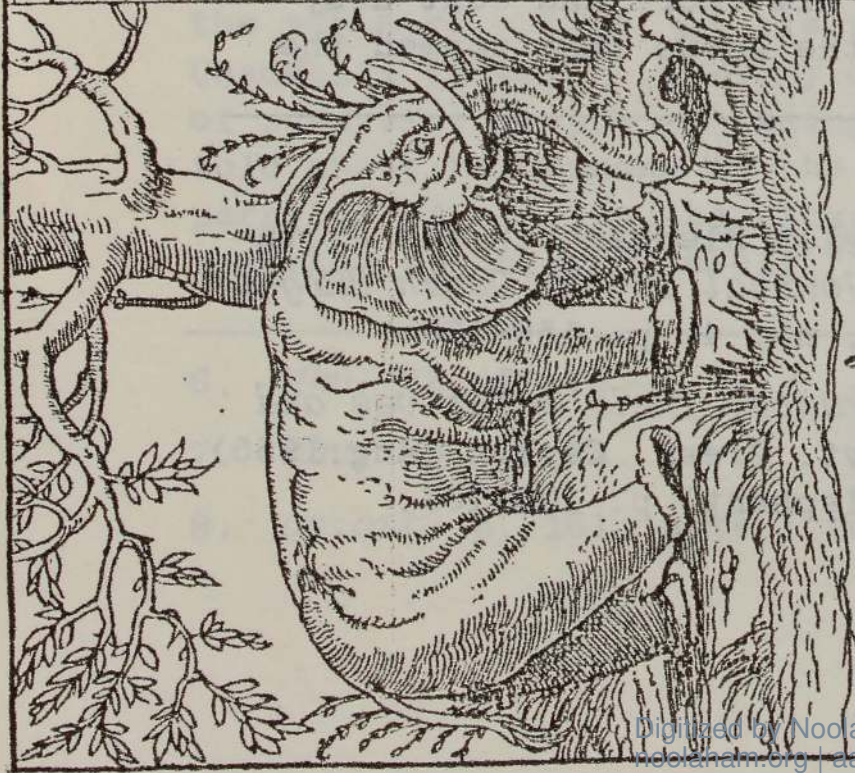
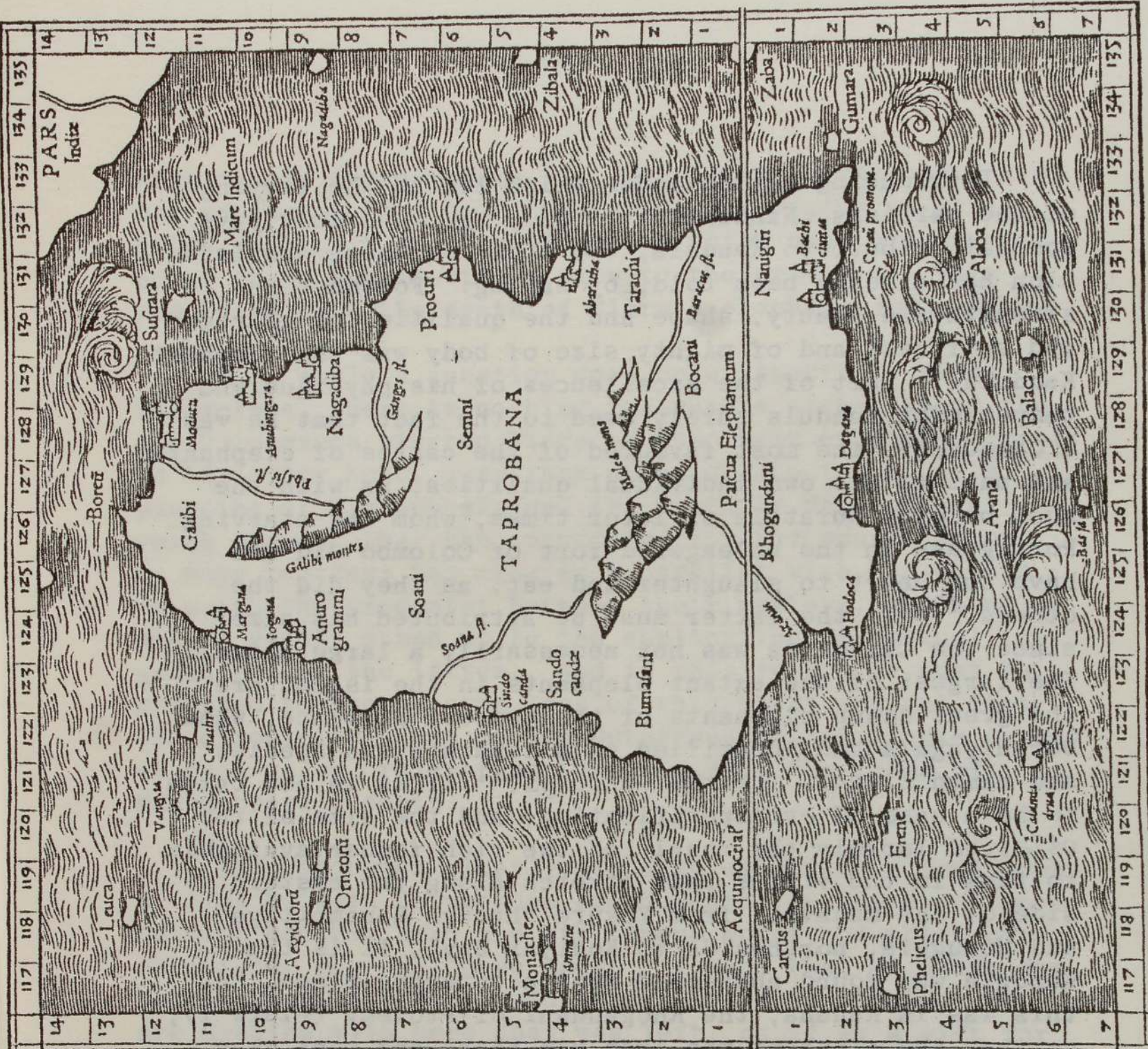
8. *op.cit.* p. 161, note I to xxiii. 74.

Introducing the episodes which led to the levying of the warriors, Nandimitta *et al.*, the *Mahāvamsa* pays special tribute to Kandula, the story of whose acquisition had already been told, by saying: "Foremost in strength and beauty, shape and the qualities of courage and swiftness and of mighty size of body was the elephant, Kandula." Part of the excellences of his physique and temperament Kandula surely owed to the fact that he was a Chaddanta, the most favoured of the castes of elephants, and part to his own individual qualities, as with the much beloved Huratalā of later times, whom the starving Portuguese in the beleaguered fort of Colombo did not have the heart to slaughter and eat, as they did the others.¹⁰ To the latter must be attributed his size, since the Chaddanta was not necessarily a large animal. The largest of the extant elephants in the island are the great swamp elephants of the Eastern Province, whom Deraniyagala had identified as a separate sub-species and named *Elephas maximus vilaliya*.¹¹ This is now taken to be a case of overspecification, and the size of the *vilaliya* largely the result of the rich fodder available to them in the villus that stretch along the eastern side of the Mahaveli from Yakure through Manampitiya and Mutugala, northwards to Kodyar Bay. It is true Kandula was found abandoned near a watering place, but this was in Ruhuna, the Rhogandani of Ptolemy (Plate I), so that the elephant who left him there and went away must have belonged to one of the herds that roamed the

9. *Mhv.* xxiii. I.

10. See C.W. Nicholas "The Ceylon Elephant in the Portuguese and Dutch Periods" *Journal of the Dutch Burgher Union of Ceylon* vol. xliv, no. 4. p. 159-160.

11. See his *Some Extinct Elephants, Their Relatives and the Two Living Species* Govt. Press, Ceylon (Aug.1955) 'The Giant Ceylon Swamp Elephant' p. 104-107.



VARTOMANNVS
 Taprobanam insulã hodie vocat Suma-
 tram, moderanturq; ei quaterni diadema
 te insigniti reges. Mittit proceriores quã
 alibi inueniuntur elephantes, meliores /
 que. Est etiam ibi procerioris pipertis ube
 rior proventus, miraq; copia. Lingua pa-
 tris piper molaga dicitur, & est longe pro-
 cerius illo, quod huc aduehitur, multoq;
 candidius, sed minus ponderosum, uenit
 enim ibi piper nõ pòdere sed mensura.

Plate I. Map of Taprobane (Sri Lanka) according to the Geography of Ptolemy.

"feeding ground of the elephant" (νόμας ἑλεφάντων), which the geographer located there.¹²

Elephants of the Chaddanta caste may be tall, but (notwithstanding the expression *saddhanta purushaya* used in Sinhala of a large man) could also be a medium-sized animal, so that if Kandula was a big specimen, he may have owed his size as much to his heredity as to the rich fodder and attention he received in the royal stables (*hatthisala*) of Kavantassa as the state-elephant (*mangala-hatthi*) meant for his son. The consensus of medieval opinion gives the distinctive characteristics of the Chaddanta as including elongate trunk, tail and penis, all of which, together with the four legs, touch the ground, and (apart from lesser details) a body that is covered with hair like golden ringlets.¹³ But the most valuable characteristic of the Chaddanta is a psychological one, and one that is required also of a good battle elephant - self-control under attack and molestation. This Kandula was to display, and eminently, in the

12. In the geography of the island as described by Claudius Ptolemy (c. 121-150 A.D.) these are located south of the "Malea Mountains". According to Tennent, hunters agreed that the largest specimens are to be found in the Hambantota country. See J.E. Tennent, *Ceylon: An Account of the Island, Physical, Historical and Topographical*. vol. II, London (1860) Part VIII - 'The Elephant'. p. 291.

13. Other qualities of the Chaddanta describe the forehead and its bump, the tusks, ears, nails and eyes. "An elephant with these perfections", says the *Hastisilpa*, "will impart glory and magnificence to the kings", but adds that "he cannot be discovered amongst thousands, yea, there shall never be found an elephant clothed at once with all the excellences herein described."

seige of Vijithanagara.¹⁴

At the single combat between Dutugemunu and Elāra, which is the subject of discussion here, we are expressly told that Dutugemunu made his elephant pierce Elāra's elephant with his tusks (*vijjhāpesi ca dantehi tam hatthim sakahatthina*), which obviously evidences the fact that Kandula was not an *aliya*, or tush elephant, but a tusker (*ātha*), and surely one that, even in the infancy in which he was noticed and captured, showed promise of sprouting a goodly pair of tusks.

Tuskers are rare in Sri Lanka, only about one in ten males having tusks, and even rarer in females. The so-called *vilaliya* is notoriously a tush elephant,¹⁵ whereas tuskers, rare as they are, are more frequent in the herds of the south, to which Kandula's parent belonged. It must have been this scarcity of good tuskers which impelled the Sinhalese kings to import elephants from India and Burma (and even go to war with the latter country when the supply was interrupted),¹⁶

-
14. See *Mhv.* 25. 29-31. When Kandula attacked the gates of the city, the Damilas not only assailed him with weapons of every kind, but with balls of red hot iron and molten pitch, which tormented him with pain. All he did was find relief in a pool of water.
15. *Deraniyagala op.cit.* p. 104. He says "It is relatively more tuskless than the 'forma typica', usually even the tushes being completely hidden underneath the upper lip.
16. Indian elephants formed part of the dowry of the royal bride of King Vijaya in the 5th cent. B.C. (*Mhv.* 7. 55-57). In the 6th century Cosmas says the king of Sri Lanka was buying elephants by the cubit, at 50 or 100 nomisma per cubit (height being measured from fore-foot to withers). In 1165 A.D. Parakramabahu I invaded Burma when her king (contd.)

whereas, from as far back as the first century A.D. down to Portuguese and Dutch times there is good and steady evidence of the export of elephants in large numbers from the island to the mainland.¹⁷ Indeed, the rarity of tuskers in the island had led Lydekker to suspect that even the few there were were the result of early importations from India - a theory which however Deraniyagala has discounted on palaeontological

raised the price of elephants fantastically and also obstructed the export (*Cul.* 76. 17-20, see also 33-34.) After the defeat, the Burmese king announced: "Year by year must we from now onwards send elephants to any amount as tribute from our property ..." (*Cul.* 76.70) and early sent a number of elephants and renewed the pact of friendship with the Lanka Ruler. (*Cul.* 76.75).

17. Megasthenes (3rd cent. B.C.), as reported by Aelian (c. 170-235 A.D.), says, "The islanders export them to the mainland opposite in boats which they construct for this traffic from wood supplied by the thickets in the Island, and they dispose of their cargoes to the king of Kalinga" (J.W. McCrindle *Ancient India as described by Megasthenes and Arrian* London. (1877) p. 173-175. Ptolemy notes Modoutou (Mahatittha) as the chief outlet. Vasco da Gama, in his pioneer voyage in 1497, notes in his journal that "The king of Ceylon has many elephants for war and for sale." Arab traders invariably paid a high price for a Ceylon elephant, sometimes twice or thrice what they paid for an Indian or Burman (Ribeiro 1658); de Barros noted in the 15th century that Ceylon elephants were "those with the best instinct in the whole of India, and because they are notably the most tameable and handsomest, they are worth much more". Andrea Corsali (1515) says "Ceylon has a great quantity of elephants, which are sold to divers merchants of India when they are small in order (contd.)

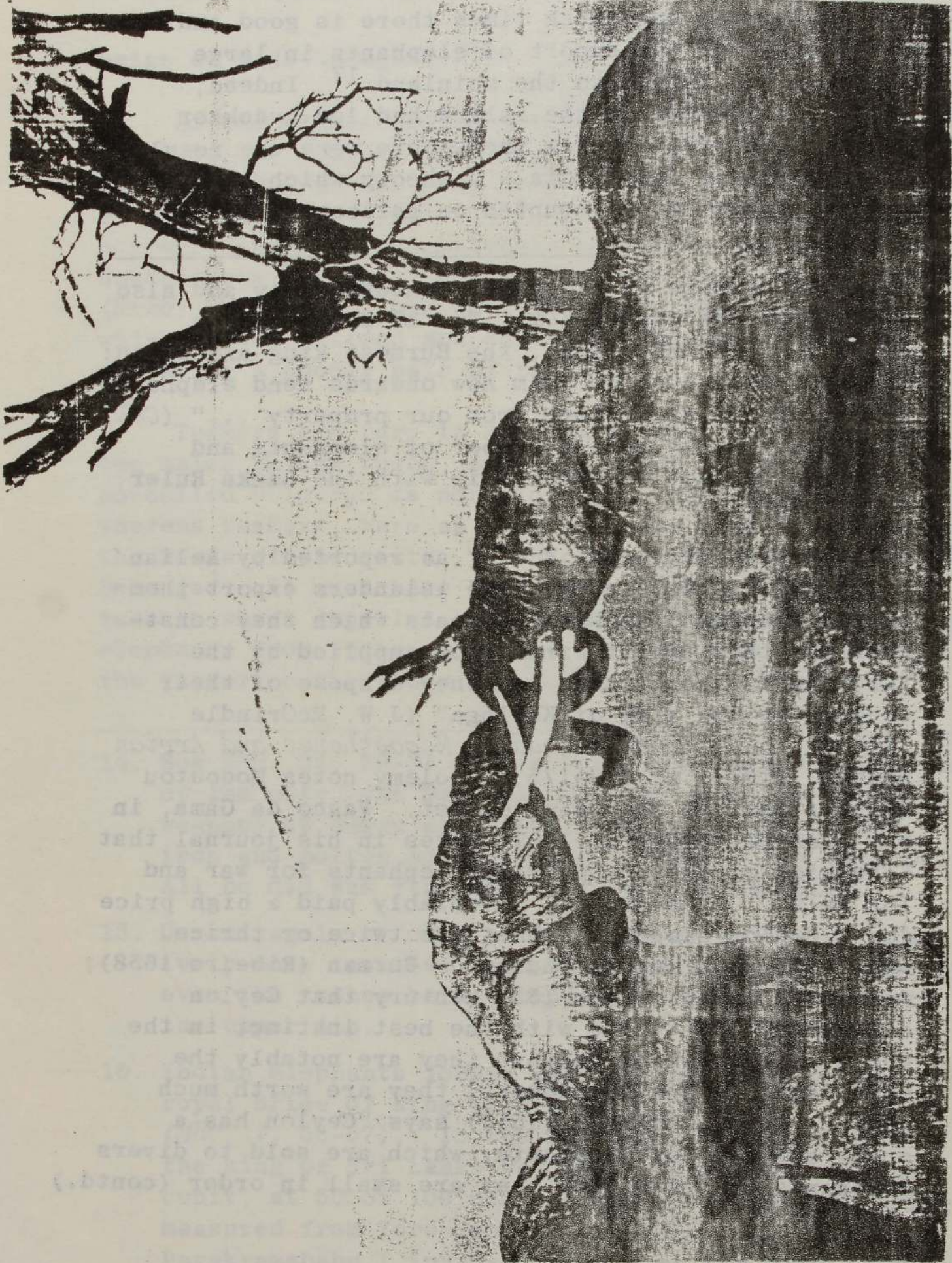


Plate II. Two African elephants push trunk to trunk in a test of strength. Observe the elevation of the tusks when the head is lifted.

evidence.¹⁸

Elāra's own Mahapabbata could however have been an Indian tusker, and as his name 'Mighty Mountain' suggests, a big animal himself. But his defeat by Kandula must not be allowed to imply the truthfulness of the popular belief, coming down from its first mention by Onesicritus in the third century B.C., that the elephants of Sri Lanka (Taprobane) were "larger and more warlike" (*maiores bellicosioresque*) than those

to be domesticated. In Duarte Barbosa's description of Sri Lanka he says, "There are in this island many wild elephants, which the king orders to be caught and tamed, and they sell them to merchants of Coromandel, Narsynga and Malabar, and those of the kingdoms of Deccan and Cambay go to those places to buy them." Next to cinnamon, elephants were the major attraction which impelled the Portuguese to establish themselves in Sri Lanka. See Nicholas *op.cit.* p. 155-156. See also B.J. Perera 'Ancient Ceylon's Exports and Imports' *The Ceylon Journal of Hist.* vol. II. nos. 1 and 2 (1952) p. 18-19 and B.W.M. Gooneratne 'The Ceylon Elephant: *Elephas Maximus Zeylanicus*: Its Decimation and Fight for Survival. *The Ceylon Journal of Hist. and Social Studies* vol. X. nos. 1 and 2 (June-Dec. 1967) p. 149-150 etc.

18. *op.cit.* p. 47. He says fossils of the extinct Pleistocene race of this elephant that occur in Ceylon frequently possess tusks. At the same time he dismisses de Blainville's theory, put forward in 1845, that the Ceylon elephant's tusks were thin, attributing this to the youth of those that had such tusks (*loc. cit.*).

of India,¹⁹ or that they were, as Aelian reported,²⁰ "stronger, bigger and more intelligent" (ἀλκιμώτεροι τε τὴν ῥώμην καὶ μείζους ἰδεῖν εἰσὶ καὶ θυμοσφοώτεροι). The likelihood is that, while Kandula and Mahāpabbata were large for Asiatic elephants (not however more than eight, or at most nine feet),²¹ The former may have been the younger animal, as his master was the younger rider.

19. Preserved by Pliny (*Nat. Hist.* 81 = fr. 13 Jacoby). Onesicritus, seaman, Cynic and Alexander-historian; he was with Alexander and steered his ship down the Jhelum as Nearchus' lieutenant. This opinion of the superiority of the Sri Lankan elephant in war (*plus courageux a la guerre*) was affirmed by Tavernier (*Les Six Voyages* J.B. Tavernier, bk. III. ch. 20). So much so, he says, that elephants from other lands instinctively worshipped them, laying their trunks on the ground and then raising them.
20. *De. Nat. Animal.* xiii. 8.
21. The largest elephant killed stood 13 feet at the shoulders and weighed 12 tons - but this was an African; and largest pair of tusks on record, again African, weighed 440½ pounds (see *Elephants and Other Land Giants* Time-Life Films publ. USA (1976, 1977) p. 16 and 25. In Asiatic elephants size diminishes towards the east, the largest being the animals of Ceylon, India and Assam; those of Malaya are smaller, and of Borneo the smallest (*Deraniyagala op.cit.* p. 40). But even those of Hambantota, according to Tennent (see ft. note 12 above) are no taller than 9 feet. Above this, he thinks, the estimates are extravagant and the result of imagination. The ancient Sinhalese belief that the height of a beast was roughly twice the circumference of his fore-foot has now been established as sufficiently accurate for practical purposes; (contd.)

According to the *Mahāvamsa* the two kings fought it out with spears (*tomara*) which they hurled at each other from elephant-back. These were, like the *visu kadu* (or "throwing swords"), not very long, but perhaps, for their length, heavier than the stabbing spear or *sarissa* with which the men on the elephants fought each other in the battle of Raphia (217 A.D.), which Polybius describes for us.²² In the combat with Bhalluka the weapons used were the bow and arrow,²³ again projectiles, but this time for attack from a greater distance.

There may have been advantage in the use of such weapons against infantry from the eminence provided by the elephant, when one could hit targets that would otherwise be obstructed at ground level - though the same must be true *vice-versa*, with the riders themselves providing sitting targets to all the enemy around them. There is good reason why the lance may not have been of much use upon elephant back. One of these may be that, being bulky and lumbering, the elephant was not as agile and lithe as the horse to make the swift passes which would allow for jousting with the lance, using the

see T.A. Bongso *et al.* 'Estimation of Shoulder Height from Fore-Foot Circumference in the Asian Elephant' *Ceylon Journal of Science Bio.Sci.*) vol. 14, nos. 1 and 2 (April 1981) p. 79-82. Mitchell, Secretary of the Regents Part Zoo in 1851, had already established this, but by measurement of one animal. See Tennent *op.cit.* p. 336, n.1.

22. v. 79-86. The vividness of the description may reflect an eye-witness account. Ptolemy had 73 elephants to Antiochus' 102. While the men lunged at each other with their long *sarissas*, their animals fought it out with each other beneath them

23. *Mhv.* xxx. 88-93.

momentum. But the more significant reason is that, unlike horses, the elephants were not mere mounts but confronted each other and themselves did battle when they met. Otherwise as mounts their bulk and comparative sluggishness in manoeuvre, as against the horse, was a disadvantage. Interesting in the light of this are the silver decadrachms minted during the last period of Alexander at Babylon (Fig.1) which depict the king upon his horse, Bucephalus, taking the Indian rajah, Porus, from the rear as he sits helplessly upon his elephant, stabbing him with his long *sarissa*. In front of Porus, his mahout has turned around in alarm and is hurling a spear of the sort Dutugemunu and Elāra may have used, at the intrepid horseman, while he holds two others in his left hand. The prancing horse is a study in contrast with the resigned immobility of the huge elephant.²⁴ It is this same contrast of equine agility and elephantine cumbersomeness that is underscored in the single combat between Dutugemunu and his brother, Tissa, at Mahagama, when Dutugemunu, riding the mare, Dighathunika, is said to have had her vault clean over the elephant, Kandula.²⁵

Notwithstanding Kandula's attempt to treat this humiliation then as of having been overleaped by a

24. See B.V. Head *A Guide to the Principal Coins of the Greeks* London (1959) plate 27, no. 4; C. Seltman *Greek Coins* 2nd ed. London (1955) p. 36, plate 186. The obverse type commemorates the victory of Alexander over Porus - though obviously not with realism, since there was no personal encounter such as this. On both obverse and reverse types Alexander wears the plumes he wore at the battle of Granicus. Two coins are at the British Museum and one in New York.

25. *Mhv.* 24, 34-35.

female rather than a horse, and to shift the blame for that too on to the weakness of his rider, Tissa, there is no doubt that, even if elephants may have been grand animals to ride in ceremonial, they were hardly the best of mounts in the field of battle, and even otherwise, with an enemy experienced in them, likely to prove "a double-edged weapon" (*genus anceps*: Livy)²⁶ best left out, as by Alexander and the Romans after him.²⁷

Be that as it may, they were ridden to battle throughout much of history by Sinhalese and Indian kings and nobles, very often with disastrous consequences to themselves in defeat.²⁸

-
26. xxvii. 14; Appian *Hisp.* 46 refers to them as "common enemies" (κοῖνοι πολέμιοι)
27. Curtius (ix. 2.15 f) suggests Alexander did not deploy elephants against Porus because, the more numerous they were, the more confusion they would create. Though he never used them, they played a considerable part in the wars of his Successors. The Macedonians used them primarily as a screen against cavalry, though at Raphia they led Antiochus' attack. After the initial experience of fighting elephants and the defeat of Hasdrubal and his squadrons of elephants, the Romans preferred to concentrate on devising and perfecting their anti-elephant defences to using elephants themselves. Once they learnt how to tackle them, the Romans lost their terror for elephants. For a collection of references to elephants in ancient warfare, see P. Armandi *Histoire Militaire des Elephants depuis les temps les plus recules jusqu' a introduction des armes a feu* Paris. (1848).
28. Consider the suicides of Kassapa I (*Cūl.* 39.27), Kassapa, son of Upatissa III (*Cūl.* 41.24), Dathapabhuti (*Cūl.* 41. 52-53), Jetthatissa III (*Cūl.* 44. 112-113) and Mahinda, brother of Sena I (*Cūl.* 50.23). The elephant was hardly the mount for escape, as Elara himself must have realized.

The chief reason why fighting on elephant-back was different from fighting from horseback is the fact that, as observed before, the elephant himself took part in the onslaught on the enemy, both against the soldiery as well as (where the enemy too had deployed elephants) the enemy's elephants, and was thus (to adapt a phrase from Aristotle) a living engine (ἔμψυχον ὄργανον) of war.

We are not here concerned with the manner in which elephants went about attacking soldiery, but with the nature of combat of elephant with elephant. Dutugemunu, it would be recalled, got Kandula to attack Mahāpabbata at the same time that he threw his own weapon at Elāra. This instruction to kill he may have conveyed by 'elephant language' or by prodding one of the many nerve centres (*nīla*) which would have made the elephant go for his adversary.²⁹ What would however be a mistake is if it was thought that the manner in which Kandula launched his attack i.e. with his tusks and lethally, was quite the natural and immediate way in which a tusker would do so and that there was nothing unexpected about the result. This may also lead to the supposition that it is for this reason that tuskers were naturally more valued for war, and conversely that the *aliya*, or tuskless elephant, however dreadful he may be against infantry, both physically and psychologically, was at a grave disadvantage against one armed with tusks. Those experienced in elephants are however not without reservations about both these notions.

29. Many of those which drive an elephant to kill are located in the head between ear and ear, in front of the eyes and in the lower neck and underbelly. Touching, prodding or pricking *nīla* are said to make the elephant do a number of things without verbal orders. However, I am not aware of any scientific study which has gone into the efficacy of this claim.

A tusker, if there be one in a herd, is generally observed to be in command of it, though a female of great energy draws as much obedience as a male. In the kraal of 1847, of which he was a spectator, Tennent³⁰ observed that in instances where the intervention of other decoys had no effect in reducing a wild one to order, the mere approach or presence of the tusker belong to Dehigame Rate-mahatmaya was enough to ensure submission without more active intervention.

Yet, despite this respect among elephants for a tusker and a tusker's own psychological diminution at the loss of his tusks, his tusks were neither given to the elephant as weapons of offence, nor does he in his natural state wield them as the deer and the buffalo, or the rhinoceros use their horns. Had this



Fig. 1.

30. *op.cit.* p. 367.

been the case, says Tennent,³¹ the vast majority of elephants in Sri Lanka, males as well as females, would be left helpless in the presence of an assailant. In fact, however, tuskless males are at no disadvantage in a fight, although to outward appearance they are, as Lt. Col. J.H. Williams³² calls them, "the eunuchs of the herd." For, he explains,³³ from the age of three all that the animal gains by not having tusks goes into additional bodily strength, particularly in the girth and strength of the trunk. As a result, the trunk becomes so strong that it will smash of an opponent's tusk as though, instead of being solid ivory, it were the dry branch of a tree".

"The *aliya* generally avoids taking on a tusker," adds Deraniyagala," but when such a fight is in progress the former is generally found to be more powerful than the latter, which possesses the great advantage of its long tusks. The *aliya* checks the tusks of its foe with its trunk, and instances are known where the former evened up matters early in the contest by breaking off a large section of the rival's tusks."³⁴ Tennent refers to this occasion when some Sinhalese villagers were witness to a fight between a tusker and one without tusks, and saw the latter with his trunk seize one of the tusks of his antagonist and snap off from it a portion about two feet in length, which a civil officer of Government, Mr. Mercer, later sent to him.³⁵ According to Deraniyagala's information, the *aliya* does this by striking upwards with the base of his trunk against the

31. *op.cit.* p. 275.

32. *Elephant Bill*, London (1950) p. 5.

33. *loc.cit.*

34. *op.cit.* p. 66.

35. *op.cit.* p. 280.

lower or convex surface of the tusks, which give way, as they are only built to sustain weight from above against their concave curvature.³⁶

Here the trunk is shown to be the more powerful weapon of the two, though, as Tennent adds - and with other authorities agreeing with him, "the chief reliance of the elephant for defence is his ponderous weight, the pressure of his foot being sufficient to crush any minor assailant after being prostrated by means of his trunk."³⁷

This is not to say that the tusks are not used in combat when an elephant has them. They are - by action which Tennent describes as "pushing and goring" - and result in wounds and lacerations by which the contenders are much bloodied; but they are not used with lethal effect, except when one of them is tripped or otherwise falls over, or in the alternative, accepts defeat and turns round to flee. Deraniyagala, describing the fighting of elephants in their natural state, writes,³⁸

36. *loc.cit.*

37. *loc.cit.* The irresistible impetus and havoc caused by a charging elephant have given the *Cūlavamsa* chroniclers an apt simile for describing an army that has burst through the enemy formation - (*Cū.* 72. 248; 76. 224. See n. 6 *ad loc* in the Geiger transl. *Cūlavamsa* Pt. II, Colombo (1953) p. 85. For a vivid description of the elephant's charge and the horrifying effect of it, see Aelien *De Nat. Animal.* viii. 10.

38. *op.cit.* p. 65-66.

"The animals either circle round each other, slashing at trees and termite hillocks with their tusks until one suddenly charges the other, which meets the charge with his head, or they both meet at an ambling rush. *Aliyas* thereafter use the basal third of the raised trunk in pushing and in attempting to dig downwards with their tushes on to the skull of the opponent. Frequently both animals will strive for such an opening by placing the basal undersurfaces of their trunks together and pushing with the whole weight. An elephant will also butt with its head and employ its trunk in tripping up its opponent's forelegs. When one combatant falls down its rival endeavours to rip open its flanks with its tushes and stave in its ribs by butting. Tuskers with straight tusks employ them for stabbing, but if the tusks are very curved the animal is forced to rely on butting as do the tuskless ones. In a fight between tuskers, the one about to be beaten summons all its energies and jolts back his rival, and then turns round and bolts before the other can recover himself and stab him in the flank or between the hind legs as he turns his head to flee. The vanquished is hotly pursued by the victor, which attempts to stab it in the anus or genital protuberance and not infrequently have the end of its tail bitten off, especially if the pursuer is a tuskless *aliya*."

"Elephant bulls fight head to head," writes Williams,³⁹ "and seldom fight to the death, without one trying to break away. The one that breaks away frequently receives a wound which proves mortal. Directly one of the contestants tries to break off and turn, he exposes the most vulnerable part of the body. The deadly blow is a thrust of one of the tusks between the hind legs into the loins and intestines where the testicles are carried inside the body. It is a common wound to have a treat after a wild

39. *loc.cit.*

tusker has attacked a domesticated one." This same pushing with the foreheads until the weaker, fagged and bleeding from tusk wounds, yielded ground, followed by the victor jabbing his tusks (but in front, forcing the vanquished elephants' head up) is described by the great hunter, Alosyius Horn,⁴⁰ who had witnessed a fight between two African elephants on a sandbank (see Plate II). When an elephant fell after being rushed or tripped by the forelegs by his opponent during a fight, he would be even more greatly at the mercy of his assailant than if he fled. Bodies of elephants are sometimes found with their heads battered in and abdomens ripped open, and great holes torn out of their sides, bearing witness to the fierce battle that had ensued.⁴¹

Aristotle,⁴² who appears to have known a great deal about elephants, whether from personal observation or the reports of others who had been out east, records that "Elephants fight fiercely with one another and stab one another with their tusks; of the two combatants the beaten gets completely cowed, and dreads the sound of the conqueror's voice." Polybius,⁴³ who gives us a vivid description of the fighting of elephants at the battle of Raphia, which may reflect an eye-witness account of it, says that they used all their strength to push each other with their foreheads, their tusks firmly interlocked, until one of them gave ground. Then the winner pushed aside the other's trunk, and when once he had made him turn, he gored him with his tusks as a bull does with his horns."

40. E. Lewis *The Life and Works of Alfred Alosyius Horn*, London (1927-1929) p. 109.

41. R. Carrington *Elephants* Penguin Books (1962) p. 71.

42. *Hist. Animal.* iv. 1. 610a15.

43. *loc.cit.*

For a country that has trained and put elephants into the field of battle and seige operations for nearly two thousand years as a regular contingent of the traditional fourfold army, the information about their use in these is suprisingly niggardly; nor does India have much to say on this, notwithstanding Kautilya. There is mention of the exercise of making one elephant charge another, travelling at top speed over a distance of a furlong, and the recipient trained to patiently endure the pain until ordered to attack in turn.⁴⁴ It is likely also that they were trained to attack men by making them charge dummies with tusks, or with trunk armed with club, sword, or other weapon. A painted cloth at the Aluth Nuvara Maha Devale at Hanguranketa depicts two elephants with their tusks shortened and with their mahouts up, fighting over a low parapet - quite evidently a training programme for fighting one another. A stone inscription belonging to the 1st century B.C. at Navalar Kulam in the Panama Pattu mentions that a prince was *Āth Achariya*, or master of the elephant establishment or *āth pantiya*, and it may be this post of great dignity and importance that was subsequently placed under the Gaja Nayaka Nilame, the chief officer of the royal household.⁴⁵

44. See Appendix - Gaja Sastra p. 159, sec. (d) in Deraniyagala 'Some Aspects of the Asiatic Elephant in Zoology and Ethnography' *JRAS* (Ceylon) vol. XXXIV no. 91 (1938). Kandula (*Mhv.* 25.84) is said to have yielded ground quite slowly to weaken the expected onslaught (*taṃvegamaṇḍibhavattham paccosakki sanim sanim*) of Bhalluka's elephant, on the other hand.

45. For the flag of the Gaja Nayake Nilame (*hastiya maha kodiya*) of Huduhumpola, Kandy - a rampant elephant holding a lotus sprig in his trunk (Fig.2) see *Memoirs of the Colombo Museum, Series A, No. 2 - Sinhalese Banners and Standards* ed. E.W. Perera, Colombo (1916) plate VIII, fig. 15.

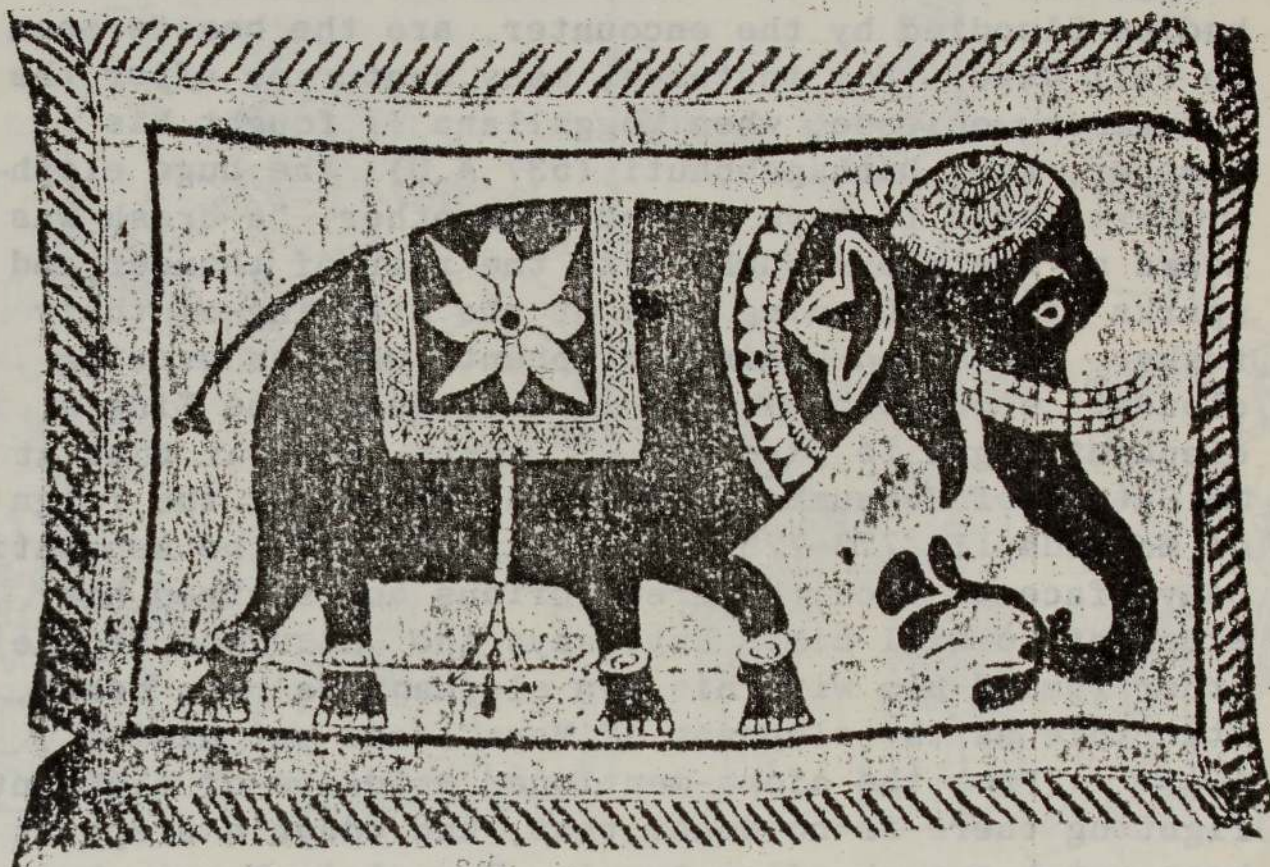


Fig. 2.

It is also known that an entire sub-caste of the Govi vamsa, the Kuruve people of Kengalle, were in Kandyan times specialized in the training of war elephants.

A whole curriculum of the training of war-elephants must then be presumed to lie behind the simple statement in the *Mahavamsa* that Dutugemunu ordered his elephant to direct his attack at Mahapabbata with his tusks (*dantehi*), since this was neither the first nor the most instinctive way in which an untrained elephant would have gone for his opponent. Elephants usually formed the van of an army, so that battle may have been engaged with the charge of the elephants, but on two occasions at least the spotlight of the *Culavamsa* falls on a single combat between king and king or king and noble, like that

between Dutugemunu and Elara. But in neither of these, though the tusks of the elephants are used and their bodies bloodied by the encounter, are the beasts seen to fall dead. For instance, many centuries after the Dutugemunu episode, when Moggallana II fought his brother, King Dathapabbhuti (537 A.D), the huge elephants are said to have rammed each other; "a crash was heard at their onslaught like the roar of thunder, and sparks like lightning flew at the striking of their tusks. The blood-stained elephants were as evening clouds. Wounded by Moggallana's elephant the King's elephant began to give way."⁴⁶ Again, we hear that at the Battle of Mahaummara (towards the end of the reign of Mahinda II: 772-779), when Dappula met the senapati Udaya face to face, he grew furious and spurred his elephant to kill him. But, says the *Cūlavamsa*,⁴⁷ the other rammed him with his own elephant (a huge beast, "terrible as the elephant of Mara") and put him to flight. (From the afore-mentioned evidence of elephant-fighting there is no doubt that, had Udaya's elephant been quick enough after turning Dappula's beast, he would have driven his tusk into his rear end!).

According to Tennent,⁴⁸ although an elephant with tusks may push or gore with them (and he thinks the French word *défences* has been given to them too hastily), "their almost vertical position, added to the elephant's difficulty of raising his head above the level of his shoulders, is inconsistent with the idea of their being designed for attack", and if an elephant

46. *Cūl.* 41. 49-53.

47. *Cūl.* 48. 156-157.

48. *op.cit.* p. 276. Even the trunk he thinks is too delicate an organ to be rudely employed in a conflict with other animals. A charging elephant usually curls his trunk up into one and a half coils to protect it, though when he sees no danger to it, he may swing it outward and upwards to strike the object of his hate.

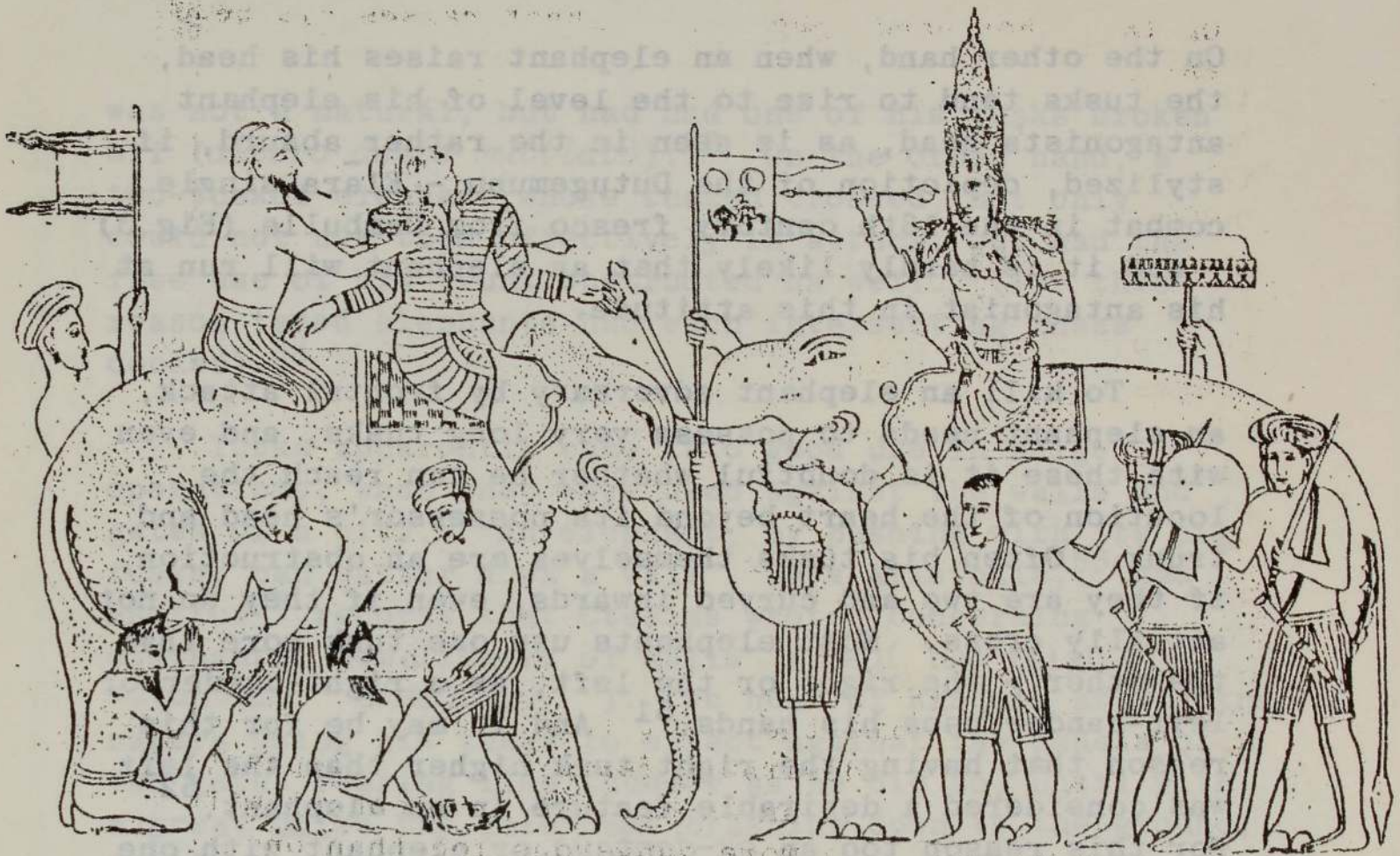


Fig. 3

does severely wound his opponent with his tusks, it is when he prostrated him and attacked him by the downward pressure of these, "*which in any other position, it would be almost impossible to use offensively*" (italics mine).⁴⁹ Tusks are elongations of an elephant's incisors of the upper jaw, and when the head is held in normal position, tend to slant downwards before they curve upward - if they do. For this reason he can use them effectively groundwards, (sometimes kneeling for effect) in attacking a prostrate man, as at the sort of execution which has received undue publicity by the account of it in Knox.⁵⁰

49. Tennent *op.cit.* p. 79-80. See also Plate III.

50. *An Historical Relation of Ceylon* (1681) p. 22. (contd.)

On the other hand, when an elephant raises his head, the tusks tend to rise to the level of his elephant antagonist's head, as is seen in the rather absurd, if stylized, depiction of the Dutugemunu - Elāra single combat in the 16th century fresco from Dambulla (Fig.3) - and it is hardly likely that an elephant will run at his antagonist in this attitude.

To kill an elephant adversary by frontal attack, an elephant needs to possess very long tusks, and even with these it is doubtful whether he can reach the location of the heart beyond its possessor's head and trunk. Often his tusks themselves are an obstruction, if they are two and curved inwards, even if they do not actually cross. Most elephants use one tusk more than the other - the right or the left, as a right-hander or left-hander uses his hands.⁵¹ And it may be for this reason that having the right tusk higher than the left was considered a desirable feature in an elephant.⁵² For this reason too an *ek-danteya*, or elephant with one tusk, could prove a more dangerous foe than one with a two-pronged attacking system. This may have had something to do with the reputation that that formidable Carthaginian elephant, surus, seems to have won for himself even among the ranks of the Romans, even though he

The elephant is said to run his tusks through the body of the victim and tear it to pieces, limb after limb. H.C. Sirr (*Ceylon and the Cingalese* London (1850) vol. I. p. 185-186) says the animal was trained to crush the criminal's limbs. But these may be refinements in the art of execution rather than the regular mode and excited the interest of the Englishmen because of the novelty of the use of elephants.

51. Pliny *Nat. Hist.* viii.7; see Aelian *De.Nat.Animal.* vi. 56.

52. *Some Extinct Elephants* etc. p. 66.

was not a natural, but had had one of his tusks broken off (*altero dente mutilato*).⁵³ On the other hand, a two-tusked elephant, whose tusks crossed, not only could not use them effectively in attack, but had the free use of his trunk obstructed as well. (For this reason tamed elephants had such intersecting tusks docked).⁵⁴

Tusks apparently came into good use in seige operations, when they were used against the walls and gates of a city. "An elephant, by pushing with its big tusks, can batter down a wall", says Aristotle,⁵⁵ and Photius⁵⁶ records that Ctesias wrote "concerning elephants, demolishers of walls" (Περὶ τῶν τεῖχο-καταλύτων ἑλεφάντων). We hear of Kandula at Vijithanagara using his tusks to effect against the panels of the gate, roaring like thunder as he did so, until with a great noise the gate came crashing down to the ground, together with the arches.⁵⁷

To return to combat, however, an elephant's opportunity for inflicting the most serious damage with his tusks to his antagonist would have been in the initial charge, if instead of going at him with his forehead,

53. Pliny *Nat. Hist.* vii.11. A pun on his name, found in a verse of Ennius (*Ann.* v. 516) "*unus surum surus ferre, tamen defendere possent*" alludes to this single tusk.

54. Tusks were cut for other reasons as well, which we need not go into here.

55. *Hist. Animal.* ix. 1. 610a 15.

56. *Indica* 3 = Jacoby p. 491..

57. *Mhv.* 25. 37-38.

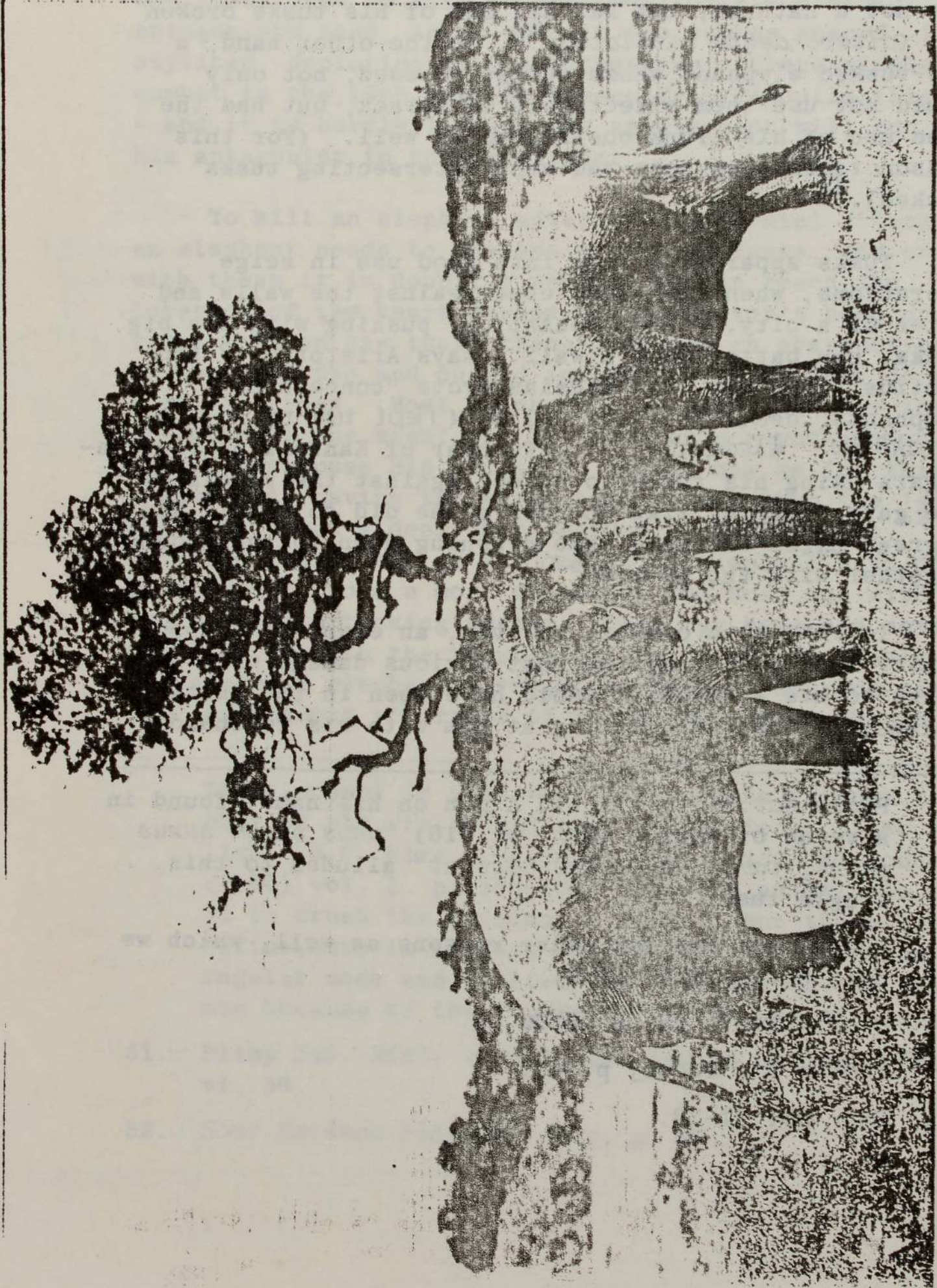


Plate III. Two Ceylon elephants confront each other, head to head, in friendship or a test of strength. Observe the inclination the tusks would take, if the animals had been tuskers.

as elephants naturally did, he did so with his tusks. With a good pair of tusks four to four and a half feet long, backed by a body weight of five tons or so, he could have jabbed them a foot or so deep before the other's body took the impact on his own. Thereafter it was pushing and goring that the tusks could do - unless the elephants separated and came in again in short rushes.

Reconstructed in the light of this, and giving credit to the fact that Kandula's attack brought down Mahapabbata, it would seem that Elāra threw his spear at Dutugemunu when they were still some distance apart, with their elephants running at each other. The precipitateness on Elāra's part must account for his missing as well as the fact that the elephants had not met in their initial impact. On the other hand, Dutugemunu hurled his spear when they were at closer quarters and the elephants about to ram each other with the impetus of their run. And if at this moment, on the command of Dutugemunu, Kandula, instead of lowering his head to meet Mahapabbata forehead to forehead, kept his tusks up, there is no doubt he would have inflicted some very heavy injury on the latter with his tusks. It has been suggested to me that perhaps a tusk might then have pierced through the rostronasal aperture in the skull, damaging the brain and causing immediate death. The vulnerability of an elephant in this region of the head was known to the ancients. In his *Natural History* (VIII.70) Pliny refers to the death of an elephant in an elephant combat in the amphitheatre of Rome by a single blow when *pilum sub oculo adactum, in vitalia capitis venerat*. If so, the Mahāvamsa's allusion to this rare and remarkable event is, to say the least, absolutely casual and matter of fact.

My difficulty in accepting even this exceptional and chance happening as the cause of Mahapabbata's sudden demise is that here too a problem arises. And this has to do with armour.

We are told that Dutugemunu, after proclaiming that none but he should take on Elāra, armed himself as well as his elephant (*samnaddho sayam aruyha sammaddham Kaṇḍulam*

karim...)⁵⁸ Earlier we were told that Elāra himself was in full armour (*Eḷararāja sannaddho*)⁵⁹ mounted on Mahāpabbata - who no doubt was also armed like Kandula.

No armour of elephants survive to give an idea of what they constituted. However, the caparisoning of an elephant for ceremonial should give some idea of the maximum coverage a beast could have had, provided it also covered the chest - and was of material capable of protecting him from the numerous arrows and spears that would have been rained on him in his trundling passage through the ranks of the enemy. Livy⁶⁰ refers to head pieces (*frontalia*) used on elephants at the battle of Magnesia, which may have protected the front of the head without interfering with the movement of the trunk, while Juba's elephants are described as having worn breastplates (*lorica: θώραξ*)⁶¹ Head and part of the forepart of a bronze elephant wearing protective armour on the face and body (reproduced in the *Dictionnaire des antiquites*: Darenberg and Saglio: fig. 2625) may give some idea of the way elephants were armed in Sri Lanka as well in antiquity. Kautilya in his *Arthasastra*⁶² mentions mail armour (*varma*), and it may be some such coat that is to be seen on the bronze sculpture just mentioned. Polyænus talks of a huge

58. *Mhv.* 25.68. See also 25.36. Note that for the second assault on the gate of Vijithanagara also Kandula was "armed (*suvarmitam*) before he was draped with the sevenfold buffalo-hide covering and hide steeped in oil.

59. *Mhv.* 25.57.

60. xxxvii. 40.4.

61. *Bellum Africum* 72; *ornatusque ac loricatus*; see also 86.1: *ornatos armatosque*. Cf. Dio Cassius lxxiii. 3-4.

62. 138.

elephant protected with iron scales (μέγιστος ἔλεφας --- τοῦτον φολίσιν ὀχυρώσας);⁶³ armour fitted with mail also covered the elephants of Heliodorus.⁶⁴ The refulgence of such armour created a formidable spectacle (*elefantorum fulgentium formidandum spaciem*)⁶⁵ which was designed to strike terror (ἔς τὸ φοβερῶτατον ἑσκευασμένοι)⁶⁶

A painting from Degaldoruwa (Fig. 4) is evidence that *frontalia* constituted part of the armour⁶⁷ when elephants in Sri Lanka were said to be "well-armed" (*suvamitta gaja*)⁶⁸ which, since they were designed for withstanding the concussion of butting heads, must have been of strong metal plate, and would thus have provided protection for the weak spot in the elephant's skull against even the sort of lucky thrust we envisaged might have killed Mahāpabbata.

Otherwise, and which is the greater likelihood, the death of Elara's elephant at the same instant as his master is no more than epic fantasy, which seeks to establish a parallel between the elephants, of exactly what transpired between the two kings - and thus also win for Kandula in the sphere of battle

63. viii.23.3.

64. vi.18.8.

65. Ammianus Marcellinus xxv. 1.14; see also Florus 1.24.16; Aulus Gellius v.5.3.

66. Appian viii.7.43 of the elephants at the Battle of Zama. Am.Marcel. *loc.cit*: *formidandum speciem*.

67. Line reproduction after Deraniyagala 'Sinhala Weapons and Armour' *JRAS (Ceylon Branch)* vol.xxxv no. 95. p. 112.

68. *Cul.* 70.229. Sometimes this armour was gilded (*Cul.* 72.314) - if indeed this is no exaggeration.

elephants the same *kudos* as his master won in the human sphere in their joint battles against the Damilas. What it certainly does is round off the single combat without residue, as the single combat rounded off the battle of Anuradhapura - and the battle of Anuradhapura rounded off the series of twenty eight battles which Dutugemunu fought upon Kandula to liberate the island from Damila rule.

.....

I should like to conclude this discussion with a question that bothers me about the kings themselves who fought upon the elephants. The combat account, as would be noticed, seems to imply that both kings were by themselves on their respective mounts. No other people are mentioned. When Dutugemunu is required to make his elephant charge Elara's elephant, it is the king himself who appears to have given the command. And when Mahāpabbata falls, he falls along with the dead Elāra and no one else.



Fig. 4

Several kings in the *Mahāvamsa* and *Cūlavamsa* are spoken of as being on their elephants in battle as if by themselves. On the other hand, in the combat with Bhalluka, we know that at least Phussadeva was seated on Kandula with the king. The Dambulla painting (Fig.3) shows Dutugemunu by himself, but a man sits behind Elara, who supports the king when he is stricken and

falls back. Dutugemunu, we are told, was "skilled in (guiding) elephants and horses" in addition to "(bearing) the sword and versed in archery."⁶⁹ And we may well believe this, not only because they would have formed part of a prince's education and training in those days, but because he had proved the truth of this in his numerous battles with the Damilas.

But in war the elephant itself is the essential weapon, and his appropriate rider, the mahout (*hatthipaka*), who directs him. If kings and nobles fought from elephant-back, they were supernumerary and could well, and with less risk, have done so from horseback or chariot, where they would be less of sitting targets. On the other hand, if they continued to choose to ride to war on elephants, it may have been because they could, from the elevation so provided, better "oversee" the battle, if it were not also from the rather dubious and certainly (in war) stupid idea that the mount had to be worthy of the rider.

In any event, it is hardly likely that the king would ride his elephant without at least a mahout to handle the animal, if not one other warrior as well, the former seated in front of him and on the neck of the elephant, his toes tucked under the animal's ears, the latter behind him, like Phussadeva in the Dutugemunu-Bhalluka combat, or the man who supports Elāra in the Dambulla painting. It is difficult to think that a king would be able to handle both the fighting and directing he himself had to do on elephant-back and at the same time direct the elephant itself as a weapon against the enemy. If indeed kings were represented as riding by themselves, it may have been out of pure epic considerations, which blacked out the other riders in deference to the king, and at the same time presented the rival monarchs or commanders as facing each other in combat by themselves in keeping with the heroic tradition.

69. *Mhv.* xxiv. I.

In the light of this, a second look at the decad-rachm of Alexander might be worthwhile, since the scene there, even if symbolic (as the rider on horseback is none other than Alexander himself),⁷⁰ is yet more realistic as far as the action goes. For here the rajah, Porus, is not the driver of the elephant, but there sits a mahout in front of him, toes tucked behind the elephant's ears, who has turned completely round to defend the helpless Porus, who is being attacked from the rear, (from which quarter the king perhaps thought he was safe,) by the horseman, who had either broken through the ranks of the Indians to take him that way or found the king in advance of his men, if not indeed deserted by them!

In the circumstances, I find it difficult to think that Dutugemunu would have gone in pursuit of Elāra, (restraining all others from doing so by proclamation,) all by himself deep into enemy area, or that the Damila king would have been caught up by him and turned round on him, riding an elephant all by himself. But they had to be so, facing each other, as in the Dutugemunu-Bhalluka combat, if they were to perform or suffer the heroics that the *Mahavamsa* tells us of, unless, that is, the fight lasted longer than it says there, and there were sundry other details and deaths that had been obliterated so as not to detract from the battle royal.

The only other construction that I can give the account of the Dutugemunu-Elāra combat that will fit the facts - or lack of them - in the *Mahavamsa*, is that this encounter, which brought an end to the battle of Anuradhapura, was an arranged one between the kings in the style of the single combat between Menelaus and Paris in the *Iliad*, which was to decide the issue one way or the other for the contenders - and that it was fought between the two kings alone and their elephants, by arrangement.

MERLIN PERIS

70. See Fig. I, also p. 84 and n. 24 *ad. loc.*

HOW THE "SONG OF GOD" CORRELATES WITH THE "DRAMA OF LIFE" *

Scholars have considered and argued whether the *Bhagavad-Gītā* is an integral part of the *Mahābhārata* or whether it was simply interpolated at a later date.¹ Probing the validity of these theories is unimportant because both works are estimated as masterpieces of Sanskrit literature. However, when we investigate the various episodes carefully linked in these works, the most conspicuous theme appears to be the part played by the individual in the socio-religious dynamics of life. The drama appears in the *Mahābhārata*, and the course of action is delineated in the *Bhagavad-Gītā*.

The *Bhagavad-Gītā*, literally translated as "The Song of God",² consists of a dialogue between *Kṛṣṇa* (God incarnate) and *Arjuna* (or "man"), in which *Kṛṣṇa* expounds, through poetic discourse, the philosophy *Arjuna* must follow for God-realization. Therefore, the term "The Song of God" seems suitable to render the title *Bhagavad-Gītā* in English. It is *Kṛṣṇa's* or God's teaching set forth in a rhythmically metrical composition. The *Mahābhārata* or "The Great (battle of the) Bharatas"³ is the

* The writer is indebted to Prof. Ms. Ratnā Handurukande who read through the paper and made corrections and valuable suggestions for its improvement.

1. Upadhyaya, K.N., *Early Buddhism and the Bhagavadgītā*, Delhi, 1971, p. 2-9.

2. Winternitz, M., *A History of Indian Literature*, Vol. I., Tr. V. Sirinivasa Sarma, Delhi, 1981, p. 409.

3. *Ibid.* p. 297.

story of a mighty combat between two sections⁴ of one family over a kingdom. It portrays many a caper, as well as stirring movements in the socio-religious life of the human being; the *Mahābhārata* deals with, and reflects the dramatic struggle of life. Hence the writer thinks that it would be pertinent to refer to this great epic by the metaphoric title "the drama of life".

In this short article it is expected to discuss how "The Song of God" can be incorporated into "the Drama of Life". The importance of the *Bhagavad-Gītā* within the *Mahābhārata* is great. There is a definite need in the *Mahābhārata* for the spiritual philosophy which is taught in the *Bhagavad-Gītā*. The battle idea from the *Mahābhārata* is simply used to bind and relate the spiritual teachings of the *Bhagavad-Gītā* into the *Mahābhārata*, or a real life situation: a struggle both mental and physical. This is done so that the common man can understand how to relate and combine the spiritual teachings of the *Bhagavad-Gītā* to his life and problems. Due to this use of the battle theme we find that there is a congruent relationship taking place throughout both: a "mental battle" in the *Bhagavad-Gītā* and a "physical battle" in the *Mahābhārata*; both battles have to be won. The winning of these battles successfully makes a person completely perfected.

What are the basic spiritual or philosophical ideas and teachings found in the *Bhagavad-Gītā*? It seems that the most important one and the most emphasized idea is that of detached activism or *karma-yoga*. *Kṛṣṇa* advised *Arjuna* not to be inactive, but to be active in his duty without being attached to the result. "To action alone hast thou a right and never at all to its fruits; let not the fruits of action be thy motive; neither let there be in thee any attachment to inaction".⁵ He further states:

4. *Kauravas* and *Pāṇḍavas*.

5. *karmany evā'dhkaras te mā phaleṣu kadācana* (contd.)

"Not by abstention from work does a man attain freedom from action; nor by mere renunciation does he attain to his perfection".⁶ According to Upadhyaya, prior to the composition of the *Bhagavad-Gītā* there were two ways of one's attitude towards the performance of his life's duties: namely, indulgence in worldly duties or *pravṛtti* and renunciation of worldly duties or *nirvṛtti*. He says that the *Bhagavad-Gītā* questions these as the only ways by putting forth the idea of detached activism or *karma-yoga* along with a strong faith in God.⁷

The answer to realizing God is therefore not necessarily in renouncing the world, rather, it lies in living in the world but not being of the world. This refers to the performance of one's normal duties or *dharma* in life; working, leading a family life, being a householder, taking all worldly responsibilities. "Better is one's own law though imperfectly carried out than the law of another carried out perfectly. Better is death in (the fulfilment of) one's own law for to follow another's law is perilous".⁸ This is a sequel to the idea that if you are a *Kṣatriya* then you must fight and be a warrior. "Further, having regard for thine own duty, thou shouldst not falter, there exists no greater good for a *Kṣatriya* than a battle enjoined by duty".⁹ One should not drop

mā karmaphalahetur bhūr mā te saṅgo'stv akarmanī
(BG. II.47). (The text and the translation of verses are quoted from: Radhakrishnan, S., *The Bhagavadgīta*, London, 1953).

6. *na karmanām anārambhān naiṣkarmyam puruṣo'snute*
na ca saṁnyasanād eva siddhim samadhigacchati
(BG. III.4.)
7. Upadhyaya, K.N. *op.cit.*, p. 483. ff.
8. *śreyān svadharmo viguṇaḥ paradharmāt svanuṣṭhitāt*
svadharme nidhanaṁ śreyāḥ paradharmo bhayāvahaḥ
(BG. III.35.).
9. *svadharmam api cā'vekṣya na vikampitum arhasi* (contd.)

out or run away from one's duty. This is a very important point of view in the *Bhagavad-Gītā*; we must discharge our foreordained responsibilities. Whatever the responsibility is, it should be accomplished perfectly.

Not being of the world in turn implies both not becoming caught up in sensual temptations, as well as keeping a detached attitude towards one's worldly duty. It also implies keeping a proper perspective on the importance of worldly duties in comparison to spiritual duties.

Here, it is pertinent to turn back to *Bhagavad-Gītā* II, 47,¹⁰ mentioned above. *Kṛṣṇa* says that we must perform our duties to the best of our capacities, but we must do them in such a way that we are not attached to them, their results or rewards. *Niṣkāma-kriyā* reflects the same meaning. We must not look upon the actions as a means, or be elated or depressed about their results, but must simply discharge them and then leave the results in the hands of God.

The reason for this outlook is that *Kṛṣṇa* is the ultimate doer, and we must do our duties with Him in mind, in other words, dedicate our actions to Him. Once we do this, then they become God's actions and are therefore considered as right actions.¹¹

Devotion fits in with this teaching of *Karma-yoga* perfectly. The idea of pursuing action or *dharma* unselfishly for God is devotion. It is stated: "An action which is obligatory, which is performed without attachment, without love or hate by one undesirous of fruit, that is said

dharmyād dhi yuddhāc chreyo'nyat kṣatriyasya na vidyate (BG.II.31.).

10. See f.n. 5 above.

11. Upadhyaya, K.N., *op.cit.*, p. 366.

Vedas and used earlier to describe the "Absolute" (*Brahman*).¹⁶

First He cites all things that were created by *Brahman*; "the great (five gross) elements" (*mahābhūtāni*) of which all physical objects are composed of, namely earth, water, fire, air, and space (ether), (the fifth being active only in man).¹⁷ He then refers to the idea of "self-sense" (*ahaṅkāra*) or egoism, "intellect" (*buddhi*), the "Unmanifested" (*avyaktam*) or *mūla-prakṛti*, the "ten senses and the one" (*indriyāni daśai 'kaṁ ca*), viz. the eye, the ear, the skin, the tongue, and the nose that form the senses of knowledge (*jñāna-indriya*), and hands, feet, mouth, anus, and genitals that form the five organs of action (*karma-indriya*), and the mind that functions as the background of all the ten senses. Then He mentions the "five objects of the senses" (*pañca cendriyagocarāḥ*), viz. form, sound, touch, taste, and smell. He goes on further, briefly describing the *Kṣetra*, and says it also consist of "desire" (*içcā*), "hatred" (*dveṣaḥ*), "pleasure" (*sukham*), "pain" (*duḥkham*), "the aggregate" (*saṁghātaḥ*) or the assemblage of various parts of the body, "intelligence" (*cetana*) or the power to reveal and interpret, and "steadfastness" (*dhṛti*) or firmness that keeps the senses and the body fit and active.¹⁸ In conclusion He describes the qualities of life, pure and good traits which a person must possess to have knowledge (or to be enlightened), and finally the ultimate state (*atman* merging into *Brahman*).¹⁹ When *Kṛṣṇa*

16. *Ibid.* XIII. 4 and commentary. See: *BG.* tr. R.C. Zaehner, New York, 1975, p. 335; *BG. as it is*, tr. A.C. Bhaktivedanta Swami Prabhupada, Los Angeles, 1975, p. 207 f.

17. *Ibid.* XIII. 5.

18. *Ibid.* XIII.6. See: *BG.* tr. Swami Chidbhananda, Tirupparaitturai, 1965, p. 677-681; *BG.* tr. S. Radhakrishnan, p. 303.

19. *BG.* XIII. 7-17.

says: "He is the Light of lights said to be beyond darkness. Knowledge, the object of knowledge and the goal of knowledge - He is seated in the hearts of all"²⁰ He is referring to a person who has reached his ultimate goal; God realization or *Brahman*. He states that to gain knowledge a man must realize and know (to know in the mind, and to realize or make real in the heart) all these things, from what constitutes the world to what constitutes God Himself. This is an extremely valid and thorough account of what man must achieve to gain knowledge or God realization. The world has to be comprehended; *Brahman* has to be understood; and the fact that *Brahman* dwells within all has to be realized.

Before making an attempt to describe how the *Bhagavad-Gītā* is pertinent to and befits the *Mahābhārata* it is preferable to give a brief summation of the theme and course of events which occur in the latter.

The theme of *Mahābhārata* is a battle between *Kurus* and their cousins, the sons of *Paṇḍu*, over a kingdom that belonged to their fathers. The sons of *Paṇḍu* are *Yudhiṣṭhira*, the eldest, *Bhīma*, *Arjuna* (who is the main character in the *Bhagavad-Gītā* too), and the twins *Nakula* and *Sahadeva*. The foremost sons of *Dhṛtarāṣṭra* are *Duryodhana* (the eldest who is always referred to as being wrathful, jealous, and evil), *Bhiṣma*, *Droṇa*, *Vidura*, and the adopted *Karṇa* (the mighty archer). *Karṇa* is a rival of *Arjuna* throughout the epic which is ironic because they are, unknowingly, brothers. They had all been brought up together by the blind king *Dhṛtarāṣṭra*, as *Paṇḍu* had encountered an early death. *Yudhiṣṭhira* was recognized heir to the throne and *Duryodhana* and his brothers were very jealous. *Duryodhana* tried to kill the *Pāṇḍavas*, or the sons of *Paṇḍu*. But when he failed they disguised themselves as *Brahmaṇa* priests and lived a reclusive life in the forest.

20. *jyotisam api taj jyotis tamasaḥ param ucyate
jñānaṁ jñeyam jñānagamyaṁ hr̥di sarvasya dhiṣṭhitam
(BG.XIII.17).*

When *Yudhiṣṭhira* won a powerful ally in *Drupad* (his father-in-law), *Duryodhana* decided he must part with a parcel of the kingdom and give it to the sons of *Pāṇḍu*. But *Duryodhana* was still very jealous and *Yudhiṣṭhira*, though he was righteous and pious, had one weakness, an uncontrollable urge to gamble. So *Duryodhana* devised a scheme whereby *Yudhiṣṭhira* was tricked (by the use of loaded dice), into gambling away his entire kingdom, his brothers, and the worst of all his queenly wife *Draupadī*.

Thereafter they roamed in exile for twelve years. But when their exile was over, *Yudhiṣṭhira* requested the return of his kingdom. When this request was not granted, a huge battle was foreseen. The *Pāṇḍu* brothers, with the aid of *Kṛṣṇa*, pleaded for peace, but proud *Duryodhana* would not consent. Then a great battle occurred, which included all the kingdoms of Northern India and lasted for a gory eighteen days, in which all the sons of *Dhṛtarāṣṭra* were slain. This is where the *Bhagavad-Gītā* takes its place in the *Mahābhārata*, just preceding the commencement of the great battle.

It should not be misunderstood that the *Mahābhārata* is devoid of spiritual teachings; this is not so. We should behold this work as containing a moral theme displayed throughout; the rise and the success of the good and virtuous and the fall and defeat of evil and improbity. There is no doubt that justice always prevails, and the bad is overcome by good. The epic has many other beneficial teachings and Hindu beliefs scattered throughout. It contains moral codes, the duties of four castes (*varṇas*), the four stages of life (*āśrama-dharma*), the laws of marriage, and yogic philosophy. These moral teachings are necessary and important in every society and they cannot by any means be overlooked in this great work.

The *Bhagavad-Gītā* is needed within the *Mahābhārata* in order to accentuate the pure and straight spiritual

teachings of a living Master (at that time). Not only are these true and direct philosophical ideas not offered in the *Mahābhārata*, but many readers do not recognize and absorb the moral teachings that are presented in the epic. This is due to the fact that they are often underlying, deep-rooted, and not given clearly, simply, and straightforwardly on the surface. In order to grasp, comprehend, and perceive these spiritual and moral teachings clearly, a direct and a brief explication becomes indispensable; the *Bhagavad-Gītā* fulfils this requirement, and paves the way for God realization.

Then, once one has absorbed these ideas of the way in which to attain God realization, one can relate them to his own life or the lives of the characters in the *Mahābhārata*. The work will then take on an entirely new and deeper meaning.

Now we should see how the *Mahābhārata* absorbs the ideas and teachings of the *Bhagavad-Gītā*, and where the need for the *Bhagavad-Gītā* within the *Mahābhārata* lies. In other words, in what parts of the *Mahābhārata* can we recognize ideas similar to those proclaimed in the *Bhagavad-Gītā* (the places where they sometimes overlap), and in what areas of the great epic can we discover a definite need for the spiritual teachings and ideas expounded in the *Bhagavad-Gītā*?

The precept of detached activism (*karma-yoga*) is only too clearly demonstrated throughout the *Mahābhārata*. Condensing a section of eight *ślokas* from the *Sabhaparvan* in the *Mahābhārata* Dutta says: "Battle for the cause of virtue, perish in a deadly war, then to seek their upper mansions in the radiant realms afar! ---- Primal Cause and self-created! When is done his purpose high, *Narayana* leads immortals to their dwelling in the sky".²¹ This

21. See: R.C. Dutta, *The Mbh.* (Condensed into English Verse), Allahabad, 1944, p. 43. Also see: *The Mbh.* ed. V.S. Sukthankar and S.K. Belvalkar, Vol.2.(contd.)

speaks of performing one's duty through action, or battle in this case, and then one will be led to "upper mansions in radiant realms" or to a "dwelling in the sky".²² This clearly propounds the idea of *karma-yoga* and goes so far as to point out that we must do our *dharma* through action; this automatically implies right action. It is not our duty unless it is the correct or right action.

When the good and righteous *Yudhiṣṭhira* carelessly gambles away his entire kingdom, including brothers and wife, he is obviously following wrong action. Not only is he attached to its results but he does not have the thought in mind that he is performing this action for God. One needs the teachings of *karma-yoga* propounded in the *Bhagavad-Gītā* to see which actions are right and which actions are wrong, and which are neutral (*karmanāḥ*, *vikarmanāḥ*, *akarmāḥ* respectively). When a person performs an action with true devotion to God it is considered as right action, and not when a person is doing it for the sake of good results. *Yudhiṣṭhira* wanted to win (the result) so lustfully that he entirely forgot what he was doing and whether it was honourable, virtuous, or not.

Dutt, when he condenses and versifies a section from the *Sabhaparvan* of the *Mahābhārata*, speaks of "conqueror of earthly trails, crowned with virtue's heavenly crown".²³ If one can live through and overcome his worldly tribulations, then one can go to Heaven. But the key is how does one conquer his earthly trails This is communicated

Sabhaparvan, ed. F. Edgerton, Poona, 1944, p. 169 f.;
The Mbh. (Books 2 and 3), tr. J.A.B. van Buitenen,
 Chicago, 1975, p. 92.

22. R.C. Dutta, *op.cit.*, p. 61.
sam̐dideśa pura yo'sau vibudhānbhūtakṛtasvayam
anyonyamabhinighnantāḥ punarlokānavapsyatha (*Mbh.*
Sabhaparvan, adhyāya XXXIII. 15).

23. V.S. Sukthankar and S.K. Belvarkar, *op.cit.*, p. 343-345; J.A.B. van Buitenen, *op.cit.* p. 163.

in the *Bhagavad-Gītā*; one must perform the right actions with the right frame of mind: "Even if a man of the most vile conduct worships me with undistracted devotion, he must be reckoned as righteous for he has rightly resolved. Swiftly he become a soul of righteousness ---." 24 The *Mahābhārata* gives us keys and ideas, but only the *Bhagavad-Gītā* positively tells us the proper way in which we should act.

As is pointed out in the *Bhagavad-Gītā* and the *Mahābhārata*, it does not matter what *dharma* we follow; whether it be that of a *Brahmana*, *Kṣatriya*, man in exile, enunch, herdsman, cook, or any worldly duty (the caste or class is unimportant). It only matters that wherever we find ourselves in life, we do our duty as best as we can, attributing actions to God, and not relying upon or considering their sequel. This idea of dedicating all actions to God ties up with the idea of devotion (*bhakti*).

The concept of "self" is also very important here. In the tale of *Savitri*, we find an illustration of how devoted an Indian wife was to her husband; she actually talks *Yama*, the god of death, into returning her dead husband's soul. She has completely lost her sense of self in her sanctimonious devotion to her loved one. When the *Bhagavad-Gītā* speaks of dedicating one's actions to God, *Kṛṣṇa* also says that we must renounce the idea of self or ego as it all belongs to God no matter in what way. *Savitri* likens the devotion between man and wife to that of union between *atman* and *Brahman*. *Draupadī*, in reply to a long question put to her by *Satyabhama* who is the chief queen of *Kṛṣṇa*, also says: "There is no such deity *Satyā*, here in all worlds with all their divinities like a husband: you're rich in every wish if you please him right; if angry

24. *api cet sudurācāro bhajate mām ananyabhāk
sadhur eva sa mantavyaḥ samyag vyavasito hi saḥ
kṣipram bhavati dharmātma* ----- (BG. IX.30 and 31.1.1).

you're dead."²⁵ This pure and true devotion is an integral tenet of enlightenment, if one does not give up the self and dedicate all actions to God, one will never attain this enlightenment. One of the main reasons why this tale of *Savitri* is so beautiful is that it gives us some light into the subject of selfless and devotion; two trails which are so important because with them, we can come closer to realizing God in everything, including our actions.²⁶

As it was mentioned earlier *Kṛṣṇa* talks of a wise man's detachment from emotions. We get a definite view of attachment to the emotion of anger, jealousy, revenge, hatred, lust, pride, and greed in the *Mahābhārata*. We also find instance of women's attachment to their husbands, grief over losses, and elation over gains.

Duryodhana is very lustful towards *Draupadī* who is full of hatred or anger when he tries to take her as a concubine. He is always referred to as proud and all the cousins feel revenge stemming from anger, for one another at some point in the story. All the emotions that have been mentioned above are part and parcel of the make up of the *Mahābhārata*. In the *Bhagavad-Gītā*, on the other hand, *Kṛṣṇa* asserts that one must not be affected by emotions; pleasures should not cause elation, nor pains depression; one should not grieve over losses, or house negative emotions such as anger, which causes revenge and hatred. Therefore, *Kṛṣṇa* suggests that it is impossible to be wise, or righteous unless these emotional reactions are overcome. So, by the standards of *Bhagavad-Gītā*, the characters of the epic have some good and moral points, and follow religious codes to some

25. *naitaddr̥śam daivatamasti satye - sarveṣu lokeṣu
sadaivatesu.
yathā patistasya hi sarvakāmā - labhyāḥ prasāde
kupitaśca hanyat*

The Mbh. (The *Āraṇyakaparvan* - pt. 2), ed. V.S. Suktankar, Poona, 1942, p. 799. Translation is quoted from J.A.B. van Buitenen, *op.cit.*, p. 667.

26. Swami Chidbhavananda, *op.cit.*, p. 685.

extent, but they are nowhere near being truly righteous or gaining God realization.

This is interesting and relates to what was stated earlier because a reader would almost assume that these characters, just by simply following their *dharmā*, (and actions resulting from their *dharmā*), were achieving spiritual enlightenment in or after life. But this is not necessarily so and thus the great need for the *Bhagavad-Gītā* within the *Mahābhārata*. The reader needs to see that there is not only more to attaining enlightenment than what appears on the surface of the epic, but also needs to be clearly and concisely presented with the actual do's, don'ts, how's, and wherefore's of this great task.

The reason why attention is drawn to this issue is because emotions are presented so freely in the epic; even *Kṛṣṇa* is said to feel angry.²⁷ Therefore, without the theme of unwavering mind or knowledge brought forth in the *Bhagavad-Gītā*, one would assume these were good or at any rate not detrimental. Yet *Kṛṣṇa* lays so much importance on this subject that we realize its value. This shows the need for the *Bhagavad-Gītā* to keep the themes and ideas of the *Mahābhārata* in perspective to their true spiritual value.

The last point that would be touched upon is that of "knower of the field" (*kṣetra-jñā*).²⁸ We get a definite knowledge of the attributes of forgiveness, uprightness, humility, sincerity, etc. from reading the *Mahābhārata*. The "good" characters presented to us in the epic

27. *tathā bruvaca evāsyā bhagavānmadhusūdanaḥ
vyapāharicchiraḥ kruddhaścakreṇāmitrakarśanaḥ
sa papāta mahābhūrvajrahata ivācalaḥ*
V.S. Suktankar and S.K. Belvarkar, *op.cit.*, p. 203,
and *loc.cit.*, f.n. v. 21. For Tr. see: J.A.B. van
Buitenen, *op.cit.*, p. 104.

28. *BG. XIII.2.*

all display these beneficial traits which are said to be possessed by the knower. But there are many other facets of the knower that we do not see in any characters in the epic. The most profound of these is the "absence of the thought of 'I'" (*anahmkāra*).²⁹ Every personality seems to be very self-centered, with the one exception of *Savitri*. One could argue that she too was self-centered since she desired her husband. But we should remember that the sense of "herself" was non-existent within her, and her only wish was to give life to the dead husband; it was the inordinate attachment to her dearest relative that made her to follow *Yama*. *Mahābhārata* says that woman has no god other than her husband.³⁰ This is a very important course that one must adopt to become a knower, and also another reason why the tale of *Savitri* is such a necessary and integral part of the epic poem.

In the view of the writer the *Mahābhārata* represents the stage for "the drama of life". The stage being the world, man, life, and all the interaction that occurs among them. With the many variety of stories, and the length and depth of the entire epic that they comprise, it is felt that the reader receives a long lesson on life itself, its problems, pleasures, and pains. Moreover, he receives a valuable lesson because the *Mahābhārata* gives us a moral standpoint from which we can deal with these problems, pleasures, and pains.

The *Mahābhārata* also displays some of the many tribulations and temptations that are encountered in one's lifespan. One instance, gambling, warns us of its negative results; another, war, shows us of its inevitability or unavoidable occurrence, and then of its devastating outcome.

29. BG. XIII.8.

30. *patyāśrayo hi me dharmo mataḥ strīṇāṃ sanātanaḥ
sa devaḥ sa gatirṛitya tasya ka vipriyaṃ caret*
V.S. Suktankar, *op.cit.*, p. 797. Also see: J.A.B.
van Buitenen, *op.cit.*, p. 666.

Then, in still other situations, we are shown the right or righteous way to act or react in a given situation, how to accept one's *dharma*, a subject that is dealt with in both the *epic* and the *Bhagavad-Gītā*. There is no doubt that the *Mahābhārata* deals with many of the themes that are also found in the *Bhagavad-Gītā* and we can go so far as to say that in many instances these themes are more clearly and deeply propounded in the epic poem. This is because they are woven into the story so that it is like experiencing them directly not from the source instead of hearing a discourse about their attributes or detriments (such as is found in the *Bhagavad-Gītā*).

Therefore we have some advantage to the reading of the *Mahābhārata* due to its incorporating moral and spiritually based philosophies into a story in which we can observe their use and outcome. But, nevertheless, there is a need for the *Bhagavad-Gītā*, or we might never have noticed these teachings in the epic, valued them according to their worth, or accepted their practical incorporation into our life experience and situations. Without the implications found within the epic of how a person can really use certain traits, ideas, or attitudes, in his lifestyle, the discourse given in the *Bhagavad-Gītā* could make these same things seem useful for a *sādhu* or holy man, and not for a common man or a householder. Without the one we could never realize the true value of the other.

R.A. GUNATILAKA

BIBLIOGRAPHY

- Aurobindo, Sri. *Essays on the Gītā*. Calcutta, 1926.
- Chidbhananda, Swami. *The Bhagavad Gita*. Turupparait-turai, 1965.

- Crowford, S.C. *Evolution of Hindu Ethical Ideals.* Calcutta, 1974.
- Dutta, R.C. *The Mahābhārata condensed into English Verse.* Allahabad, 1944.
- Kuppuswami, A. *Bhagavat Gītā.* Varanasi, 1983.
- Prabhūpāda, A.C. Bhaktivedanta Swami. *Bhagavad-Gītā As it is.* Los Angeles, 1975.
- Radhakrishnan, S. *The Bhagavadgītā.* London, 1953.
- Roy, P.C. *The Mahābhārata (Translation).* Calcutta, 1889.
- Sarma, D.S. *Introduction to the Bhagavad-Gītā.* Madras, 1925.
- Sukthankar, V.S. and Belvalkar, S.K. *The Mahābhārata.* Poona, 1944. (Vol. 2, *Sabhaparvan*, ed. F. Edgerton. Poona, 1944).
- Sukthankar, V.S. *The Mahābhārata (Āranyakaparvan).* Poona 1942.
- Swarupananda, Swami. *Śrīmad Bhagavad-Gītā.* Calcutta, 1948.
- Upadhyaya, K.N. *Early Buddhism and the Bhagavadgītā.* Delhi, 1971.
- van Buitenen, J.A.B. *The Mahābhārata (Book 2 and 3).* Chicago, 1975.
- Zaehner, R.C. *The Bhagavad-Gītā.* New York, 1975.

MICA ZONES AND THE EARLY IRON AGE SITES IN SRI LANKA: AN EXPLORATORY STUDY

"They have a marble which resembles tortoise-shell, pearls also precious stones, and these are all held in high esteem." (Pliny on Taprobane)

"The name mica is applied to a group of minerals which are complex aluminium silicates with potassium hydroxyl, magnesium and ferrous iron and in some varieties - sodium, lithium, and ferric iron. Mica is characterized by excellent basal cleavage and by a high degree of flexibility and elasticity" (Herath 1975:44; also see Mathur 1968; Watt 1891/1972:239-240; *WI* 1962: vol.6, 354-359). This form of narrow introduction to the mineral known as mica cannot help in the evaluation of the archaeological significance or the important position assigned to mica during the Early Iron Age. Recent investigations on the environmental archaeology of Sri Lanka have revealed some amount of information related to the utilization of this non-metallic mineral in antiquity.

The use of mica may have an antiquity going back to the Pre-historic period in Sri Lanka. It is suggested that the Mesolithic people used this mineral in their ritual cave art (Deraniyagala 1971:38). The succeeding Proto-historic Megalithic Black and Red Ware (BRW) culture reveals more positive evidence for its use from archaeological sites (Seneviratne 1984:278-279). The deposition of mica flakes in Proto-historic megalithic burials and the occurrence of mica-glazed pottery in Proto and Early-historic habitation layers is common to both Peninsular India and Sri Lanka.

The deliberate inclusion of mica within Proto-historic burials is suggestive of some degree of prestige value and a socio-ritual practice attached to this mineral. To note a specific instance from South India, a layer of mica dust emerged at the bottom of an urn at Chataparamba, near Cochin in Kerala (*vide* Leshnik 1974:75). Mica cannot be

found in this region and obviously it carried sufficient social importance to be imported from the interior hills of Kerala. Similarly, the Proto-historic urn burials at Adichchanallur (District Tirunelveli, Tamilnadu) yielded flakes of mica in the course of early investigations at that site (Rea 1915:4,5). Mica does not occur in the lower Tambraparni valley and it has to be transported from the upper reaches in the Agastiyamalai hills. Interestingly enough, mica flakes adhering to copper rods were unearthed from the burial urns at Pomparippu in Sri Lanka (*ASAnR* 1957:30-31). Similar flakes of mica have been reported from the cist burials at Galsohonkanatta (Pin-vewa) near Yapahuva (*ASAdR* 1967-68:78).

Its continued use, in the post-Megalithic period, indicates social importance attached to mica even by Early historic society. Significantly the *Naturalis Historia* of Pliny (23-79 A.D.) records that Taprobane produced a "marble which resembles tortoise-shell." He also goes on to equate its social prestige at par with gold, silver, pearls and precious stone (McCrinkle 1901:106). The mineral that comes closest to this description is mica (*vide* Nicholas 1963:106). In view of this, the occurrence of mica-glazed pottery along with skeletal remains from the Pre-Arrotine layer at Mantai (Chanumugam et Jayawardana 1954:65) may indicate that mica was used on de-luxe ware associated with more affluent social groups. We may also note that mica-glazed sherds were found from an unstratified context at the Citadel (elite residential complex) of Anuradhapura during the 1969 excavation (Deraniyagala 1972:83, 103).¹

Pieces of mica were found within the Tissarama at Anuradhapura (*ASAdR* 1960:65) and also from the area south of

-
1. It is difficult at times to ascertain whether the mica may have been introduced to the clay during the process of production or whether it was a natural formation in the raw material. Clay, or kaolinite (hydrated silicate of aluminium), derives from feldspathic rocks and is never found in a pure state but with other minerals (deriving from feldspathic rocks) such as mica (contd.)

the Abhayagiri stūpa during the recent excavations at that site. The excavator at Abhayagiri notes that "this material was collected and prepared for some specific use" (Wikramagamage 1984:87).² The specific use of mica during the Early Iron Age is not known to us, though it is pointed out that in ancient India the usage of mica ranged from ornamentation (personal and clothing), buildings, pottery, pigment and the most purified variety for medicinal purposes (*vide* Watt 1891/1972:239-240). Copper rods (having traces of mica), such as those found at Pomparippu, were unearthed from strata 4a (Early historic) at Anuradhapura during the Citadel excavation (Deraniyagala 1972:146 fig. 24). These may be identified as antimony rods, what are also known as kohl sticks, so commonly found within the Proto and Early historic context in India (*ibid.*). Kohl is a preparation based on powdered sulphide of lead or sulphide of antimony. These rods were quite obviously used for applying eye collyrium. It is possible that well-powdered and purified mica, which is a glittering substance, may have been used for personal ornamentation.³

It is not altogether impossible that mica was an export commodity during the Early historic period. The 1980 excavation at Mantai in fact revealed flakes of mica (in Trench A) brought into this port-city from another source (*vide* Carswell et Prickett 1984:52). "A marble which resembles tortoise shell", was therefore known to the foreign merchants and it is not surprising that Pliny was aware of this particular mineral found in Taprobane (*vide* Seneviratne 1985; 1985a).

quartz and even other compounds containing iron (Hodges 1965:21). For instance, the fine sand used by the present potters of Sind for mixing with clay has a very high proportion of mica in it (Mackay 1930:129).

2. The excavations at the Sigiriya 'summer palace' revealed 'minute particles of biotite mica' in Layer 9, while 'small particles of mica' were unearthed from Layer II (*vide* Bandaranayake 1984:79). Probably this indicates the nature of mica inclusions in the natural soil composition.
3. The Chalcolithic cultures of West Asia used haematite(contd.)

II

There has been no effort, so far, to systematically analyse the fragments of mica obtained from archaeological sites. Such an analysis may reveal the mineral composition of the samples, thereby indicating the source located in proximity to such archaeological sites. Recent studies indicated that, during the formative (Proto- and Early historic) period, there was a coincidence between particular resource zones and habitation zones (Seneviratne 1986; 1987; 1987b). This coincidence obviously had an element of time and space in its distribution across the island. Conversely, there was also the movement of resources (especially minerals) from one eco-zone to another during the formative period (Seneviratne 1986a; 1987; 1987a; Seneviratne et Senanayake 1987; Seneviratne et Rambukwella 1987). It is possible, within the above context, to identify some degree of coincidence and interaction between mica zones and the Early Iron Age sites in Sri Lanka.

Mineralogists identify phlogopite (magnesium mica), muscovite (potash mica) and biotite (ferro-magnesium mica) as the most widely distributed types of mica found in Sri Lanka. As for the general distribution pattern, it is pointed out that phlogopite occurs in association with the crystalline limestones; biotite more widely distributed in the gneissess; and muscovite mica in association with quartz-feldspar-pegmatites of Sri Lanka (Herath 1975:44).

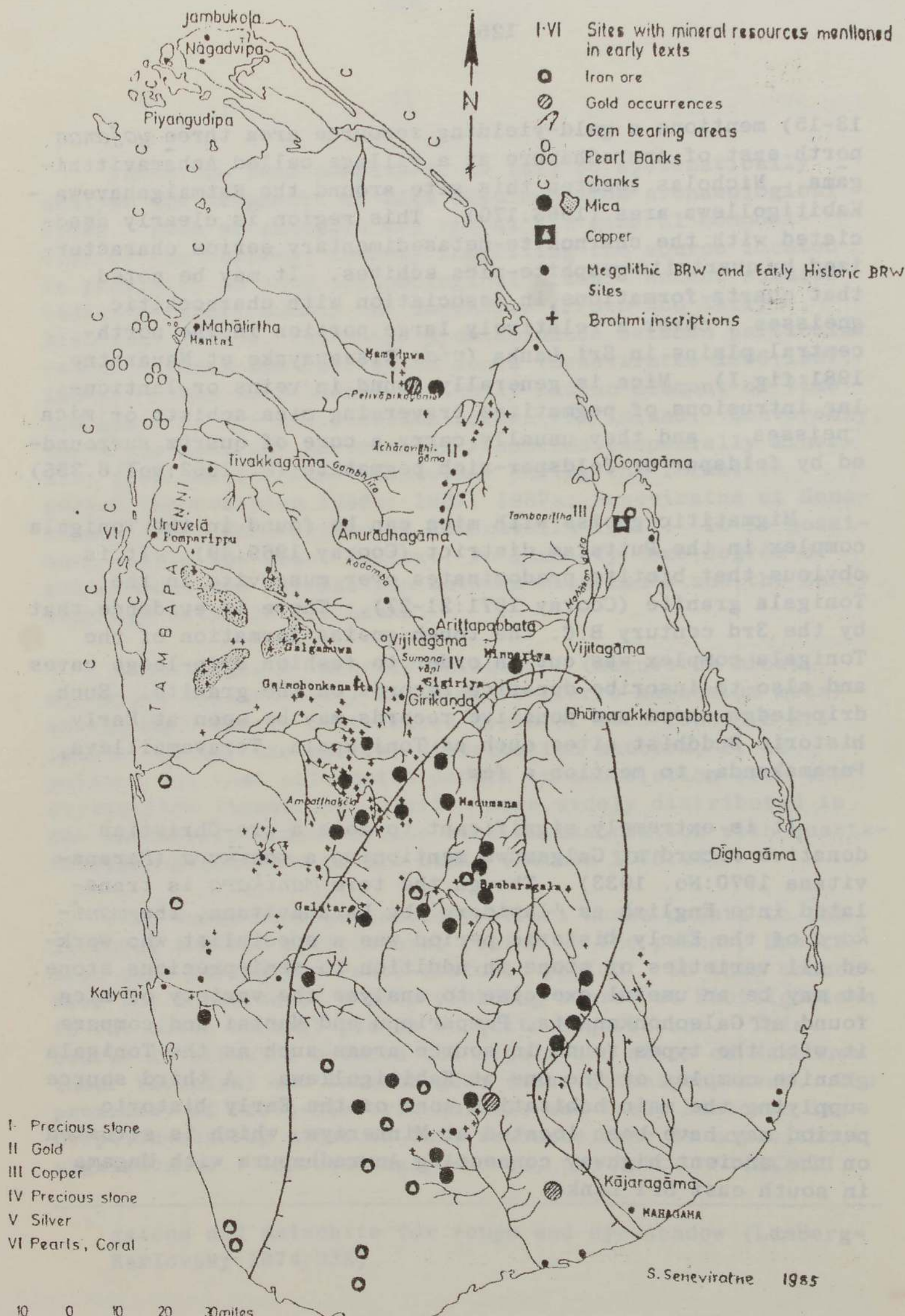
The settlement archaeology of Sri Lanka points to the littoral and the agricultural plains as the primary habitation zone during the Proto-historic period. In this connection the location of a mica yielding source at Kabitigollewa in the north central plains is quite significant. This source is situated between the megalithic sites of Mamaduwa (near Vavuniya) and Tammannagoda (near Ratmalgahavewa). The proximity of Proto-historic burials and Early historic inscription-bearing sites to this resource zone is not without significance. Interestingly enough, the *Mahavamsa* (XXXIII.

galena and malachite for rouge and eye-shadow (Lamberg-Karlovsky 1974:338).

13-15) mentions a gold-yielding resource area three *yojanas* north east of Anuradhapura at a village called *Ācharavittigama*. Nicholas locates this site around the Ratmalgahavewa - Kabitigollewa area (1963:170). This region is clearly associated with the charnokite-metasedimentary series characterized by quartzite-graphite-mica schists. It may be noted that quartz formations, in association with charnockitic gneisses, cover a relatively large portion in the north-central plains in Sri Lanka (*vide* Dissanayake et Navaratne 1981:fig.1). Mica is generally found in veins or lenticular intrusions of pegmatites traversing mica schists or mica gneisses and they usually carry a core of quartz surrounded by feldspar or feldspar-rich pegmatite (WI 1962:vol.6.355).

Migmatitic gneiss with mica can be found in the Tonigala complex in the Puttalam district (Cooray 1969:49). It is obvious that biotite predominates over muscovite in the Tonigala granite (Cooray 1971:21-27). There is evidence that by the 3rd century B.C. the tough gneiss formation of the Tonigala complex was cut in order to fashion drip-ledge caves and also to inscribe donative records on the granite. Such drip-ledge caves and donative records may be seen at Early historic Buddhist sites such as Toniyaḡala, Toravamailleva, Paramakanda, to mention a few.

It is extremely significant to note a pre-Christian donative record at Galgamuwa mentioning a *manikara* (Paranavitana 1970:No. 1033). Though the term *manikara* is translated into English as 'lapidary' by Paranavitana, the *manikara* of the Early historic period was a specialist who worked all varieties of stone in addition to semi-precious stone. It may be an useful exercise to analyse the variety of mica found at Galsohonkanatta, Pomparippu and Mantai and compare it with the types found in source areas such as the Tonigala granite complex or the one at Kabitigollewa. A third source supplying the main habitation zone of the Early historic period may have been located at Minneriya, which is situated on the ancient highway connecting Anuradhapura with Magama in south east Sri Lanka.



I- Precious stone
 II Gold
 III Copper
 IV Precious stone
 V Silver
 VI Pearls, Coral

III

A cursory examination of the map indicates a high concentration of mica zones in the montane region of Sri Lanka. Curiously enough, each zone seems to coincide with Early Iron Age burial or BRW sites, and more specifically with regional groups of early inscriptions. There can be two reasons for this situation.

The first is the geological and mineralogical formation. The primary occurrence of mica in Sri Lanka is the montane region associated with the Highland series i.e. the Khondalite and Charnockite groups. This formation is also the primary source for other intrusive minerals. For instance, it is noted that charnockitic gneisses in association with quartz formations where mica can be found also have gold occurrences (*vide* Dissanayake et Navaratne 1981: fig.1). Similarly, the crystalline formation found in the Dambulla - Habarana migmatite complex and the Kadugannawa complex, beryl is frequently associated with mica pegmatite masses or veins (*vide* Cooray 1969). A similar association between mica and beryl is reported from the Aravalli system in north India (Mathur 1968:7). It is therefore quite likely that, in their search for mineral stones, the Early historic folk discovered sources of mica associated with the same mineral formations.

The second is related to a functional aspect associated with this mineral. It is perhaps the wider use of iron, and with more regular intrusions to the montane region (prompted by a greater demand for minerals), that may have enhanced the supply of mica to centres of production and distribution situated in the agricultural plains and at port-cities. It may be noted that, unlike metallic ores or mineral stones, which can be categorized as 'weight-gaining objects' (Seneviratne 1987:144), mica is extremely light in weight and has the ability to derive dust or flakes, which is an additional advantage for the convenient transportation of mica from source areas to centres of utilization. For example, as late as 1943, over one ton of mica extracted at Madumana, north east of Rattota, was transported to Illukkumbura by head port-erage (Cooray 1961: 143).

It is, however, pointed out that, due to the erratic nature of the pegmatite and the sporadic occurrence of mica, the pegmatite deposits are less convenient to exploit. Conversely, it is more productive to exploit vein type of deposit. Books of mica occur commonly at the vein and also between the quartz core and feldspar on its two sides (*vide* Herath 1975:44; *WI* 1962:vol.6.355). Since high quality sheet mica is obtained with deep mining, exploitation is largely confined to shallow depths having weathered material invariably yielding scrap mica (Herath *op.cit.*). There are, however, instances when books of mica are exposed at the surface level. For instance at Madumana "large books of mica, some over two feet long, are scattered on the banks of the stream" (Cooray 1961:134).

The lower montane region covered by the districts of Kurunegala, Matale, and Kandy may be identified as the primary mica yielding source area located in proximity to the northern plains. The highest number of Early Iron Age sites coinciding with mica-yielding areas can be located in the same zone. It could be suggested that the demand for high-quality mica may have prompted the exploitation of these sources, which was possible only with the qualitative development of better produced tools made of iron and steel during the Early historic period (*vide* Seneviratne 1987).

In this context the Brahmi inscription at Demeda Oya, located near Nalanda, belonging to the 1st century B.C./A.D. may provide us with some useful information. According to this inscription, the lapidaries (*maṇikara*) or *raja* Macuḍi arrived at this site to obtain slabs of stone (*silā itaka kaṭaya agatase*) (Paranavitana 1970:No. 830). We have already suggested that these lapidaries may have arrived in this region to work the rock formation to obtain high quality mica (Seneviratne 1984:279). However, it is not impossible that these lapidaries may have worked some mineral stones in this area, which is not located too far from the gem yielding Elahara area to its east. There is also a possibility that the route extending from Dambulla cut across Demeda Oya along natural routes to reach Madumana, where books of mica can be obtained without much effort on the surface of river banks. This same route moved further south

and linked itself with the plateau of Kandy via Bambaragala (*vide* Seneviratne 1987a; Seneviratne et Rambukwella 1987). Similarly, the location of the Gal-atara burial site at Asmadala, near a highly workable deposit of mica, may not be a coincidence after all. Pliny probably speaks of this high quality books of mica as a marble which resembles tortoise-shell.

This exploratory study was intended to be a preliminary investigation raising some relevant issues on resource-use and its inter-relationship with the technology, settlement pattern and its socio-economic significance during the Early Iron Age or the formative period.

SUDHARSHAN SENEVIRATNE

ABBREVIATIONS

- ASAdR - Administrative Report. Archaeological Survey of Ceylon.
 ASAnR - Annual Report. Archaeological Survey of Ceylon.
 Mv - *The Mahāvamsa* ed. Wilhelm Geiger. London PTS (1958).
 WI - *The Wealth of India* Vol. 6. New Delhi. CSIR (1962).

Bibliography

Bandaranayake, Senake

- 1984 - *Sigiriya Project First Archaeological Excavation and Research Report. January to September 1982.* Colombo. Central Cultural Fund.

Carswell, John et Martha Prickett

- 1984 - 'Mantai 1980: A Preliminary Investigation'. *Ancient Ceylon* No. 5: 3-80.

Chanmugam, P.K. et F.L.W. Jayawardana

- 1954 - 'Skeletal remains from Tirukketiswaram'. *Ceylon Journal of Science.* Section G. 5(2): 65-68.

- Cooray, P.G.
 1961 - *The Geology of the Country around Rangala.* Colombo. Ceylon Department of Mineralogy.
 1969 - 'The Significance of the Mica Ages from the crystalline rocks of Sri Lanka'. *The Geological Association of Canada (Special Paper) No. 5: 47-57.*
 1971 - 'The Tonigala Granite, North West Ceylon'. *Bulletin. Geological Society. Finland.* 43: 19-37.
- Deraniyagala, S.U.
 1971 - 'Pre Historic Ceylon - a summary in 1968'. *Ancient Ceylon No. I: 3-46.*
 1972 - 'The Citadel of Anuradhapura 1969: Excavations in the Gedige Area'. *Ancient Ceylon No.2: 48-169.*
- Dissanayake C.B. et S.W. Nawaratne
 1981 - 'The occurrence of gold in the gem beds of Sri Lanka'. *Economic Geology. Vol.76 (No.3): 733-738.*
- Herath, J.W.
 1975 - *Mineral Resources of Sri Lanka.* Colombo. Geological Survey Department.
- Hodges, Henry.
 1965 - *Artifacts.* London. John Baker.
- Lamberg-Karlovsky, C.C.
 1974 - 'Historical Continuity stage and process: the development of a metallurgical technology'. *Perspectives in Palaeoanthropology.* (Professor D. Sen Festschrift) Calcutta. Firma K.L. Mukhopadhyay ed. A.K. Ghosh. 331-344.
- Leshnik, Lawrence, S.
 1974 - *South Indian Megalithic Burials.* Wiesbaden. Franz Steiner.
- Mackay, Ernest.
 1930 - 'Painted pottery in modern Sind: A survival of an ancient industry'. *Man.* Vol.30: 127-135.
- Mathur, K.S.
 1968 - *Mica industry in Rajasthan.* Jaipur.
- McCrinkle, J.W.
 1901 - *Ancient India as described in Classical Literature.* Westminster.

- Nicholas, C.W.
 1963 - *Historical Topography of Ancient and Medieval Ceylon*. (Special Number. Journal of the Royal Asiatic Society, Ceylon Branch - New Series. Vol.VI).
- Paranavitana, S.
 1970 - *Inscriptions of Ceylon*. Vol.I. Colombo. Archaeological Survey of Ceylon.
- Seneviratne, Sudharshan.
 1984 - 'The archaeology of the Megalithic - Black and Red Ware complex in Sri Lanka'. *Ancient Ceylon* No.5: 237-307.
 1985 - *Social Base of Early Buddhism in South East India and Sri Lanka, c. 3rd century B.C. - 3rd century A.D.* Ph.D. dissertation. New Delhi. Jawaharlal Nehru University.
 1985a - 'The Baratas: a case of community integration in Early Historic Sri Lanka'. *Festschrift 1985 - James Thevatasan Rutnam*. ed. A.R.B. Amarasinghe and S.J. Sumanasekera Banda. Colombo. UNESCO. 49-56.
 1986 - 'The distribution pattern of the Megalithic - Black and Red Ware sites in Sri Lanka'. Paper presented at the *First South Asian Association for Regional Cooperation (SAARC) Archaeological Congress*. New Delhi. (January).
 1986a - 'The locational significance of Early Iron Age sites in Intermediary Transitional Eco-Systems: A case study of the upper Kala Oya region, north central Sri Lanka'. *Sri Lanka Archaeology - I*. Ed. Mangala Illangasinghe and Sudharshan Seneviratne (in press).
 1987 - 'Iron technology in Sri Lanka: A preliminary study of resource use and production techniques during the Early Iron Age'. *The Sri Lanka Journal of the Humanities*. Vol. XI (Nos. I and 2): 129-178 (for 1985).
 1987a - 'Marine-littoral ecology and archaeology'. Paper presented at the *Seminar on the Maritime Heritage of Sri Lanka*. Colombo. Archaeological Department. ARTI (September).

- 1987b - 'The evolution of Proto and Early historic eco-zones in Sri Lanka: a proposed theoretical model for the Early Iron Age'. Paper presented at the *II National Archaeological Congress*. SLFI. Colombo. (November).
- Seneviratne, Sudharshan et Chulani Rambukwella
1987 - 'The locational pattern of Early Historic sites in the plateau of Kandy'. Paper presented at the *II National Archaeological Congress*.
- Seneviratne, Sudharshan et Piyatissa Senanayake.
1987 - 'A preliminary study of a road trace from Uruwela to Ambatthakola during the Early historic period'. Paper presented at the *II National Archaeological Congress*.
- Rea, A.
1915 - *Catalogue of Prehistoric antiquities from Adichchanallur and Perumbair*. Madras. Government Press.
- Watt, George.
1891/1972 - *A Dictionary of Economic products of India*. Vol.5. Delhi (reprint).
- Wikramagamage, Chandra
1984 - *Abhayagiri Vihara Project, Anuradhapura. Ist Report of the Archaeological Excavations*. Colombo. Central Cultural Fund.

COMMUNICATIONS

RECENT ARCHAEOLOGICAL RESEARCH ON A SRI LANKAN
CITY COMPLEX (KANDY)

This paper is an attempt to throw light on some aspects of the city complex of Kandy, the ancient hill capital of Sri Lanka, from the evidence culled out of recent excavations conducted under the auspices of the UNESCO - Sri Lanka 'Cultural Triangle' Project. The Cultural Triangle consists of six projects, of which Kandy is one. The Kandy archaeological project, which was commenced in 1981, primarily concentrates on the ancient Palace Complex together with four major shrines of Gods which are ancillary to the complex (Fig. 1).

The study of the city is significant for several reasons. It is the only capital city of Sri Lanka which came into contact with, and which was very much influenced by Indian as well as Western European powers, the Portuguese, the Dutch and the British. The resultant political legitimation of power in this final phase of Sri Lanka's indigenous rule ranked very high in the organization of the political, social, religious and cultural lifestyle of the present times.

Kandy remains the only ancient city that continues at the present times as a living city, with all its ancient buildings being used for various purposes. Kandy constitutes one of the major attractions for the tourist, where one could enjoy the living cultural traditions of the past, architecture, sculpture, murals, traditional crafts of ivory, lapidary, tapestry, metalware etc.

This paper was presented to the South-Asian Archaeological Congress, University of Wisconsin, Madison, in November 1986.

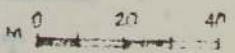
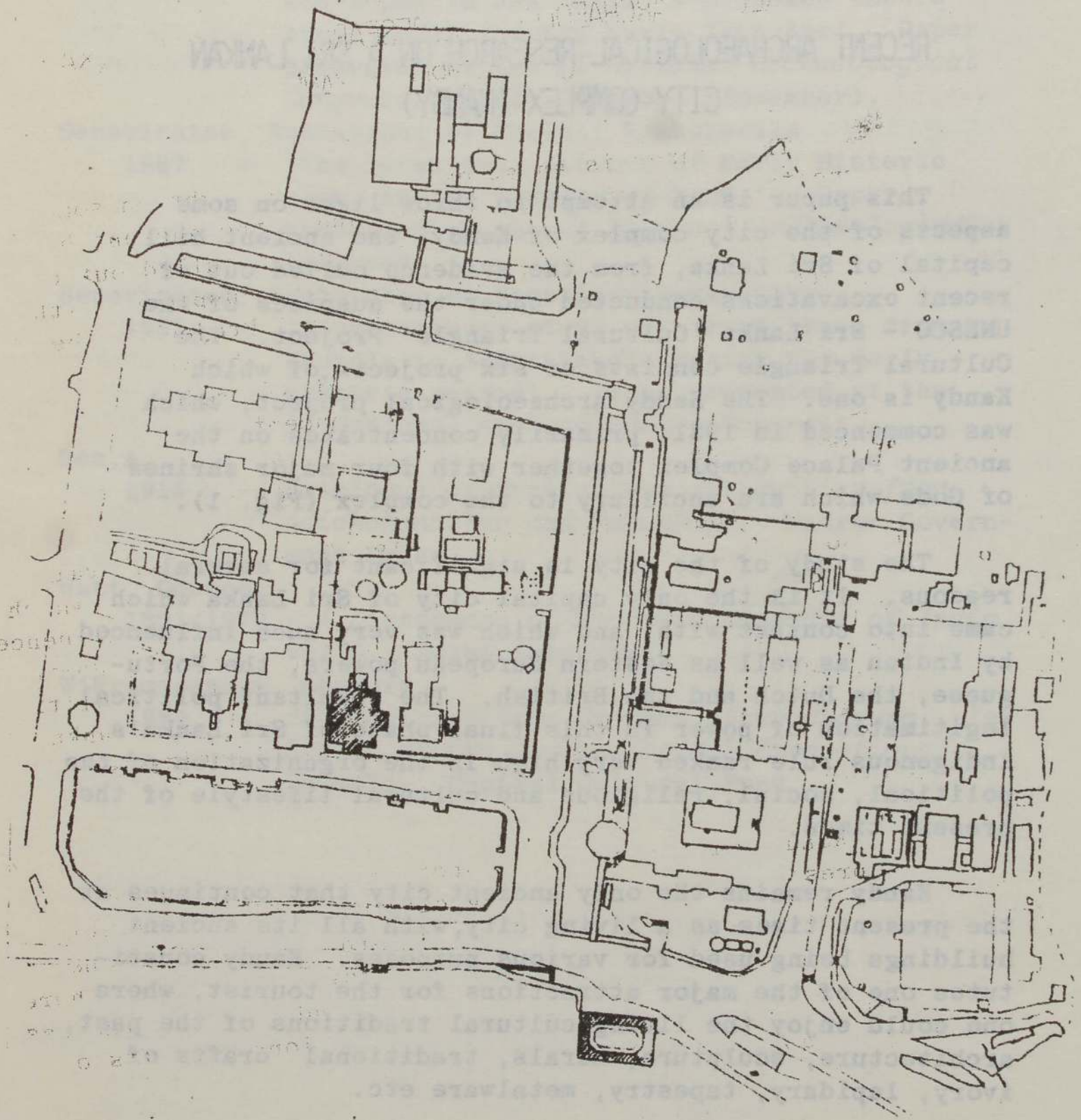


FIG. I

The situation of Kandy (*Kanda*, meaning hill) in a valley among the central hills at an altitude of more than 1600 ft. above sea level, with a salubrious climate and girdled by the longest river of Sri Lanka, river Mahaveli (the Ganges of Ptolemy), affords the correct environment for the sustenance of a rural economy on which the effects of modernization have been very minimal.

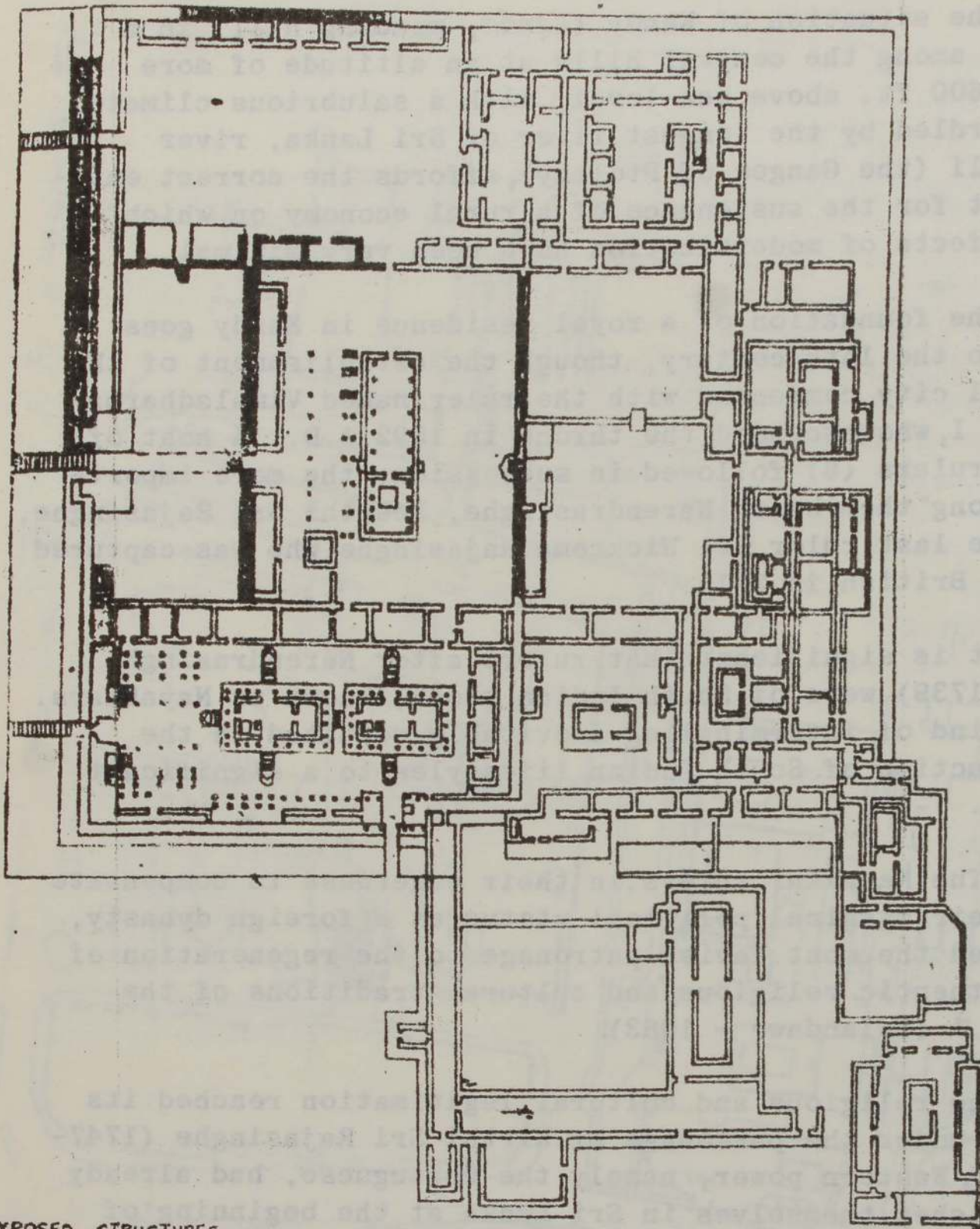
The foundation of a royal residence in Kandy goes back to the 14th century, though the establishment of the capital city commenced with the ruler named Vimaladharmasuriya I, who ascended the throne in 1592 A.D. A host of other rulers (8) followed in succession, the more important among them being Narendrasinghe, Keerthi Sri Rajasinghe, and the last ruler, Sri Wickrema Rajasinghe, who was captured by the British in 1815.

It is significant that rulers after Narendrasinghe (1707-1739) were of South Indian stock, known as Nayakkars. This kind of intermingling inevitably resulted in the introduction of South Indian lifestyles to a significant extent.

"The Nayakkar rulers, in their eagerness to compensate for their marginal political status as a foreign dynasty, extended the most lavish patronage to the regeneration of the authentic religious and cultural traditions of the people." (Welandawe - 1983).

The religious and cultural legitimation reached its height under the patronage of Kirthi Sri Rajasinghe (1747-1782). A Western power, namely the Portuguese, had already established themselves in Sri Lanka at the beginning of the 16th century, and they were followed by the Dutch and finally the British. In 1815 the long rule of the Sinhala political power, which lasted nearly 25 centuries, came to an end and Sri Lanka came under the colonial rule of the British Empire until it regained independence in the middle of the present century.

During the last six centuries (i.e. 15th-20th century) the entire city complex, which continuously functioned as



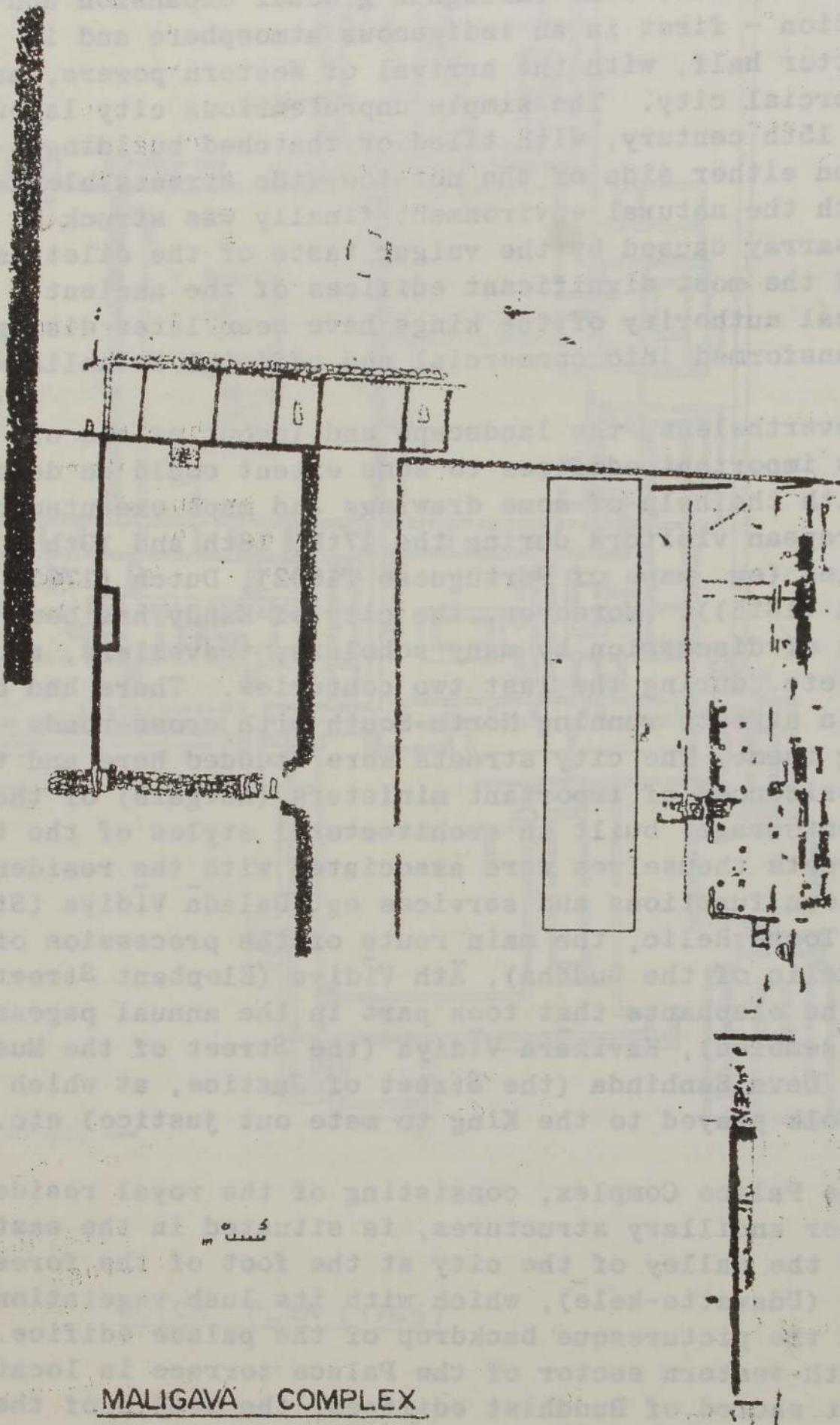
EXPOSED STRUCTURES

DUTCH PLAN (1765)

the hill capital, went through a gradual expansion and transition - first in an indigenous atmosphere and in the latter half, with the arrival of Western powers, as a commercial city. The simple unpretentious city layout of the 15th century, with tiled or thatched buildings lying on either side of the not-too-wide streets blending with the natural environment finally was struck by the disarray caused by the vulgar taste of the dilettante. Some of the most significant edifices of the ancient political authority of the kings have been later disfigured and transformed into commercial and official establishments.

Nevertheless, the landscape and layout of the old city and its important edifices to some extent could be determined with the help of some drawings and maps executed by the European visitors during the 17th, 18th and 19th centuries (eg. maps of Portuguese (1602), Dutch (1765) and British (1815)). Moreover, the city of Kandy has been the subject of discussion by many scholars, travellers, ambassadors etc. during the last two centuries. There had been two main streets running North-South with cross-roads joining them. The city streets were studded here and there with residences of important ministers (Adigars) of the royal entourage, built in architectural styles of the times. The streets themselves were associated with the residences of various functions and services eg. Daladā Vīdiya (Street of the Tooth Relic, the main route of the procession of the Tooth Relic of the Buddha), Āth Vīdiya (Elephant Street, where the elephants that took part in the annual pageant were assembled), Kavikāra Vīdiya (the Street of the Musicians), Deva Sanhinda (the Street of Justice, at which the commonfolk prayed to the King to mete out justice) etc.

The Palace Complex, consisting of the royal residence and other ancillary structures, is situated in the eastern part of the valley of the city at the foot of the forest reserve (Udawatte-kele), which with its lush vegetation, adds to the picturesque backdrop of the palace edifice. On the south-western sector of the Palace terrace is located the most sacred of Buddhist edifices, the Temple of the Tooth, which is protected by a moat and a wall. The location of the Temple of the Tooth, though an object of worship,

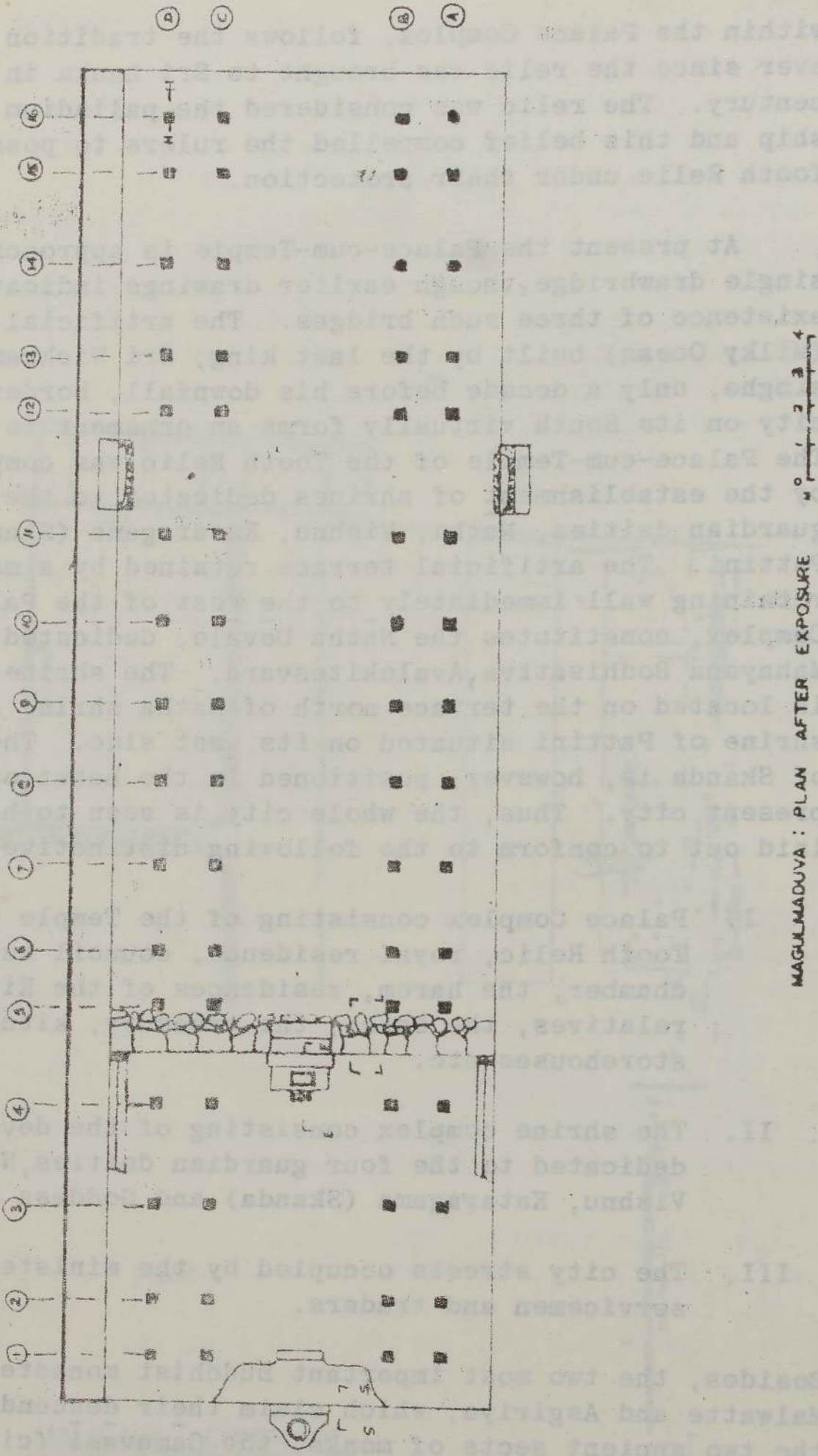


within the Palace Complex, follows the tradition upheld ever since the relic was brought to Sri Lanka in the 4th century. The relic was considered the palladium of Kingship and this belief compelled the rulers to possess the Tooth Relic under their protection.

At present the Palace-cum-Temple is approached by a single drawbridge, though earlier drawings indicate the existence of three such bridges. The artificial lake (Milky Ocean) built by the last king, Sri Wickrama Rajasinghe, only a decade before his downfall, bordering the city on its South virtually forms an ornament to the city. The Palace-cum-Temple of the Tooth Relic was complemented by the establishment of shrines dedicated to the four guardian deities, Nātha, Vishnu, Kataragama (Skanda) and Pattini. The artificial terrace retained by a massive retaining wall immediately to the west of the Palace Complex, constitutes the Nātha Dēvāle, dedicated to the Mahayana Bodhisattva, Avalokitesvara. The shrine of Vishnu is located on the terrace north of Nātha shrine and the shrine of Pattini situated on its west side. The shrine of Skanda is, however, positioned in the heart of the present city. Thus, the whole city is seen to have been laid out to conform to the following distinctive entities:

- I. Palace Complex consisting of the Temple of the Tooth Relic, royal residence, council hall, Queen's chamber, the harem, residences of the King's relatives, the baths, the treasury, kitchens, storehouses etc.
- II. The shrine complex consisting of the dēvāles dedicated to the four guardian deities, Nātha, Vishnu, Kataragama (Skanda) and Goddess Pattini.
- III. The city streets occupied by the ministers, servicemen and traders.

Besides, the two most important Buddhist monasteries, Malwatte and Asgiriya, which claim their descendancy from the two ancient sects of monks, the Gamavāsī (city dwellers) and Vanavāsī (forest dwellers) are found to be established on the south and the north-west hillocks guarding the city.



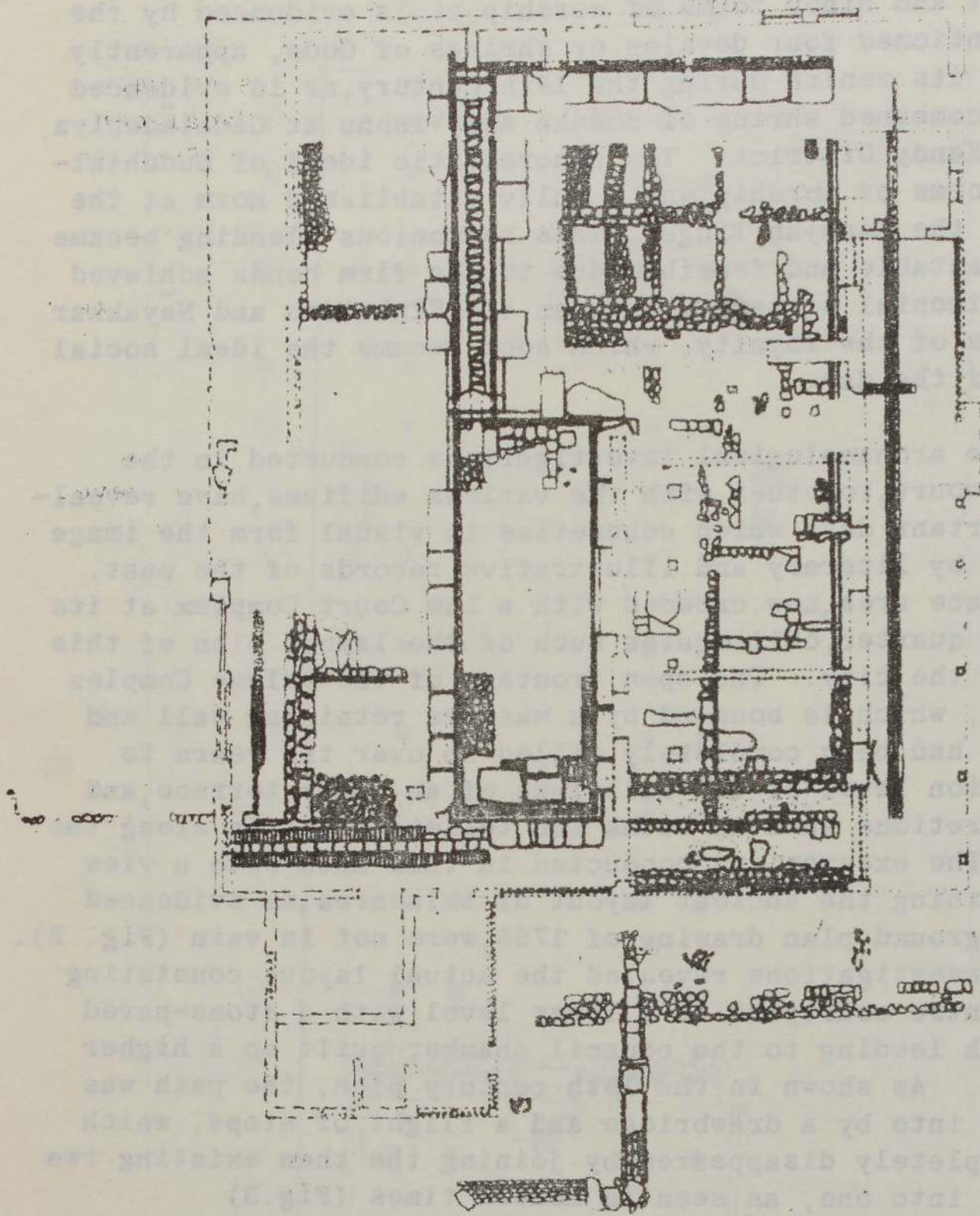
MAGULMADUVA : PLAN AFTER EXPOSURE

FIG. 4

The religious synthesis seen in the amalgamation of Buddhist and Hindu forms of worship, as is evidenced by the aforementioned four devales or shrines of Gods, apparently reached its zenith during the 14th century, as is evidenced by the combined shrine of Buddha and Vishnu at Gadalaḍeniya in the Kandy District. The syncretistic ideal of Buddhist-Hindu forms of worship was a fully established norm at the time of the Kandyan kings. This harmonious blending became more adaptable and feasible due to the firm bonds achieved by matrimonial alliances between the Sinhalese and Nayakkar families of the royalty, which soon became the ideal social order of the day.

The archaeological investigations conducted in the Palace court, together with the various edifices, have revealed important data which concretise in visual form the image created by literary and illustrative records of the past. The Palace area, now crowded with a Law Court Complex at its eastern quarter, obliterates much of the layout plan of this part of the city. The open frontage of the Palace Complex terrace, which is bounded by a massive retaining wall and a moat, had been completely filled up over the years to foundation level of the buildings of an upper terrace, and new accretions such as baths and toilets crept in along the wall. The excavations conducted in this area with a view to examining the ancient layout of this area, as evidenced by the ground plan drawing of 1765, were not in vain (Fig. 2). These investigations revealed the actual layout consisting of a centre courtyard at a lower level with a stone-paved approach leading to the council chamber built on a higher terrace. As shown in the 18th century plan, the path was entered into by a drawbridge and a flight of steps, which has completely disappeared by joining the then existing two bridges into one, as seen in modern times (Fig. 3)

The path that ran across the courtyard is actually the one that led the various foreign ambassadors to the king, who gave audiences to them in the council chamber, as described by contemporary writers (Pybus 1762). The flight of steps that led from the lower centre courtyard to the upper terrace, appeared to have possessed an archway, as seen in one of the early paintings. Though the archway has now



QUEEN'S PALACE

FIG 5

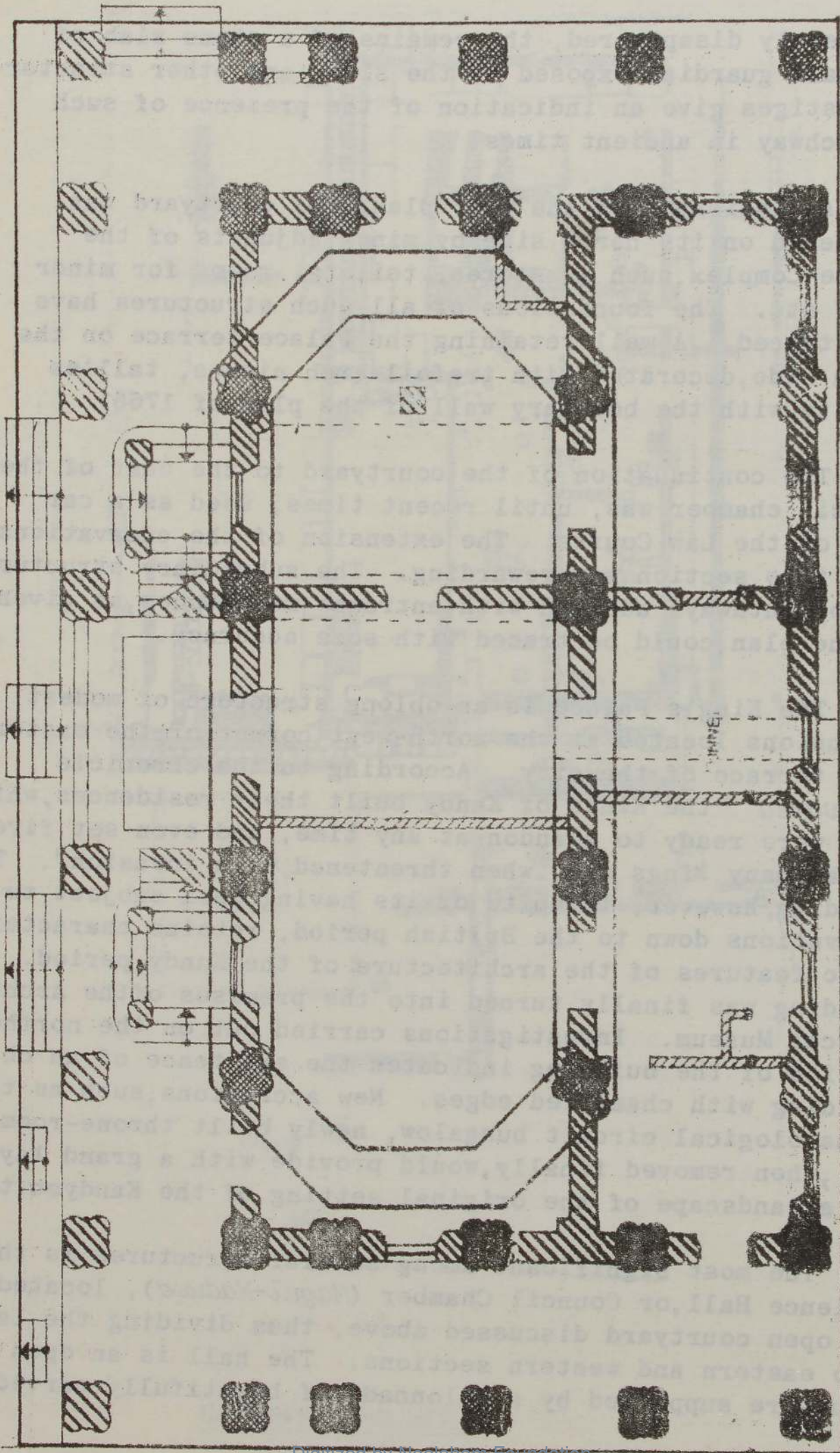
completely disappeared, the remains of a stone slab of a female guardian exposed at the site, and other structural vestiges give an indication of the presence of such an archway in ancient times.

As indicated in the 1765 plan, the courtyard was broadened on its north side by minor adjuncts of the Palace Complex, such as stores, toilets, rooms for minor staff etc. The foundations of all such structures have been traced. A wall retaining the Palace terrace on the north side, decorated with trefoil-arch niches, tallies exactly with the boundary wall of the plan of 1765.

The continuation of the courtyard to the east of the council chamber was, until recent times, used as a car park of the Law Courts. The extension of the excavations into this section was rewarding. The subsidiary structure led by pathways adorned with entrance moonstones, as given in the plan, could be traced with some accuracy.

The King's Palace is an oblong structure of modest dimensions located at the north-west corner of the easternmost terrace of the city. According to the chronicle *Cūlavamsa* "the Kings of Kandy built their residences, which they were ready to abandon at any time, and even set fire to, as many kings did, when threatened with invasion". The building, however, in spite of its having been subject to renovations down to the British period, retains characteristic features of the architecture of the Kandy period. The building was finally turned into the premises of the Archaeological Museum. Investigations carried out on the northern section of the building indicates the existence of an oblong building with chamfered edges. New accretions, such as the archaeological circuit bungalow, newly built throne-room etc., when removed finally, would provide with a grand layout and a landscape of the original setting of the Kandyan times.

The most significant among secular structures is the Audience Hall, or Council Chamber (*Magul-Maduwa*), located in the open courtyard discussed above, thus dividing the latter into eastern and western sections. The hall is an open structure supported by a colonnade of beautifully carved



ULPANGE (QUEEN'S BATH)

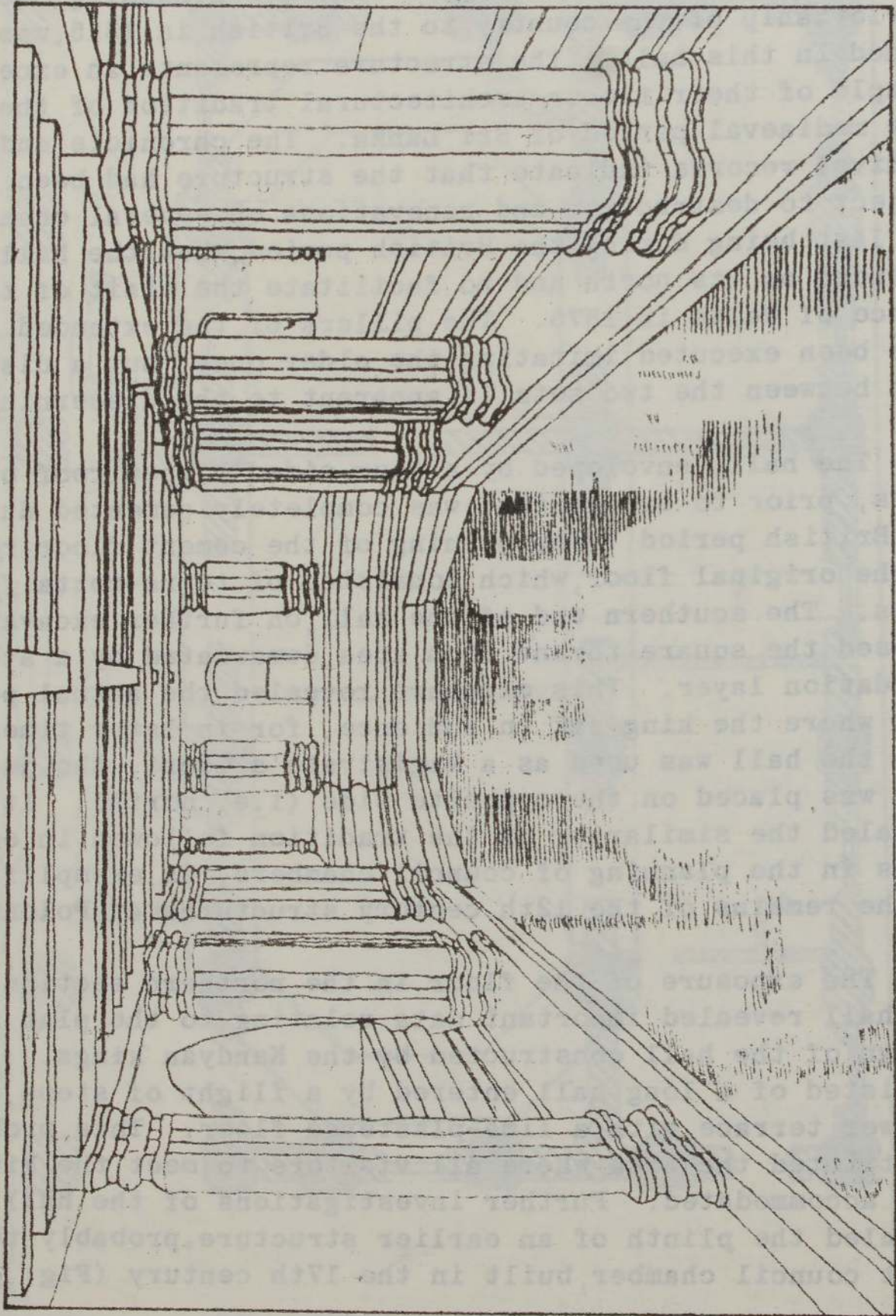
FIG. 6

wooden pillars. The Council chamber, in which the king held council with his ministers, also served as the court building when the king sat in judgement of those who had committed political treason. The Kandyan Convention, handing over the overlordship of the country to the British in 1815, was signed in this hall. The structure represents an excellent example of their timber architectural tradition of the late mediaeval period of Sri Lanka. The chronicle and archival records indicate that the structure had been subject to destruction and renovations on several occasions, the last being during the British period, when the hall was extended on its north and to facilitate the visit of the Prince of Wales in 1875. The pillars of the extended section have been executed imitating the older ones, but a distinction between the two sets is apparent to the discerning eye.

The hall, enveloped by a four-sided hipped roof of flat tiles, prior to excavation, was completely cemented during the British period. The opening of the cement floor revealed the original floor, which consisted of terra-cotta floor tiles. The southern end of the hall, on further excavation, exposed the square throne room area demarcated by a stone foundation layer. This exposure revealed the actual position where the king sat in audience, for in later times, when the hall was used as a Magistrate's Court, the judge's seat was placed on the opposite side (i.e. north). It also revealed the similarity of the tradition followed in early times in the planning of council chambers, as exemplified by the remains of the 12th century structures at Polonnaruva.

The exposure of the floor in the northern section of the hall revealed important data relating to the plan and design of the hall constructed by the Kandyan kings. It consisted of a long hall entered by a flight of steps, and a lower terrace with a lime-plastered floor. This probably constituted the area where all visitors to meet the king were accommodated. Further investigations of the hall revealed the plinth of an earlier structure, probably the first council chamber, built in the 17th century (Fig. 4).

The Queen's Chamber (*Meda-Vāsala*) was used as a Government office of the Health Department until the building was



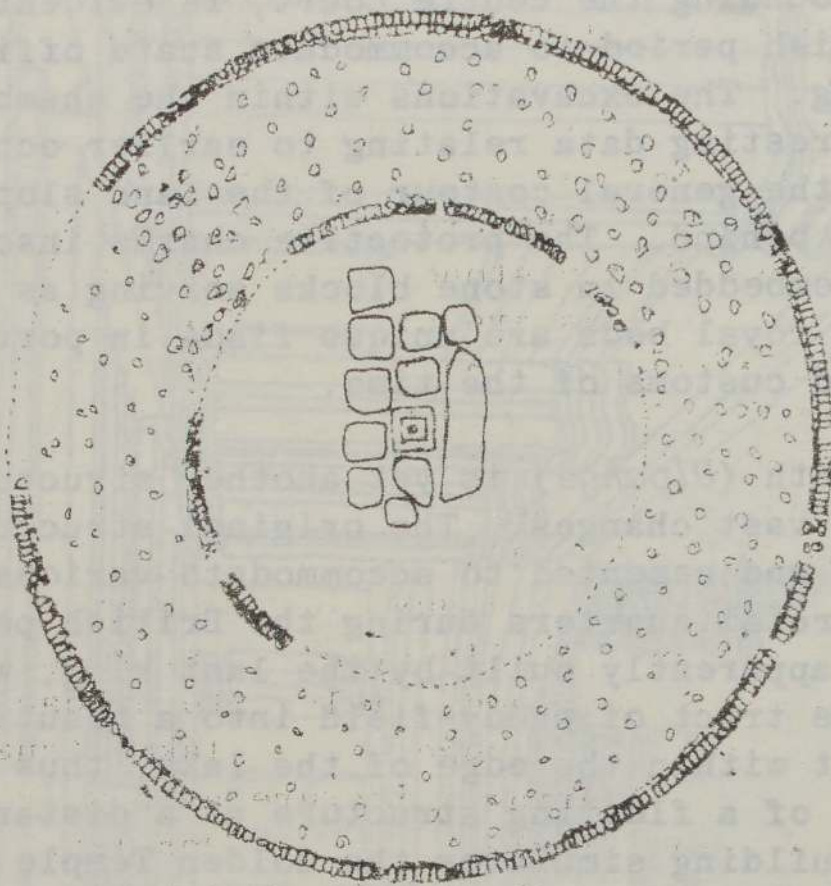
KANDY ULPENGE (QUEEN'S BATH)
CONSERVATION PROJECT
INTERIOR PERSPECTIVE
A. N. N. N.
12/10/56

FIG. 7

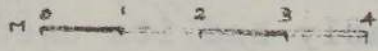
taken for investigation and conservation by the Cultural Triangle. The Queen's Chamber excavations have revealed the existence of a centre courtyard open to the skies. The basic ground plan thus conforms to the plan of the Kandyan period *Walawwa* type house architecture (Fig. 5). The present roof joining the end-points of the four roofs of structures surrounding the centre court, is evidently a work of the British period to accommodate state offices within the building. The excavations within the chamber also revealed interesting data relating to earlier occupational levels and the general contour of the land sloping down from the hill behind. The protective charms inscribed on copper plaques embedded in stone blocks serving as props of the legs of the royal beds are unique finds in portraying the beliefs and customs of the time.

The Queen's Bath (*Ulpangē*) is yet another structure that had undergone vast changes. The original structure had been filled up and cemented to accommodate various official and commercial quarters during the British period. The structure was apparently built by the last king, who converted the large tract of paddy-field into a beautiful lake. It was built within the edge of the lake, thus creating the impression of a floating structure at a distance. In some ways the building simulates the Golden Temple of Japan, also built in a lake, though the purposes of the two are different. The opening of the cemented and tiled floor exposed an oblong octagonal pool constructed with moulded stone slabs with a large central ledge running round the pool. A colonnade of adorsed pillars supported the roof originally, but subsequently they had been covered with British period walls. The bath, provided with an inlet for water, probably had its used water let out through a channel device. The whole structure speaks of the ingenious skills of the contemporary architects (Figs. 6,7).

The *Nātha Dēvāle*, dedicated to Avalokitesvara, situated on the artificial terrace in front of the Tooth Relic Temple, was evidently the earliest recorded religious shrine in Kandy. The *Gedige* shrine, portraying the Vijayanagara architectural style, is datable to the 14th century. However,



CIRCULAR MANDAPA

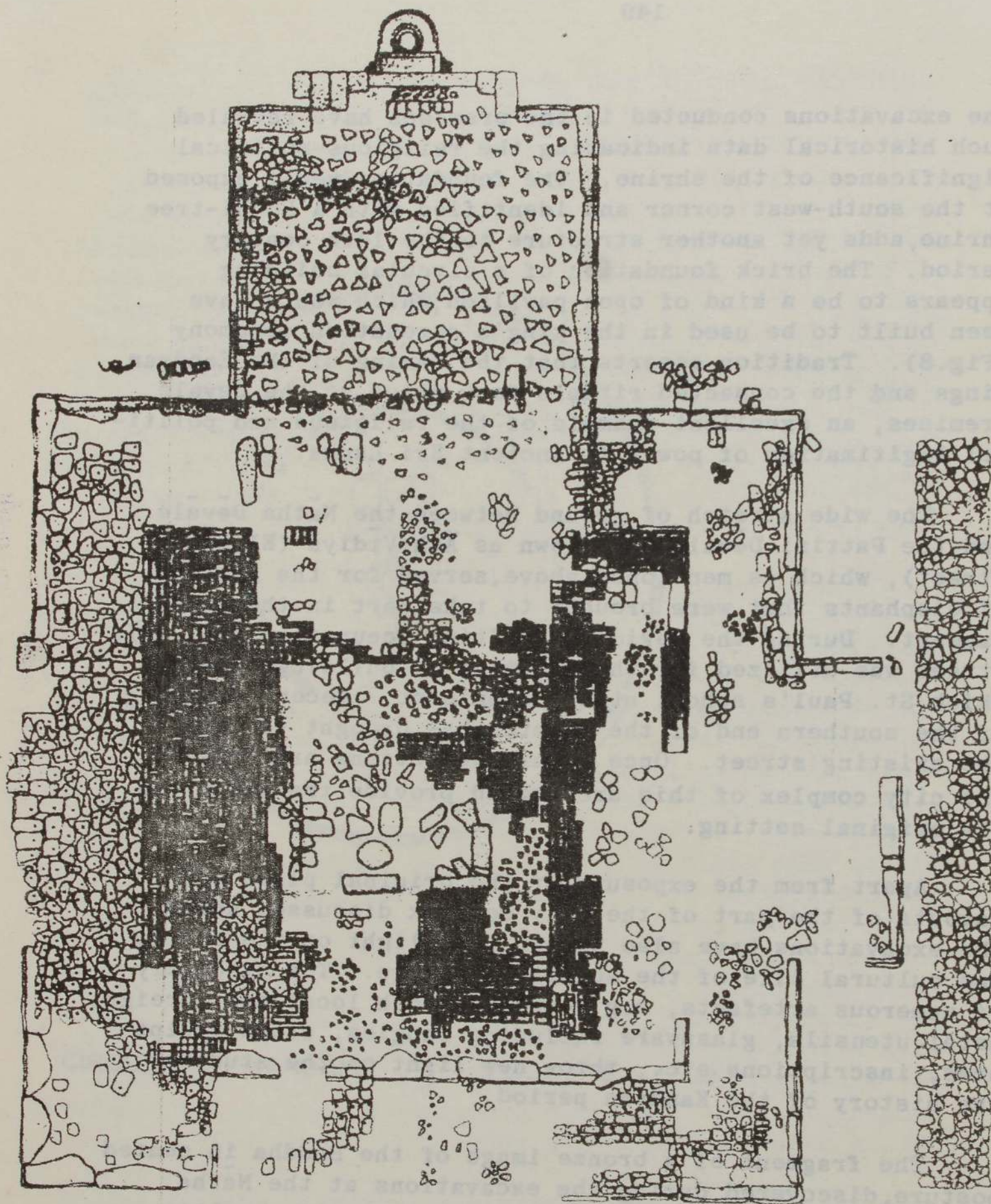


the excavations conducted in the premises have revealed much historical data indicating the religious-political significance of the shrine. The foundation, newly exposed at the south-west corner and identified with a Bodhi-tree shrine, adds yet another structure to the 14th century period. The brick foundation of a circular building appears to be a kind of open pavilion, which would have been built to be used in the king's coronation ceremony (Fig.8). Tradition asserts that the naming of the Kandyan kings and the connected rituals took place at the devale premises, an excellent example of the religious and political legitimation of power in ancient Sri Lanka.

The wide stretch of ground between the Nātha Dēvāle and the Pattini Dēvāle was known as Āth Vīdiya (Elephant Street), which as mentioned above, served for the assembly of elephants that were brought to take part in the annual pageant. During the period of British occupation the whole street was utilized for the erection of buildings, among which St. Paul's school stands prominent. Recent clearing of the southern end of the stretch has brought to light the existing street. Once modern accretions are removed, the city complex of this area would provide the layout in its original setting.

Apart from the exposure of the original plans and layouts of the part of the city complex discussed above, the excavations have also thrown much light on the social and cultural life of the society at large. The discovery of numerous artefacts, e.g. ceramics both local and foreign, metal utensils, glassware including bangles, stone sculptures, inscriptions etc., throw new light on the study of the history of the Kandyan period.

The fragment of a bronze image of the Buddha in seated posture, discovered during the excavations at the Nātha Devale near the Bodhi-tree shrine (Fig. 9), if complete, would measure about five feet across the knees and thus be the largest bronze Buddha found so far in Sri Lanka. A large quantity of cannon-balls of iron amassed at one place at the same premises, testifies to the Portuguese and Sri Lankan wars at the time. At least two foundries, discovered



BODHIGARAYA



in the palace courtyard, burnt pieces of bronzes, mass of iron slag and large blocks of wax, all go to define the practice and technologies used in bronze casting.

The pottery fragments constitute the largest quantities of artefacts discovered. These constitute a large variety of cooking utensils which show the evolution of the local ceramic industry through the centuries. However, thin section studies of potsherds of Anurādhapura (1st millenium A.D.), Polonnaruva (11th-13th century A.D.) and Kandy (15th-19th century) indicate a steady deterioration of the technology and workmanship of the potter. Yet, the character and style of the early pottery is found to be maintained in Kandyan were as well.

The excavations of the last five years in the Kandy Palace Complex have unravelled a mass of information that would help the historian to place the history of the period in its correct perspective. The layout plan of the Palace Complex as it stood in the 18th century is being retraced in its ruined state. The conservation of various edifices in the light of new data found through excavations and the landscaping of the rediscovered layout would no doubt present a glimpse of the grandeur that was Kandy at the zenith of its power.

LEELANANDA PREMATILLEKE

Bibliography

Abeysinghe, Tikiri

Portuguese Rule in Ceylon (1594-1622), Colombo, 1966.

Cave, H.W.

The Book of Ceylon, London, 1908.

Codrington, H.W.

The Diary of Mr. John D'oyly, Colombo, 1917.

Coomaraswamy, Ananda

Mediaeval Sinhalese Art, New York, 1956 (New print).

Davy, John

An Account of the Interior of Ceylon and its Inhabitants with Travels in that Island, London, 1821.

- Devaraja, L.S.
Kandyan Kingdom (1707-1760) Colombo, 1972.
- Goonewardena, K.W.
The Foundation of Dutch Power in Ceylon (1638-1658), The Netherlands, 1958.
- Hocart, A.M.
The Temple of the Tooth in Kandy, Memoirs of the Archaeological Survey of Ceylon, vol. IV, London, 1931.
- Karunaratne, Nihal
From Governor's Pavilion to President's Pavilion, Colombo, 1985.
- Knox, Robert
An Historical Relation of Ceylon, Colombo, 1966 (new print).
- Lawrie, A.C.
Gazetteer of the Central Provinces, vol. I and II.
- Ludowyk, E.F.C.
Robert Knox in the Kandy Kingdom, Oxford, 1948.
- Peiris, P.E.
Ceylon and the Hollanders (1658-1796)
- Peiris, P.E.
Ceylon and the Portuguese, 1922.
- Peiris, R.
Kandyan Kingdom - Political and Administrative Structure at the British Accession. (unpublished)
- Percival, Robert
An Account of the Island of Ceylon, 1805.
- Prematilleke, P.L.
First Archaeological Excavation Report, Kandy Project, CCF, Colombo, I, 1983.
- Prematilleke, P.L.
Second Report of the Archaeological Excavation and Documentation, Kandy Project, CCF, Colombo, 1985.
- Seneviratne, Anuradha
Kandy - An Illustrated Survey of Ancient Monuments, CCF, Colombo, 1983.
- De Silva, T.K.N.P.
Second Architectural Conservation Report, CCF, Colombo, 1985.
- Smith, Bardwell L. ed.
Religion and Legitimation of Power in Sri Lanka, PA. 1978.



REVIEW ARTICLES

Turner, L.J.B.

'A Description of the Town of Kandy about the year 1815 A.D.' *Ceylon Antiquary* vol. IV (2) 1918.

Vimalananda, T.

The State and Religion in Ceylon since 1815, Colombo, 1970.

Welandawe, Hiranthi

A Study of the Role of the Secular Buildings in the Last Palace Complex of the Kandyan Kingdom, 1983 (unpublished).



The Sri Lanka Journal of the Humanities

Volume XI, Nos. 1 & 2 (1985)

Articles include:

The Language of the Sigiri Poems
P.B. Meegaskumbura

Knower, Known and Knowledge in Advaita Philosophy
Maheswari Arulchelvam

Manjusri-Vāstuvidyāsāstra and the Ancient Sinhalese
Monastic Architecture
E.W. Marasinghe

I. The Wolf in Sheep's Clothing
II. A Naughty Jataka: Kacchapa 273
Merlin Peris

Jātakamālas in Sanskrit
Ratna Handurukande

The Buddhist Attitude to Other Religions
Lily de Silva

Iron Technology in Sri Lanka: A Preliminary
Study of Resource Use and Production Technique
during the Early Iron Age
Sudharshan Seneviratne

Price Rs. 50/= in Sri Lanka - abroad \$ 8.50 or the
equivalent in convertible currency. Obtainable from
the Managing Editor, Sri Lanka Journal of the Humanities,
Library, University of Peradeniya, Peradeniya, Sri Lanka.

REVIEW ARTICLES

APROPOS THE NAUGHTY JATAKA

Dr. Warnasuriya, when translating the *Kacchapa Jataka* (No. 273) into English in Volume XI, nos. 1 & 2 (pp. 83-90) of this journal, has omitted to take notice of a variant reading in the third stanza of the Jataka, which changes the tone of the ending considerably. He has followed Fausböll's text of the Jataka. The third stanza in that text runs thus:

*Kacchapā kassapā honti, kondaññā honti makkatā.
muñca kassapa kondaññām, katham methunakam taya*

He translates the verses thus:

Tortoises are Kassapas, monkeys Kondaññas by clan.
Kassapa, let go Kondañña; by you too has sex been had.

The variant reading, included by Fausböll as a footnote and designated as Bⁱ, C^k, C^s is *katham*. According to this reading the translation would be:

Tortoises are Kassapas, monkeys Kondaññas by clan.
Kassapa, let go Kondañña; how sex by you?

According to the Fausböll text, which Dr. Warnasuriya has followed, the Bodhisatta rather unconcernedly makes a statement to the tortoise "Sex has been had by you", and the matter ends there. This sounds even frivolous.

If, however, the variant reading *katham* is followed, the third stanza sounds more conclusive. The Bodhisatta asks the tortoise "How sex by you?" There is an argumentative tone in the ending here. There is a social evaluation also - "Tortoises are Kassapas and monkeys, are Kondaññas, so how can there be sex between you?"—indirectly implying that the two belong to two different species.

The Bodhisatta is cast in a serious pose; he is reprimanding the tortoise, since it is the tortoise who was perpetuating the unnatural congress. Of course, the shade of humour is not to be missed even so.

The implications of this reading go against the elucidation provided of the other reading by the scholiast in the *Jatakattthakatha* on this stanza. The scholiast states that since the laws of marriage permit alliance between Kassapas and Kondaññas, and since the monkey and the tortoise belong respectively to the Kondañña and Kassapa clans, a sinful sexual act, but yet one that is in accordance with the clan laws of marriage, has taken place (*gottasadisatasaṅkatassa methunadhammassa anucchavikaṃ dussīlyakammaṅkaṭham pi methunakaṃ kaṭham*). If the reading *katham* is accepted, the gloss is misleading.

The variant reading *katham*, according to Fausböll, occurs in the Burmese mss. of the India office (B¹). Dr. Warnasuriya has followed Fausböll in using the mss. of the 'Cingalese Redaction'. Fausboll himself states in the 'Preliminary Remarks' at the beginning of his edition (*The Jataka*, London, Trübner and Co., 1879) that the Burmese mss. in fact represents a redaction different from the 'Cingalese' and "in some cases have most likely preserved the true reading but notwithstanding this, I shall, as I have once resolved, still continue to give the Cingalese Redaction in the text and put the Burmese readings in the footnotes".

Thus, in view of the importance given by Fausböll to the Burmese reading, *katham* deserves special notice.

The Buddha Jayanthi Tripitaka Granthamāla No. 30 in the *Jataka Pali*, Part I, published by the Government of Sri Lanka, treats the text of the *Kacchapa Jataka* on pages 138 and 139. The Venerable Madihe Pannasiha Maha Nayaka Thera translates the third verses of the *Kacchapa Jataka*, which is under discussion here,

ඉදිබ්‍රවෝ කාශ්‍යප ගෝත්‍රය අන්තෝ වෙති. වජ්‍රරෝ
 කෝඨිඤ්ඤ ගෝත්‍ර අන්තෝ වෙති. කාශ්‍යපය, කෝඨිඤ්ඤය
 මුදව, කාශ්‍යප ගෝත්‍රයෙහි උපක්‍රම විසින් කෝඨිඤ්ඤ
 ගෝත්‍රයෙහි උපක්‍රම මොහු හා කෝසම මෙවුන කාශ්‍යපයෝ
 කරන ලදි.

The translator has used the words කෝසම මෙවුන කාශ්‍යපයෝ
 (i.e. 'an unequal act of sex') in his translation. The
 text offers no basis for කෝසම 'unequal'). The text
 followed by the translator is the same as that adopted
 by Fausboll and used by Dr. Warnasuriya - not the reading
 with *katham*.

When I approached the Venerable Mahanayaka Thera
 for an elucidation of this point, he declared that he
 'probably' translated *methunakam* as කෝසම මෙවුන කාශ්‍යපයෝ
 because the suffix *ka* added to a noun gave a pejorative
 sense to the word. The noun here is *methuna*, which means
 'coitus'.

The PTS Dictionary (1966) gives *methuna* (nt) as
 'sexual intercourse', and *methunaka* (i.e. *methuna* with
 suffix *ka*) as 'one concerned with illicit intercourse',
 'a fornicator'. The pejorative sense is there in the
 agent noun *methunaka*, and so far the Mahanayaka Thera
 is right. But under the entry "nt" (i.e. *methunakam*)
 it gave the meaning 'coitus' (*methunadhamma*). There is
 no pejorative sense attached.

Therefore, despite the Venerable translator's expla-
 nation (give at a busy moment), it appears that the Sinhala
 reading කෝසම මෙවුන කාශ්‍යපයෝ cannot be allowed by the
 text. The gloss to the *Jatakatthakatha* too does not permit
 it (*gottasadisatasaṅkhatassa methunadhammassa anucchavikam
 dussilyakammasaṅkhatam pi methunakam katham*). In view of
 the fact that the Sinhala කෝසම is insupportable on all
 grounds, it is not proposed to discuss its implication here.

The confusion of commentators on this Jataka must to
 a large extent have owed itself to (a) the immorality of the
 action (whence the monkey is called *dussilo*), (b) the
 happiness of the tortoise with the Bodhisatta's observation

(in the third stanza, whence he is said to have left *pasanno*) and (c) the need for the same judgement to have settled the hostility that there had been between the participants (which is only to be expected by the parallel in the *paccupannavatthu*). Interpretation based on the reading *katham* is not more successful in satisfying all these items than is the reading *katam*.

On the other hand, it must be noted that in the version of the story found in the Sinhalese *Pansiya Panas Jataka Potha* the tortoise is found to be equally reprehensible (if at least for his folly), and to that extent the writer there appears to have justified the reading *katam* as against *katham*. Thus, between the two, Dr. Warnasuriya's preference (for all its awkwardness in projecting the Bodhisatta as making light of the sinful and unnatural congress of monkey and tortoise) may stand - and with it a likelihood of an attitude of condescending humour on the Bodhisatta's part at the little jungle drama enacted between these two stupid creatures.

GNANASIRI GUNARATNE

MEDICINE AND SOCIETY IN SRI LANKA

An authoritative study of the history of medicine in Sri Lanka, published to commemorate the centenary of the Sri Lanka Medical Association, fills a long-felt lacuna in our information on a subject which has hitherto been confined to fugitive research papers and episodic notes. The work under review,* is particularly welcome in view of the unique qualifications of the author to undertake the task. It is rare that a leading consultant physician also has to his credit a number of publications on various aspects of medical history, ancient and contemporary. No history of medicine can, of course, claim to be "complete". Some selection is necessary. Consequently many titles listed in the comprehensive *Bibliography of Medical Writings on Sri Lanka 1811-1976*, co-authored by Dr. Uragoda, do not find a place in the present book. It is understandable that the author has paid more attention to his own areas of interest in the present carefully researched volume. One need only mention his articles on ancient health care and healing practices, particularly the institution of hospitals, anciently and in Dutch times, the practice of immersion in milk, oil etc, acupuncture-related techniques, religious and occult approaches such as the chanting of *pirit* by monks, the fabrication of talisman and amulets in addition to materia medica, as well as medical aspects of the pearl fishery and the opium trade.

Medical history, properly so called is no longer a narrative of events occurring in temporal sequence. Nor is it the codification of disease-patterns or medical topography over a period of time, pioneered by early British physicians such as Henry Marshall (1821). The facts, considered in their socio-cultural context, present a number of problem areas which fall within the scope of the emerging

* C.G. Uragoda. *A History of Medicine in Sri Lanka - From the Earliest time to 1948*. A Centenary Publication. Colombo. Sri Lanka Medical Association (1987) p. 326, Bibliography, 26 Maps, Plans, Plates. Rs. 300/_.

discipline of medical sociology. These include such phenomena as professionalization, the structure of institutions such as hospitals and asylums (designated total institutions by Erring Goffman¹), the doctor-patient relationship, the role of para-medical personnel, and diseases arising from adoption of new life styles, especially in urban areas. An example is the incidence of diabetes mellitus. The disease had been identified in the indigenous tradition, and various herbal remedies commonly used. But the incidence of diabetes assumed serious proportions among the affluent rentier or landlord class and the sedentary middle class, which arose as a result of structural changes in the colonial economy under British rule. The "luxurious indolence" of the urban rich, and the "wonderful corpulency" they attained was the subject of comment by the American physician, Samuel Fiske Green, who pioneered medical education in the Mission Hospital in the North, in an observation recorded in 1854². Likewise, the consumption of toddy and arrack in the coconut areas the fermentation and distillation of which were expressly forbidden by the Kings, led to an increase of diseases such as dropsy and liver cirrhosis deriving from alcoholism. Malaria was always with us, but the stagnant waterways remaining after the exodus from the Dry Zone provide ample breeding ground for the malaria-carrying mosquito, and there were "malaria stations" which public servants dreaded to serve in, despite the availability of quinine, mosquito nets, and citronella oil. The situation improved after extensive spraying of DDT by the British army during World War II, and the anti-malaria campaign launched by the government.

A recurring problem of medical history in Sri Lanka was that western medicine was not implanted in a vacuum -- there was a pre-existing corpus of theoretical or conceptual and empirical medical knowledge, partly deriving from the Sanskritic Great Tradition evolved by authorities like Susruta in medical centres such as Varanasi. On the other

-
1. In his pioneering study *Asylums* Penguin books 1968.
 2. Samuel Fiske Green. Beloved Physician, in *Images of Sri Lanka through American Eyes* ed. H.A.I. Goonetilleke. Colombo (1975).

hand there was an indigenous "little tradition" comprising discrete collections of empirical knowledge in palm leaf "handbooks" (*at pot*) jealously preserved as family secrets by distinguished practitioners. Some of these palm leaf manuscripts have been retrieved and published by the Department of National Museums, particularly one on ophthalmology. Sinhala medicine (*Sinhala vedakam*) predated the reception of the Sanskrit tradition, had less conceptual unity, and was often the preserve of monks, who sometimes specialized in certain fields. Nilammahara was distinguished for mental disorders, and dispensed apparently efficacious oils.

The "little traditions" were loosely fitted into the macro-categories of the Indic tradition, and we can distinguish a Great Tradition (*sanskritiya*) and a sub-culture (*upa sanskritiya*). Dr. John Davy (1821) marvelled at the fitting of a multitude of diseases to three humours (wind, bile and phlegm), mentioned in the book under review (p. 12). But this uneasy meshing of macro- and micro-categories was common in many other spheres of Sinhala culture. (e.g. the Sanskritic four-fold caste differentiation into royal, priestly, farmer and serf, atrophied into two major caste divisions -- the farmer aristocracy, the "good people" (*honda minissu*) comprising the bulk of the Sinhala population, and the rest, collectively designated *adu* or low.)

Be that as it may, the concept of "humours" was basic to the ayurvedic medical system, and had its parallel in Ancient Greece, in Mediaeval European alchemy, too often misunderstood, and the Indic tradition. In the Tantric categorization five elemental states of matter correspond to the humours. According to Rawson on *Tantra* (1973), "the solid is symbolized by earth; the liquid by water; the incandescent by fire; the gaseous by air; while the ethereal has no direct symbol". This basis of the art of healing, in combination with the occult, tallied with the idiom of the villager. Supernatural agents can "cause" the upsetting of the bodily humours and result in sickness. Hence, if a patient is found to be possessed by a demon, apart from exorcising the offending spirit from his body,

the pantopragmatic healer-astrologer-magician (who, ideally, had to have certain physical characteristics, such as being hairy-chested) administers medicine to restore the body to its homeostatic condition.³ Monks who were versed in Sanskrit acquired considerable medical knowledge, and despite periodical royal edicts prohibiting indulgence of the clergy in the "despised sciences" of astrology, divining, charms and magic, in practice *materia medica* was inextricably connected with the occult. The practitioner had to be, *inter alia*, a physiognomist divining the patient's illness from his facial expression, or that of the messenger sent to summon the healer, who must also have astrological expertise, be able to interpret dreams and omens, and to fabricate amulets and talismans, qualities possessed by physicians of fourteenth century England, as described by Chaucer in his *Canterbury Tales*. The doctor who joined the travellers was a "perfect practising physician"

"No one alive could talk as well as he did
 On points of medicine and of surgery,
 For being grounded in astronomy,
 He watched his patient's favourable star
 And, by his Natural Magic, knew what are
 The lucky hours and planetary degrees
 For making charms and magic effigies,
 The cause of every malady you'd get
 He knew, and whether dry, cold, moist or hot;
 He knew their seat, their humour and condition."⁴

Here we find an acceptance of the concept of "humours" as well as a parallel of the persisting Sinhala binary categories of "hot" and "cold" foods, not temperature-wise or in terms of spiciness, but "heaty" in the ritual sense.

-
3. Gananath Obeyesekera. "The Impact of Ayurvedic Ideas on the Culture and the Individual in Sri Lanka", in *Asian Medical Systems. A Comparative Study*. ed. Charles Leslie. University of California Press (1976).
 4. Chaucer's *Canterbury Tales*. Translated into modern English by Nevill Goghill. London. Penguin (1951).

The indigenous medical system was not interfered with by the Portuguese and the Dutch in the three centuries they administered the littoral, for which Dr. Uragoda gives cogent reasons, apart from the fact that their sovereignty never extended to the interior and was tenuous even in the coastal belt under their jurisdiction -- the Portuguese gained anything like effective control only in the later 16th century, some eight decades after their arrival. In the first place western medicine was not demonstrably superior to the indigenous, though claiming to be based on reason rather than fancy, which governed indigenous medicine in particular, and science in general which had not, according to Dr. John Davy, "advanced beyond the darkest days of the Middle Ages". Secondly, the efficacy of some local herbal remedies was not to be gainsaid, as many of them are today -- bitter gourd for diabetes, *venival gata* as an antidote for tetanus etc. Thirdly, the Portuguese and the Dutch were not interested in going to the expense of financing an alien system of medicine to cater to the indigenous population. Finally, the Sinhala kings, especially in the Kandyan kingdom of the interior patronized traditional medicine.

Undoubtedly the health care of the people had been neglected since the 13th century, when a strong political centre ceased to exist. But prior to that the ayurvedic system flourished, when the king had jurisdiction over the whole country, and concomitantly the financial resources to provide health care for the people even in the rural periphery (at the zenith of the Dry Zone kingdoms, gold coins were in circulation, but wars and conspicuous construction of religious and public edifices depleted the State coffers, and the coinage had to be debased). The chronicles refer to hospitals in the heyday of the hydraulic societies of the Dry Zone. Dutta Gamani, who reigned 161 years before the Christian Era, has been credited with 18 hospitals, while Buddhadasa (AC 341) is said to have appointed a royal physician for every ten villages, besides hospitals for cripples and the dumb, and even veterinary clinics. After the third century B.C. monks became proficient in medicine. These institutions and professional cadres of antiquity suffered eclipse, and all that was left in the Great City in the last century was the *bet ge*

or House of Medicine which brought together leading practitioners, among them there being those versed in the classical Sanskrit treatises. It would appear that this establishment catered primarily to the royal family, although physicians associated with it may have been allowed private practice, ministering to the chiefs and commoners.

In the peripheral rural areas, however, recourse to the professional physician was rare, for the simple reason that a skilled practitioner would not have had an adequate clientele if he was confined to a sparsely populated rural area, although there was oral communication of the location of centres of medical expertise, as in the case of the Gampaha school today. In the mid-seventeenth century, however, the institutionalised services which existed in antiquity, including hospitals, were conspicuous by their absence. The monetized economies of the past were no more, and barter was the predominant mode of economic exchange. The "fee" of the *vederala* comprised some coins placed in a bundle of forty betel leaves. In view of a non-monetized economy (even taxes were often collected in kind) state financing of medical institutions to reach the rural periphery was precluded. Consequently, everyone was physician to himself. The remedies for common ailment (agues, fevers, dysentery, aches and pains) being widely known they were cured by self-medication. Medicines were supplemented by magic, charms, incantations etc. Despite the paucity of professional doctors, contemporary observers surmised that the average man was healthy and lived to a great age, often to fourscore years, and, according to Knox, was hale even at that age. The vulnerable groups were pregnant mothers and infants in the 0-5 age group, the death rate of the latter in the first twelve months being specially high. The risk of death of mothers at childbirth (there were no professional midwives, despite reference in the literature to *vin-ambu* "but the neighbouring good women come in and do that office") was so high that extraordinary consideration was paid to the cravings of

women in that state.⁵

When the British annexed the interior of Ceylon in 1815, there was no organisation of health services outside the hill capital. Western medical services were primarily designed in the littoral for the armed services. As in India, the military establishment was responsible for health care, catering to the British civil and military service, the expatriate mercantile and planting community, besides providing rudimentary training for native vaccinators and medical sub-assistants. At a higher level, a cadre of practitioners was trained at state expense in Calcutta in the latter half of the last century, prior to which the Governor, Viscount Torrington, claimed that financial constraints precluded the establishment of a local medical school. The mass of the rural population had no access to western medicine, and even a century ago self-medication, including resort to incantations and magic, was the rule.

Although the leading western doctors idealized the state of the art in England, the number of qualified physicians was so small that only the upper classes could benefit from their expertise, and quacks of all sorts, druggists, and later apothecaries, ministered to the population at large. The structure of the medical profession ranged from the uncunning licensed practitioners to the cunning quacks, the institutions (hospitals, colleges and associations) reflecting a pyramidal class structure, supporting an inarticulate eugenic philosophy. Good health, fecundity and longevity were prerogatives of the upper classes, the affluent, who had access to the most advanced health care of the time. The life of the indigent masses depicted in nineteenth century accounts of the London poor by reformers like Christopher Mayhew, was nasty, brutish, gregarious and short, their housing insanitary crowded and delapidated slums being conducive to infectious diseases. In Ceylon the redeeming

5. An ingenious interpretation linking pregnancy cravings to Freudian concepts such as penis-envy has been proposed in a prize-winning essay by Gananath Obeyesekera. His penetrating analysis revealed (contd.)

feature of the medicines dispensed by the folk healer, whom British doctors looked upon with disdain, was that the effect of indigenous medicine was not very mischievous, and probably did more good than harm.⁶

Although eminent army doctors such as Kinnis, Davy and Henry Marshall serving in Ceylon, reflected the Enlightenment notion that reason and science would dispel the superstition and unreason of the Dark Ages embodied in the indigenous medical system, they represented only a minute segment of the British intelligentsia. Prominent among them was John Davy, M.D., F.R.S., whose background can be gleaned from his biography of his distinguished brother, Sri Humphrey Davy (1778-1829), a chemist, inventor of the safety lamp, lecturer at University College, Dublin, from where he obtained the Ll.D., baronet in 1818, and two years later, at the age of 42, President of the Royal Society, of which Dr. John Davy was Fellow. Accredited physicians ranked high in British society by general repute and the company they kept, and they were at great pains to guard their social position. Adam Smith, in his *The Wealth of Nations* (1776) considered that confidence could not be safely reposed in attorneys and doctors, if they were of a "very mean or low condition". Their remuneration must be commensurate with the rank in society that so important a trust requires. Hence the physician maintained a social distance viv-a-vis practitioners in other inferior branches of medicine, notably surgeons, dentists, apothecaries, and druggists, which necessarily restricted their clientele. They usually completed an arts degree in one of the ancient universities, taking holy orders prior to graduating in medicine and obtaining a licence to practice from the university.

The development of medical science in England had its

that the shape of the vegetables craved for pointed to the sub-conscious prevalence of penis-envy. "Pregnancy Cravings (*dola duk*) in Relation to Social Structure and Personality in a Sinhalese Village" *American Anthropologist*. 65/ii. (1961).

6. John Davy. *An Account of the Interior of Ceylon*. London (1821).

own problems and imperfections. The Charter of the Royal College of Physicians (1518) was granted by Henry VIII "partly imitating the example of well governed cities in Italy" where medical progress was far in advance of English cities. By the end of the 15th century, however, the Renaissance had a profound impact on medical studies. Those proceeding to the continent were schooled in Greek medical literature, and the most eminent of them, Linacre, passed an arts course, became fellow of All Souls, Oxford, after which he went to Padua to take the degree of Doctor of Medicine, receiving the Oxford degree in medicine after his return.

A sartorial and behavioural refinement was expected of physicians from the inception of the profession in England. According to the original charter of the Royal College of Physicians, those permitted to practise physic should be "only those persons that be profound, sad and discreet, groundedly learned, and deeply studied in physic". While material affluence through the practice of their profession was not denied them, greed for pecuniary gain, or the making of money as their paramount objective, was discountenanced. The famous physicians of the eighteenth century were men of fashion who made large fortunes and came to be considered an elite. Their class position was not always above suspicion, however, and in one of Thackeray's novels a reference to a physician states: "I dine at Firmin's house, who has married into a good family, though he is only a doctor".⁷ The Establishment insisted that "morals and manners" could only be imbibed at the universities, where potential physicians were educated alongside the gentry, and thereby acquired a tone of feeling supposedly beneficial to a vocation which had barely established itself as a learned profession, elevated above the surgeons, dentists, apothecaries and druggists. Consequently the physicians lorded it over these ancillary professions, and their permission was necessary for the performance of operations by the lowly surgeons.⁸

7. *The Adventures of Philip*. W.M. Thackeray OUP The Oxford Thackeray cited by Saunders & Wilson (see n.8)

8. For data on the history of the professions in (contd.)

The surgeons (chirugons) along with the barbers constituted a guild. Being neither university graduates nor ecclesiastics, their status was enhanced only by the progress of the art at the hands of the great pioneers such as John Hunter (1728-1793). In 1778 Sir Carsar Hawkins was knighted for his professional services, but it was only in 1800 that the barber-surgeons came to be finally differentiated, and a charter granted to the Royal College of Surgeons. The exclusiveness and hauteur of the accredited physicians left a void in the delivery of health care in England, which was assiduously filled by the apothecaries. It may be noted that Jenner, the inventor of vaccination, which was introduced to Ceylon with great success, was an apothecary who entered the ranks of the physicians by purchasing a diploma.

It will be seen that just as the social structure of England determined the framework of the medical profession, the pattern was replicated in colonies like Ceylon. The clientele of the genteel physician was drawn from the upper and middle strata of colonial society. "Merchants" and planters constituted an entrepreneurial class, were oftentimes progeny of the English gentry, were in many cases volunteer officers in the armed forces and a cut above the "trader" or shop assistant, who served behind the counter of commercial establishments, not to mention sundry occupations such as tailors and cutters, and "writers" or clerks, recruited before the introduction of the typewriter in the present century. The native elite was still without access to western health care, but that gap was filled by medical sub-assistants, invariably Burg-
hers, trained in Calcutta at state expense. The doctors summoned to treat the father of James de Alwis, resorted to blood letting by opening a vein or applying leeches. The names mentioned are Firmer, Zylwa and Prins, all

England, the seminal source is A.M. Carr Saunders & P.A. Wilson. *The Professions*. London (1933). For later developments cf. T.H. Marshall, "The Recent History of Professionalism in relation to Social Structure and Social Policy" in his *Citizenship and Social Class* Clarendon Press Cambridge (1963).

Burghers. As late as 1890 there was vacillation in the choice between western and indigenous treatment. When the well-known philanthropist C.H. de Soysa was afflicted by rabies, his son-in-law, a western qualified doctor, originally dressed the wound. It was suggested that the patient be taken to Paris for treatment at the Pasteur Institute, but in the opinion of the eleven ayurvedic physicians in attendance, such a long journey was not advisable. Although western medicine was at hand, he opted for ayurveda, which failed to cure him, and he died at the early age of fifty four. Interestingly, he discussed the establishment of a Pasteur Institute in Colombo shortly before his death.⁹

A number of sociological factors contributed to a resistance to western medicine, at least to an ambiguous stance in relation to a logico-experimental science, an ambiguity underlined by Pareto in his celebrated treatise on sociology. In remote rural areas, villagers fled to the jungles on sight of a vaccinator. Even on the part of the emerging westernized elite, whose acculturation was partial, there was a curious ambivalence in respect of indigenous medicine, even early in the present century. There was a compulsion to advocate the superiority of traditional culture, transcending the bounds of reason. Ananda Coomaraswamy, a qualified geologist, was most ingenious in defending everything traditional, including the western "bugbears" of caste, literacy, democracy and egalitarianism. Perhaps his own biculturalism, as son of a Tamil father and English mother, led him to extreme positions. The very class that provided the catchment area for western medical personnel defended *ayurveda* on the grounds of its antiquity and popular base. In 1947 an official Commission claimed that seventy per cent of the population patronized *ayurveda*. How this figure was reached is obscure, and the fact of penetration of many western notions and drugs into the indigenous system, presents conceptual difficulties of classification. But this figure was repeated without empirical evidence in subsequent official inquiries, including the Report of the Kandyan Peasantry Commission (1951), and the

9. *The de Soysa Saga*. Colombo (1986).

W.H.O. Health Manpower Study of 1975.¹⁰ The 1947 Sessional Paper argued that, having stood the test of time, despite official neglect, the system "must have something good in it". In the outcome, the efficacious remedies, alongside the ministrations of illiterate quacks, tended to be lumped together as part of a unified "system", rather than concede that, like the curate's egg, it was "good in parts". The present reviewer finds the arguments of antiquity and popularity totally unconvincing. Antiquity is no guarantee of validity, as in the case of astrology, demonology and witchcraft, even if many western qualified medical practitioners believe in the occult.

The partiality for *ayurveda* is partly attributable to the limited education of the pioneer western medical auxiliaries, trained by army doctors and in the American Mission Hospital in Jaffna. The *ad hoc* training did not attract candidates from the higher social ranks. It was officially reported that thirty five medical sub-assistants, divided into three grades, were paid 150, 110, and 90 pounds sterling per annum, circa 1840, "certainly not a very tempting remuneration to any but a native, considering the hardships and risks they undergo". These locally trained cadres were consequently reported to have been of the "lowest and worst description", inefficient, and paid less than clerks. In fact, they preferred clerical employment, there being very few new medical recruits at a time when the demand for native medical officers was steadily increasing, especially in view of the recurrent epidemics of small-pox, yaws (*parangi*), cholera and malaria. The condition of doctors worsened during the Great Depression of the 1930's. Recruitment to the government health department was practically halted, and there were many unemployed licentiates whose names were added to a lengthening "waiting list" maintained by the state health service. Relief came with the supervening malaria epidemic. Private doctors had more patients than ever before, and Field Medical Officers were recruited by the Department of Medical and Sanitary services from its handy "waiting list", for a monthly salary of Rs. 150/-, which was sufficient for a living in the inter-war years, even to maintain a motor car and an ill-paid domestic servant.

10. L.A. Simeonov et al. *Better Health for Sri Lanka*.
New Delhi. W.H.O. (1975).

The pace of westernization was retarded by the fact that the native elite had barely been weaned from traditional values. There was a noticeable change with the emergence of a cadre of doctors drawn from the middle class, usually Christian by faith, and in the beginning, Burgher by descent. For the natives, traditional conceptions of purity and pollution made contact with death and disease, especially the handling of corpses, strictly taboo. Hence the ignorance of anatomy in the indigenous system. In contrast wax skeletons were imported for instruction at the Medical College over a century ago. Traditionally even dissection of animals was abhorred, the handling of carcasses of cattle etc. being consigned to the outcaste *rodi*. The traditional healer oftentimes did not even see his patients, especially in the case of royalty. He dispensed medicines on the basis of symptoms communicated to him. To undertake the dissection of corpses would have been unthinkable in the context of indigenous values. Death involved ritual pollution (*killa*) and contaminated the kith and kin in attendance. Vocational concern with the dead involved relegation to outcaste status. Even the inevitable case of death in the family involved ostracism until the pollution was erased by purificatory rites. Medical practitioners, functionaries in shrines dedicated to the gods (*kapuralas*), exorcists and others were debarred from performing sacred rites for a purificatory period of three months. The belief that his spirit returned to the abode of the deceased was responsible for the custom of removing the corpse, not from the front door, but through a hole made in the wall, which was immediately replastered after the remains were removed, to prevent the spirit returning the way the body left.¹¹

In the circumstance few Hindus or Buddhists embarked on careers in western medicine. It was the marginal groups, especially Christians, who were the early medical students, even after the founding of the Medical College in 1870. Prior to this there was a motley array of western practitioners trained in India, prominent among them being the Goanese P.M. Lisboa Pinto who qualified in Bombay, (Goans were among the first to avail themselves of medical training provided in Madras and Bombay) Nurtured in western radical thought, he

11. Reported in *The Taprobanian*, ed. Hugh Nevill. (1887).

pioneered the trade union movement. These men were uninhibited by traditional values, championed as a package by the founding fathers of the National Reform League, whose nativist agenda include the revival of indigenous medicine.

It was the low castes of the traditional caste hierarchy who readily accepted liberating western values and vocations, especially those associated with money and trade, the bureaucracy and the professions. Prominent were the *karava*, ranked low, because of their ascribed occupation. In the words of the 17th century Sinhala chronicle, *Jana-vamsa*, "engaged in fishing, they were sinning". It has been suggested that the fishing industry was a stepping stone to trade, an occupation greatly despised in the traditional scale of values.¹² As the nineteenth century wore on, a large number, two or three generations removed from the sea, graduated to the sub-professions and professions, including medicine. With the migrant trader penetrating into the interior, their professional clansmen followed, setting up "dispensaries" in provincial towns, degenerating to the level of commercial drug peddlers. The very circumstance leading to the disesteem of the apothecary, druggist and pharmacist in England, did not deter them in Ceylon. In England, "unlike the physicians and surgeons, the apothecary charged for the drugs he supplied and not for the services which he rendered, and this led to his becoming associated in the mind of the public with the trader".¹³ The contempt for trade was much greater in Ceylon.

In time a more sophisticated medical elite emerged, cultivating interests and tastes unknown to the fraternity in the previous century. Many entered the political arena, beginning with Sri Marcus Fernando, who was unofficial member of the Legislative Council. The mere fact of having to go abroad for "British qualifications", a prerequisite for promotion in the medical service, left the average doctor too preoccupied with securing a minimal qualification, usually the so-called london "conjoint" (MRCS, LRCP), to imbibe western cultural values. The cultural level of the

12. cf. W.M. Roberts. *Class Conflict and Elite Formation. The Rise of the Karava Elite in Sri Lanka. 1500-1931.* Cambridge University Press (1982), p. 282.

13. Carr Saunders & Wilson, *op.cit.*

philistine rarely went beyond the music hall and ball-room dancing, and he took readily to nativist politics on his return. Perhaps for this reason, the prestige of the profession was not high, and many preferred to describe themselves as landed proprietors rather than medical practitioners. There were, however, outstanding personalities who constituted an avant garde elite. R.L. Spittel was known as an authority on jungle lore by his novels on the Vaddas. Andreas Nell gained repute as an antiquarian. Lucien de Zylwa, though hailing from humble origins in the plantation sector, qualified at University College London, was a novelist and amateur singer (he makes much of his rendering of the popular ballad, "I'll sing thee songs of Araby", and his prowess as an after-dinner speaker). He did not suffer the bicultural agonies of his more distinguished and sensitive contemporary Ananda Coomaraswamy. In his prime he employed eleven servants in his luxurious mansion in Cinnamon Gardens, Colombo. Two GP's of Negombo, known to the reviewer, were active in the inter-war years -- Dr. James de S. Wijeyratne, novelist, composer, singer and musicologist, and Dr. C.A.A. de Silva, learned Pali scholar, author of a book on the Four Noble Truths and a devout Buddhist *upasaka* in his declining years, may be mentioned at random. Neither of them transcended their caste affiliations, nor did others. In more recent politics was the gynaecologist, Sir Nicholas Attygalle, President of the post-independence second chamber, and the eminent surgeon Prof. M.V.P. Pieris, ambassador to Moscow. Dr. S.A. Wickremasinghe, a Communist Party M.P., practised in the deep south, perhaps as an avocation. The contributions to anthropology by Dr. Byron Josef, who wrote to journals such as *Folklore* and *Man*, are little known. It would be invidious to single out contemporary heirs to the liberal tradition, including the author of the book under review (currently President of the Ceylon Branch of the Royal Asiatic Society), but our discussion will not be complete without reference to the pharmacologist, Dr. Senaka Bibile, respected for his labours in organizing the Formulary Committee and State Pharmaceuticals Corporation, invited to serve W.H.O. at the time of his death. His abiding interest in the widely separate spheres of music and politics was rare indeed. Such avocations were not merely indicators of

westernization. They promoted what Norbert Elias calls the civilizing process, which English physicians attained by prior studies at the ancient universities, repositories of the "high culture" associated with the gentry.

Whether westernization in colonial Ceylon was skin-deep, confined to the "borrowed plumes" of western dress condemned by Ananda Coomaraswamy, who adopted a unique attire, remains to be explored. Suffice it to say that Dr. Thomas Garvin's impeccable western dress and deportment were much admired by members of the exclusive Orient Club, which the Aberdeen qualified physician frequented in the inter-war years. At another level, to attend the annual Medical dance gave supreme bliss to the whisky-drinking philistine, who joined the *baila* dancers with uninhibitedly lewd postures, bawling the lyrics with gusto. ("What about the action of the tincture O.P.I"?)

The recent development of medical science in Sri Lanka owed much to the incorporation of the Medical College as a Faculty of the University of Ceylon in 1942. The author deals with the minimal specialization early in the present century. Even gynaecology was not recognised as a speciality. The need for an Association of Medical Specialists became evident. The university made provision for a large number of new fields of instruction and research, which came to be represented on its medical faculty by full-time professors assigned beds in the major teaching hospitals now under a separate Ministry. Increasing commitment to medical science also gave rise to professionalisms, but as elsewhere we have to separate the sheep from the goats. As against the elite of specialists, untroubled by financial worries (except the over-riding one of evading taxation), given to a conspicuous consumption bordering on vulgarity, were the aggressive and impecunious mass of GP's, those in the state sector agitating from the outset for better salaries through unionized professional associations, notably the Government Medical Officer's Association (GMOA), founded in 1924, which progressively grew in strength.¹⁴ It was in a position to para-

14. In the present regime of "channelled practice" allowed to government doctors after working hours (8-12 noon; 3-5 p.m.) the reviewer found that non-specialists (contd.)

lyse the health care system of the whole country by strike action, a weapon unthinkable in the professional milieu of the past. The effectiveness of its current deployment to exert pressure on the government has made it an important institution in recent social history.

With the eclipse of the family doctor owing to the emergence of a new, technologically-oriented profession using high precision and expensive equipment far in advance of the X-ray technology in charge of radiologists, and the modest pathological laboratories attached to hospitals even after World War II -- laser, sonic and scanning diagnostic aids, requiring the services of high calibre graduate technicians -- besides revolutionizing the role of the specialist physician and surgeon, left the GP bereft of his traditional clientele. The latter, assumed by specialists to be something of a mediocrity and a private entrepreneur to boot,¹⁵ found his functions stripped down to counselling and referral services. The prescription, hall-mark of a doctor in the popular mind assumed insignificant dimensions owing to the marketing of drugs by multinational commercial laboratories, and their often illegal peddling by unlicensed drug peddlers.

If a major objective of the GMOA is the betterment of its members above the "very mean and low condition" to which the rank and file of licentiates was repeatedly approximating in the recent past, it was in accord with Adam Smith's notion that adequate remuneration was a *sine qua non* for the trust and confidence that patients, rightly or wrongly, reposed in medical professionals to whose judgment and care they entrusted their very lives, and to whom oftentimes they collectively transferred fortunes by way of fees. Even if not always realised in practice owing to dominant pecuniary motives - commercialization is the bane of professionalism -- ideally, the doctor should not work in order to be paid. Rather, he should be paid in

supplemented their incomes by working shifts as resident physicians in private hospitals, earning as much as Rs. 8000 per month.

15. cf. R.H. Titmuss *Essays on the Welfare State* London (1963) p. 178-179.

order that he could work and be trusted to give what he cannot be compelled or contractually bound to give.¹⁶ If he is, his strategic reaction is to "work to rule" Herein lies the real bargaining power of the GMOA and other medical and para-medical unions. In the last resort, the professions generally, and the medical profession in particular, should be judged in terms of their compatibility with the good life,¹⁷ which is the aim of the civilizing process.

RALPH PIERIS

16. T.H. Marshall, *op.cit.*

17. *ibid.*

BOOK REVIEWS

Amāvatura: A Syntactical Study.

by Piyaseeli Wijemanne. p. xvi, 257. Research Publications Series, Ministry of Higher Education, Sri Lanka, 1984.

As the title indicates, Dr. Piyaseeli Wijemanne's aim in the present study is to describe the syntax of *Amāvatura*, "the first prose narrative among the extant Sinhalese literary works". At the commencement of this study, the author maintains that syntax is a field of study mostly neglected by those who have undertaken research into the language of the literary Sinhala from time to time. We have mostly phonological and morphological studies, though syntactical investigations are not completely absent. The author herself refers to some contributions in this respect by Dr. C.E. Godakumbura and Prof. S. Paranavitana, but complains that *Sīdat Sangarā* has not paid sufficient attention to syntax.¹ Regarding this meagreness of syntactic studies one should not forget the fact that, according to the traditional grammatical theory, word is the unit par excellence.² Although in earlier times the word 'grammar' was considered as embracing the whole study of language, gradually it came to be considered as denoting the analysis of language that came under the two headings known as morphology (earlier known as inflexion) and syntax. Of these two divisions of grammar, morphology describes the internal structure of words, an area of study which received much attention of the traditional grammarians, probably because the word was considered the fundamental unit of language by them. Phonology was also considered one of the important levels of language in descriptive as well as historical studies, and consequently in traditional linguistics much

-
1. It is very doubtful whether the author of *Sīdat Sangarā* had any intention of claiming that his work is a comprehensive grammar of Sinhala language.
 2. John Lyons, *Introduction to Theoretical Linguistics*, Cambridge Univ. Press, (1968) p. 194.

attention was concentrated on phonological studies too. These circumstances, perhaps, explain why most of the available research on classical Sinhala language consists of phonological and morphological studies, while syntax has received very little attention.

Nevertheless, one cannot ignore the importance of syntax in the grammatical description of a language. As mentioned earlier, grammar of a language consists of two parts: morphology, which describes the internal structure of words, and syntax, which describes how words combined to form what present-day linguists call grammatical constructions, such as phrases and clauses.³ Considering the important place that *Amavatura* occupies in Sinhala classical literature, a syntactic study of its language forms a noteworthy contribution to Sinhala linguistic studies in many respects. This forms the first systematic and detailed study of this nature of any Sinhala classical work. Besides, the language of *Amavatura* shows certain features which are distinctly characteristic of itself and it is believed that it represents a certain stage in the development of the language of the Sinhala prose writings.

Thus, the present study has much significance for an understanding of the history of the Sinhala language. Moreover, the literary works of this era have formed the basis for much of the grammatical rules of the present-day Sinhala literary usage. Scholars like Kumaratunga Munidasa, who contributed much to establish the current norms of literary usage, mostly cited the usage of *Amavatura* and other classical works of the same era to support grammatical rules which they introduced as the 'correct' usage. Many of these rules are accepted today as the standard usage. To cite just one example, in the contemporary literary usage, in a sentence with an inanimate noun as subject a singular verb is used, agreeing with that subject, irrespective of whether that subject is singular or plural. This is one of the rules which has been introduced in compara-

3. Charles F. Hockett, *A Course in Modern Linguistics*, The Macmillan Company, New York, (1958) p. 183.

tively recent times on the authority of syntactic features found in classical works like *Amāvatura*. In the 1920s and even in the 1930s, scholars of the calibre of Mudliyar W.F. Gunawardena used a plural verb agreeing with a plural subject, irrespective of whether that subject is animate or inanimate.⁴ This shows how a study of classical works up to about the 13th century is relevant for understanding the contemporary literary usage in its correct perspective.

The study of *Amāvatura* under discussion consists of six chapters. The first chapter is of an introductory nature, giving information about *Amāvatura* with regard to its author, date, subject matter, language and sources. This is a brief but informative introduction to *Amāvatura*, and Dr. Wijemanne has made ample reference to views expressed on this subject by other scholars also.

Chapter 2 deals with the order of arrangement of constituents in sentences. The author first illustrates the general order of arrangement of subject, object and predicate in the sentence, and then proceeds to cite many deviations from the generally accepted order, e.g. where the object precedes the subject and the verb. Very often these deviations are ascribed to the influence of the Pali sources, and this is supported by quoting the corresponding Pali sentence along with each example. This is very illuminating and shows the extent to which the author of *Amāvatura* has been influenced by the sentence structure of his Pali sources.

In discussing the order of arrangement of constituents of the sentence, the author presents the constituents under five categories: (1) basic constituents, namely subject, object and predicate, (2) adjectivals, (3) adverbials, (4) vocative element and (5) particles *da* and *ma*. However, this categorization does not appear to be very sound. For example, adjectives when they precede a noun which they qualify, do not function as constituents at sentence level. They are constituents of the noun phrase in which they occur.

4. Mudliyar W.F. Gunawardena, *Siddhanta Parihsanaya* First edition (1924), second edition (1959) p. 141.

Therefore it is better if they were described in terms of the position (or the slot) they occupy as attributes in a noun phrase in relation to the head of that phrase. However, an adjective may be a constituent of an equational sentence as its predicative as in *E as sav suda* (p. 116). It is not the adjective in this environment that is discussed in chapter 2. Discussing adjectives further, Dr. Wijemanne gives several examples where "animate nominals occur as qualifiers". One of these examples is (p. 38). *Vahanse, mū ki piyano sudovun maha rajāno muba dakkatiyaha* and it is maintained that there, *muba piyano* qualifies *sudovun maha rajāno*. However, it would have been better if *muba piyano sudovun maha rajāno* is treated as a coordinate construction of the appositive subtype.⁵ In this construction both constituents *muba piyano* and *sudovun maha rajāno* are of equal status grammatically, with the same inflexion. It could be argued that either of them is attributive to the other. The footnote to the phrase *muba piyano* also perhaps supports this view.⁶

Chapter 3, titled 'Syntax of the Verb' begins with a morphological description of verbs, divided into several classes based on grammatical categories such as tense and number. Certain rules regarding the agreement of the subject and the verb of the sentence as found in *Amāvatura* are enumerated with examples in this same chapter. This enlightens one as to how rules regarding agreement of the subject and the predicate in present-day literary usage gained their validity. Then comes an exposition of various sentence types under five categories: (a) imperative, (b) optative, (c) interrogative, (d) hearsay and (e) emphatic. This is in addition to the category called 'sentences of the indicative mood', described previously (p. 72). The major part of this chapter is devoted to a discussion of transitive verbs and intransitive verbs, where sentences with different subgroups of verbs, both transitive as well as intransitive, are described. Passive voice constructions and involitive

5. Charles F. Hockett, *A Course in Modern Linguistics*, The Macmillan Company, New York, (1958) p. 185.

6. Piyaseeli Wijemanne, *Amāvatura: A Syntactical Study*, p. 38. no. 21.

constructions are also discussed at length along with the transitive-intransitive distinction of verbs, and this brings to light useful information on a controversial area of Sinhala grammar.

Chapter 4 describes sentences with what are termed 'non-verbal predicates' in *Amavatura*. These are presented under three categories: (1) nominal predicate, (2) adjectival predicate, and (3) adverbial predicate. Apparently these are called 'non-verbal' because they have a noun or an adjective as base instead of a verb. Nevertheless nouns and adjectives in this position inflect like verbs for person. In this category, adverbial predicates also have a noun as their base, except that the noun in this group is in the locative case form. Perhaps it is more logical to class it as a sub-group of nominal predicate. The first two groups are categorised on the basis of parts of speech, while the third group is named after its function in the sentence - not on the same basis as the first two. However, this chapter contains a large number of examples, giving a clear picture of the variety of sentences of this type in *Amavatura*.

Chapter 5 gives a lengthy description of 'non-finite verbal forms'. This is divided into four main sections: (i) participles, (ii) conditionals, (iii) absolutives and (iv) concurrents. Under participles, verbal nouns and verbal adjectives (i.e. nouns and adjectives with a verbal base as their core) are described. What is described under conditionals, absolutives and concurrents are verbal forms which generally function as adverbials in sentences. In the same section is found a description of what is termed 'periphrastic passive', i.e. passive voice constructions with a form of the verb *labeyi* preceded by a participial abstract noun (e.g. *dakvanu labeyi*). This reveals that what is generally accepted today as passive voice constructions are not new. They are found in *Amavatura* too. The author also takes care to compare this type of passive construction with those having a similar verb phrase but are not passive but active constructions.

What is termed 'subordinate constructions' are illustrated in Chapter 6. These are presented under three cate-

gories: (1) relative clause, (2) conditional clause and (3) direct speech clause. These subordinate clauses are described at length with many examples. However, the coordinate clause seems to have escaped the attention of the author, except for a passing reference to it in page 44.

Concluding this brief review, I would like to mention that, inspite of the few shortcomings in techniques of analysis such as were mentioned above, Dr. Wijemanne has made a very valuable contribution towards a better understanding of the language of *Amavatura*. It is not easy to go through the source books and trace the Pali sentences that correspond to those in *Amavatura*, as is often done in this study. It clearly illustrates the extent to which the Pali idiom has influenced the Sinhala literary prose language in that early period. It is very interesting to see how closely the author of *Amavatura* has followed the structure of Pali sentences in source books. The present study will be of much relevance for any review of the history of the Sinhala language and will also be of use for comparative studies of other classical works.

D.D. DE SARAM

Jaffna under the Portuguese

Tikiri Abeysinghe Colombo, Lake House Investments,
1986. (VIII) 67p. Rs. 80/--.

The posthumous publication of this slim volume is perhaps a fitting occasion to take a brief look at the contribution of Tikiri Abeysinghe (1929-1985) to the writing of the history of Sri Lanka. Before his untimely death cut short a productive career, Tikiri Abeysinghe had taught at the Universities at Peradeniya and Colombo and had held the

chair of Modern History at Colombo since 1974. Since the 1960's he had emerged as the foremost authority on the Portuguese in Sri Lanka.

His doctoral thesis, published as *Portuguese Rule in Ceylon 1594-1612* in English in 1966 and in Sinhala translation in the same year, was followed in 1969 by a useful survey in Sinhala of Portuguese activity in Sri Lanka from 1598 to 1658. Professor Abeysinghe followed this up with a collection of documents entitled *Portuguese regimentos on Sri Lanka*, while a few years ago he co-authored *Udarata Rajadhaniya 1470-1818*, a book that has become the standard text on the political history of the Kandyan kingdom.

In all these works as well as in the scholarly articles that he wrote, Tikiri Abeysinghe showed meticulous attention to detail and incisive analysis as well as a rare ability to collect fragmentary bits of information and weave them into a connected story. These very same qualities are evident in his book on Jaffna.

Professor Abeysinghe begins with a survey of the politics of the conquest of Jaffna. The account of the conquest and the struggle for the retention of Jaffna is given in summary form (p. 1-16) because, as he puts it, he has tried to avoid "repeating that twice told tale". Nevertheless, even here he offers new insights on matters such as the differing attitudes and motives of the Portuguese officials in Lisbon, Goa, Colombo and Mannar. This section is followed by a perceptive analysis of the military, administrative and social measures used by the Portuguese to retain control of the newly conquered kingdom (p. 17-27).

Where Professor Abeysinghe really comes to his own, however, is in his survey of Portuguese revenue and land policy in Jaffna (p. 28-52). If the theme of increasing exactions from the Jaffna peasant has been explored before, it was never done with so much documentation. Professor Abeysinghe demonstrates that, contrary to conclusions reached by other writers (including myself), the completion of the *tombo* of Jaffna was essentially the work of Amauro Roiz in the 1630's. A more important piece of historical revision concerns the amount of revenue collected by the

Portuguese from Jaffna. Abeyasinghe points out that this was much larger than hitherto thought, and that increased revenue collections from Jaffna at a time when both the cultivated area and trade were declining led to increased economic oppression under Portuguese rule.

His survey of religious activity (p. 53-57), though very brief, highlights three themes - that the missionary effort was apparently very successful in Jaffna, that the missionaries in Jaffna, unlike those in Kotte, did not hold much land, and that "in Jaffna, churchmen were part of an oppressive system" (p. 57).

A short bibliography and an appendix complete the work. There is no index. There is one map of Jaffna, but a more detailed map referred to on page 19 seems to have been omitted by the publishers. In sum, however, this book is a significant contribution to scholarship, and the easy style in which it is written should ensure a wide readership for it.

C.R. DE SILVA

Saranam: A Novel of Refuge

Gopal Gandhi, New Delhi. Affiliated East-West Press, 1987.

Saranam is, without any doubt, one of the few novels of quality written in English on Sri Lanka during this century. The story itself is centered on Valliamma, the daughter of a labourer in a tea estate. Her life forms a thread that runs through the work; her devotion to her confused father, Kandan, her love for Soma, the Sinhalese fish-vendor who regularly visited the estate, her eventual marriage to Sannasi, a Tamil widower, and her eventual emigration to India.

Yet this is no simple tale. It gives us a picture of the exploitative nature of the estate structure, of individual greed and debasement, of family loyalty and sacrifice. It makes us acutely aware of the ethnic and religious tensions as well as the caste distinctions that lie beneath the surface of the smooth workings of a tea plantation.

Gopal Gandhi has proved to be sensitive to the many nuances of Sri Lankan society, an extraordinary achievement for one whose experience in Sri Lanka was confined to just four years as an Assistant High Commissioner for India in Kandy, dealing mainly with the repatriation programme of Indian workers. Perhaps, however, this should come as no surprise to those of us who came to know him; his gentle friendly nature, his courtly manners and his perceptive analytical remarks. To the sensitivity displayed in his novel is added a genuine touch of realism which pervades the story. The Indian Tamil hospital employee, Sabbapathi, takes bribes from estate workers for admission to his hospital. The estate Superintendants seem to care more about their reputation and jurisdiction than for the life of the estate workers. The doctor, who tries to check corruption, finds that he is requested to go on leave until allegations against him (sent by means of the usual anonymous letter) are investigated. The Catholic priest, who attempts a postponement of a Hindu festival to avoid the spread of cholera, is attacked as an anti-Hindu campaigner. These are all elements which could have been drawn from true life in contemporary Sri Lanka.

The novel is written in straightforward style and in simple English. There are several moving passages in the book, some of which are highlighted by Kamaladevi Chattopadhyay in her brief introduction to the novel. Equally deft is Gandhi's use of situational imagery. Halfway in the book he briefly brings in a school of deaf and dumb children - a school where children of all ethnic groups and religions seem to mingle freely, while tension abounds among their more "fortunate" brethren outside. The only character who jarred in my mind was Nimal, the Oxford-educated planter with a conscience, a conscience which was dormant for some of the time. The last stages of his life seem to be a drift without reason.

In the end, however, the novel succeeds because it portrays human life beyond caste, creed and race. As the author explains, "The Sanskrit word that forms the title of this book denotes shelter, refuge. But there is much more to the word than that. A final arrival is implied, a journey's end..... Almost every major figure in this story is a seeker after saranam. One seeks a spiritual end point, another an intellectual anchorage. For the formal 'population' in the story, however, the search for a place in the sun is literal and desperate". Gandhi has indeed encapsulated many attractive as well as nasty aspects of humanity in his story. For some it will merely be a story well told, but for those with a bent for reflection there is also much to be learnt from this novel.

C.R. DE SILVA

CONTRIBUTORS

- ASHLEY HALPÉ**, B.A. (Cey.), Ph.D. (Bristol)
Professor of English, Department of English,
University of Peradeniya, (Sri Lanka)
- W. I. SIRIWEERA**, B.A. (Cey.), Ph.D. (Lond.)
Associate Professor of History, Department of History,
University of Peradeniya, (Sri Lanka)
- RATNA HANDURUKANDE**, B.A. (Cey.), M.A. (Cey.), M.A., Ph.D. (Cantab.)
Professor of Sanskrit, Department of Classical Languages,
University of Peradeniya, (Sri Lanka)
- E. W. MARASINGHE**, B.A. (Lond.), Ph.D. (Calcutta)
Senior Asst. Librarian, Library,
University of Peradeniya, (Sri Lanka)
- MERLIN PERIS**, B.A. (Cey.), B.A., M.A., Ph.D. (Lond.)
Professor of Western Classics, Department of Classical Languages,
University of Peradeniya, (Sri Lanka)
- R. A. GUNATILAKA**, B.A. (Cey.), Ph.D. (Cantab)
Senior Lecturer, Department of Pali and Buddhist Studies,
University of Peradeniya, (Sri Lanka)
- SUDHARSHAN SENEVIRATNE**, B.A. (Delhi), M.A., Ph.D. (J.N.U.)
Lecturer, Department of Archaeology
University of Peradeniya, (Sri Lanka)
- LEELANANDA PREMATILEKE**, B.A. (Cey.), M.A. (Calcutta), Ph.D. (Lond.)
Professor of Archaeology, Department of Archaeology,
University of Peradeniya, (Sri Lanka)
- GNANASIRI GUNARATNE**, B.A. (Cey.)
Instructor in English, English Language Unit,
University of Kelaniya, (Sri Lanka)
- RALPH PEIRIS**, B.A. (Cey.), Ph.D. (Lond.)
Professor Emeritus, University of Peradeniya,
Fellow of the Sri Lanka Academy of Sciences.

අනුමත
සාමාන්‍ය
පාලන
කමිටිය

