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## Pythagoras' Descent to Hades

IF any religious theory concerning the soul can dispense with the notion of posthumous reward and retribution in some other place, it is that of reincarnation which metes them in some form or other in subsequent incarnations upon this earth itself. For this reason it is remarkable that reincarnation-religions, (whether it be that they have developed from that form of religion which holds a single life on earth followed by an afterdeath that is eternal, or whether they have evolved directly or indirectly from some other primitive belief,) often admit the feature of an afterdeath in their eschatology without any consciousness of superfluity or redundancy. Far from this, and particularly with the Greek reincarnation-teachings, the sojourn in Hades is as important as the central tenet of reincarnation itself and appears to have been appreciated as the more imminent and fearful peril of the soul for which all preparation must be made and all care taken, while it is bought into the mystical induction of the initiate as a *μυστικὸς λόγος* resulting from a descent to Hades by the master himself or an elect,—the reputed *κατάβασις ἐς ᾗδου*.

Among the Greek descents to Hades the earliest are those of Heracles and the Attic hero, Theseus. But neither of these, as far as we know, biosomed into a religious doctrine of the afterlife, reincarnationistic or otherwise. Nor yet is anything except the traditional concept of Hades to be found in the descent of Odysseus, (if it can be called a descent,) even granting Macchiore<sup>1</sup> is right that much of the Nekyia in the *Odyssey* is Orphic interpolation. On the other hand, the earliest references to Orpheus not only associate him with a descent to Hades<sup>2</sup> but also with the institution of *teletai* and *orgia* which quite clearly pertain to death and the afterlife.<sup>3</sup> As

1. *From Orpheus to Paul*. London (1930), p. 35. The verses he suspects as interpolations from the Orphic *katabasis* are *Od.* xi. 235—327 and 538—626.

2. See *Eur. Al.* 357—362; the famous sculptured relief at Naples (Brunn-Bruckmann pl. 341 = *Kern Orphicorum Fragmenta*. Berlin (1922) Test. 59 and discussion of it by Gruppe in Roscher's *Lexikon s.v. Orpheus*, p. 1194 and esp. J. Heurgon, 'Orphée et Eurydice avant Virgile', *Melanges d'archéologie et d'histoire*, XLIX (1932) p. 34 f.; *Plato Sym.* 179d; *Isoc. Bus.* xi. 7 f.

3. *Hdt.* ii. 81; *Eur. Rh.* 941—945; *Plato Prot.* 316d; *Rep.* 364e—365a (see in this connection Orphic fr. of unknown date cited by Olympodorus *In Plat. Phaed.* p. 87, 15 Norvin), also 363c—e, 364b—c, and 366a—b; (*Dem.*) xxv, 11; *Diod.* v. 64, 4; *Theophr. Char.* xvi, 11 f. = Diels Test. 207 with I. M. Linforth's observation in his *The Arts of Orpheus*. Berkeley & Los. Ang. (1941) esp. p. 68 and 102, also p. 167—170 for a summary of the conclusions from the foregoing evidence. The evidence indicates that this material appeared in writing in certain *ἱεροὶ λόγοι* in the form of poems.

Linforth<sup>4</sup> has shown, the evidence before 300 B.C. has no direct reference to an Orphic teaching of reincarnation, but the abstinence from killing and the regimen of vegetarianism<sup>5</sup> attributed to Orpheus, even if they need not imply it<sup>6</sup>, make it probable that the doctrine was a very old one. The story of his bringing back his wife, Eurydice (or Agriope), from Hades must be a naive mythological expression of this doctrine, or more probably the myth which helped develop it, and it is quite likely it is this reincarnation implication which detractors, who make it appear he either failed in this venture or was deluded and foiled<sup>7</sup>, aim to ridicule.

With Pythagoras, however, the difficulty lies rather in showing that the tradition concerning the descent itself is old and genuine. The early evidence, scanty though it be, comes out strongly to show that a doctrine of reincarnation was held by one who could well be Pythagoras.<sup>8</sup> Yet this same evidence, far from associating a descent to Hades with Pythagoras, has no clear testimony about such a descent itself. Even so, when references to details of Hades begin to appear in the notices on Pythagorean teaching and belief in Aristotle and the later sources, it is assumed with increasing confidence that those among them which appear genuine ultimately derive from a mystical work based on a Pythagorean descent to Hades and that the tradition is an old one. Such a descent must however remain a hypothesis, even if a reasonable one, unless the early sources can be made to yield some evidence on this that might help to establish it with a degree of certainty.

Fortunately there is a single piece of evidence on Pythagoras which alludes to this episode, though it appears there in so garbled a form and,

4. *op. cit.* ch. 1.

5. Arist. *Frogs* 1032; Eur. *Hip.* 952—953; also Plato *Laws* 782c.

6. *A Study of the Doctrine of Metempsychosis in Greece from Pythagoras to Plato.* diss. Princeton. N. Jersey (append. II. p. 89—92. However, it is interesting to note that one of those who are shown choosing new lives in the *Republic's* myth or Er is Orpheus himself, while the reference in Isoc. *loc. cit.* is to Orpheus bringing back the dead from Hades as a regular practice; (note the imperfect ἀνῆγεν and the plural τοὺς τεθνεώτας).

7. In Eur. *loc. cit.*, which is the earliest allusion to this story, Orpheus is successful, and this is supported by Isoc. *loc. cit.* The Naples-relief is capable of different interpretations. It is only in the *Symposium*-version that Orpheus is sent ἀτελῇ, but the contrast with Alcestis, his effeminacy, (being a lyre-player), the association of his descent with his death at the hands of women, the very idea that he was deceived with a phantom because he dared to go down to Hades alive, make the story suspect. The version of it most familiar to the general reader appears in Vergil in the fourth *Georgic* 516—523, and even here the warning against looking back may reflect the well-known Pythagorean taboo.

8. See Xen. *fr.* 7; Emped. *fr.* 129; Hdt. ii. 123, also iv. 95—96. Hdt. ii. 81, though often cited, is not evidence of a teaching of reincarnation. Cf. also Arist. *de anima* A3. 407b20 which alludes to Pythagoreans μυθοί which concern souls investing different bodies.

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even at that, as concerning a different person, that it is not surprising that it is overlooked. Indeed it has greater significance than this, for though it is as often as not dismissed as of no relevance to the study of Pythagorean reincarnation, it is the only piece of early evidence that is capable of linking Pythagoras by name with a teaching of this sort. What I intend here, however, is to concentrate on deriving from it the necessary testimony for showing that the tradition of Pythagoras' descent to Hades was at least as early as the time of Herodotus' writing and that this could well have been associated with Pythagoras even before he established his school at Croton. I would also like to remark the same peculiar treatment the Pythagorean descent receives from its first appearance in our evidence as I observed of the descent-account of Orpheus, a treatment which is, no doubt, the result of the hostility and suspicion of the orthodox and the sceptical alike of these new religions.

The passage I refer to is Herodotus iv.95-96 in which the historian, writing on the remarkable belief of immortality among the Thracian tribe known as the Getans, who think that they do not perish but at death go to their daemon Salmoxis, sets about giving another and different account about this as follows :

ὥς δὲ ἐγὼ πυνθάνομαι τῶν τὸν Ἑλλήσποντον οἰκεόντων Ἑλλήνων καὶ Πόντον, τὸν Σάλμοξιν τοῦτον ἔοντα ἄνθρωπον δουλεῦσαι ἐν Σάμῳ, δουλεῦσαι δὲ Πυθαγόρῃ τῷ Μνησάρχῳ. ἐνθεῦτεν δὲ αὐτὸν γενόμενον ἐλευθέρων χρήματα κτήσασθαι συχνά, κτησάμενον ἀπελθεῖν εἰς δὲ τὴν ἑωυτοῦ. ἅτε δὲ κακοβίων τε ἔόντων τῶν Θρηίκων καὶ ὑπαφρονεστέρων, τὸν Σάλμοξιν τοῦτον ἐπιστάμενον διαιτάν τε Ἰάδα καὶ ἡθεα βαθύτερα ἢ κατὰ Θρήικας, οἷα Ἑλλησί τε ὁμιλήσαντα καὶ Ἑλλήνων οὐ τῷ ἀσθνεστάτῳ σοφιστῇ Πυθαγόρῃ, κατασκευάσασθαι ἀνδρεῶνα, εἰς τὸν πανδοκεύοντα τῶν ἀστῶν τοὺς πρῶτους καὶ εὐωχέοντα ἀναδιδάσκειν, ὥς οὔτε αὐτὸς οὔτε οἱ συμπόται αὐτοῦ οὔτε οἱ ἐκ τούτων αἰεὶ γινόμενοι ἀποθανέονται, ἀλλ' ἡξοῦσι εἰς χώρον τοῦτον, ἵνα αἰεὶ περιόντες ἔξωσι (τὰ) πάντα ἀγαθὰ. ἐν ᾧ δὲ ἐποίει τὰ καταλεχθέντα καὶ ἔλεγε ταῦτα, ἐν τούτῳ κατάγειν οἶκημα ἐποιεῖτο. ὥς δὲ οἱ παντελέως εἶχε τὸ οἶκημα, ἐκ μὲν τῶν Θρηίκων ἠφανίσθη, καταβὰς δὲ κάτω εἰς τὸ κατάγειν οἶκημα διαιτᾶτο ἐπ' ἕτεα τρία. οἱ δὲ μιν ἐποθέον τε καὶ ἐπένθεον ὥς τεθνεῶτα. τετάρτῳ δὲ ἔτει ἐφάνη τοῖσι Θρήιξι καὶ οὕτω

πιθανά σφι ἐγένετο, τὰ ἔλεγε ὁ Σάλμοξις. ταῦτά φασί μιν ποιῆσαι. ἐγὼ δὲ περὶ μὲν τούτου καὶ τοῦ καταγέου οἰκήματος οὔτε ἀπιστέω οὔτ' ὦν πιστεύω τι λίην, δοκέω δὲ πολλοῖσι ἔτεσι πρότερον τὸν Σάλμοξιν τοῦτον γενέσθαι Πυθαγόρῳ.

(As I learn from the Greeks who inhabit the Hellespont and Pontus, this Salmoxis was a man and a slave in Samos of Pythagoras, son of Mnesarchus. Upon gaining his freedom he amassed a great deal of money and returned to his own country. And in as much as the Thracians led mean lives and were rather foolish, this Salmoxis, who had come to know the Ionian way of life and more serious practices than the Thracians by his association with the Greeks and, not the weakest of wise among the Greeks, Pythagoras, constructed a mens-hall in which he received the leading citizens and, at a banquet, instructed them that neither he nor his guests nor their descendants would perish but would come to this place where they would live for ever and have all the good things. And while he was doing the things mentioned and saying these things, he was all the while making an underground chamber. And when this was complete, he vanished from the sight of the Thracians, descending into the underground chamber and living there for three years. And the Thracians mourned him as dead. But in the fourth year he appeared among them and thus gave credence to what he had said to them. These things they say he did. As for me, I neither believe nor disbelieve much this thing about the underground chamber, but I think that this Salmoxis lived many years before Pythagoras'.)

The 'Ionian way of life' (διάιτα Ἰάς), which Salmoxis is said to have acquired and which appears to have had something to do with the arrangement of the common banquet in a mens-hall followed by a discourse on a subject, must have been what he owed to the Ionian Greeks in general. It is possible that, as J. S. Morrison<sup>9</sup> suggests, Pythagoras himself discoursed on λόγοι in this manner, though it is doubtful whether the secret teachings of the school, vouchsafed only to the innermost circle of Pythagoreans,<sup>10</sup>

9. *Pythagoras of Samos* C. Q. vol. L (1956), p. 140.

10. See Iamblichus *Vit. Pyth.* 267 and Porphyry *Vit. Pyth.* 37. Both agree that there were two groups of Pythagoreans, the so-called 'learners' (μαθηματικοί) and the 'hearers' (ἀκουσματικοί), though they seem not quite clear what this distinction implied. These two groups must have corresponded to the two types of Pythagoreans, the Πυθαγορικοί and the Πυθαγορισταί (see Schol. on Theocr. 14. 5) the latter leading an ascetic life. Porphyry thought that the 'hearers' only heard the teachings in outline while the 'learners' studied them closely, —and he is going on what these terms suggest, not on any knowledge about the matter. On the other hand, other such mystery-religions suggest that the 'hearers' here too are those to whom were vouchsafed the 'ear-whispered', (i.e. the most 'secret,' teachings. It is the silence attached to these that was proverbial in antiquity (see Isoc. xi. 29; Diog. Laert. viii. 5; Iambl. *Vit. Pyth.* 199).

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were imparted in same way. Be that as it may, it is in the 'more serious practices' (ἡθέα βαθύτερα), which clearly included the kind of thing Salmoxis taught and the deeds by which he made them credible to his guests (πιθανά σφι), that the Greeks of the Hellespont and the Pontus saw him emulate Pythagoras and thought he owed specifically to him.

The Salmoxian *teaching* is constituted of two statements, (a) that neither he nor his guests nor their descendants would perish, but (b) that they would come to this place where they would live for ever enjoying all the good things. That he was alone in the experience he pretended to undergo is hardly meant to suggest that it was exceptional to him, for this teaching clearly shows that it was to be equally true of his guests as well as their descendants. Nor need the fact that he addressed only the leading men of the country mean that it did not apply to others. (Apart from the more obvious reasons, this may in a way reflect the exclusiveness of the Pythagorean circle). So that we may infer for men in general from Salmoxis' *deeds* (c) that they would die and go beneath the earth, and (d) that later they would return to the earth in their own form.

Long<sup>11</sup> dismisses this passage out of hand as of no relevance to the Pythagorean doctrine of reincarnation since he finds no such thing here. In this he is notably in agreement with Cherniss<sup>12</sup>, who points out that what Salmoxis promised his audience was immortality after death and what he did was to reappear *in his own form*. According to Herodotus<sup>13</sup>, the Getans used to 'practise immortality' (ἀθανατίζειν) and this is the general impression later writers<sup>14</sup> too have of the belief of the Thracians and kindred peoples. Nor is it a doctrine of reincarnation but of immortality that is attributed to Salmoxis in the account about him which appears

11. *op. cit.* p. 8.

12. See his review of A. Cameron's *The Pythagorean Background to the Theory of Recollection* in *Am. J. Phil.* vol. LXI, (1940) p. 359 n.1.

13. iv. 93 and 94.

14. Strabo iv. 197. 4; Val. Max. ii. 6. 10; Pomp. Mela iii. 2. 19; Lucan *Phars.* i. 454—457; *Am. Mar.* xv. 9. 8. *Jul. Caes.* 327d etc. Caesar, writing of the Druids in *de Bel. Gal.* vi. 14. 5 observes of them that they do not believe that their souls perish but upon death pass from one body to another (ab aliis . . . transire ad alios). It is possible Caesar is mistaking the belief in shape-shifting among these peoples for reincarnation. Diod. v. 28 supports a teaching of reincarnation, but it is easy to see from his comparison of it to the teaching of Pythagoras how he has come by his informat. on. The allusion in Eur. *Hec.* 1265 f. which Rohde (*Psyche*: transl. by W. B. Hillis. Lond. (1925), p. 264 and n.) thinks supports such a belief will, on closer examination, be found to be an instance of metamorphosis. See also Linforth 'ΟΙ ΑΘΑΝΑΤΙΖΟΝΤΕΣ' *Cl. Phil.* vol. XIII (1918), p. 23—33.

in Plato's *Charmides*.<sup>15</sup> There is, however, a significant discrepancy between this account and the one preceding it in Herodotus on the point of where the blessed immortality is enjoyed which might throw initial suspicion on it and give the suggestion that the true features of the Getan belief have been twisted to make the Salmoxis-story conform to some other material. For, whereas the preceding account in Herodotus suggests, (as Rose<sup>16</sup> observes), that Salmoxis was a god of the dead and that to get to him one must be quite dead, the story we have subsequently from the Greeks of the Hellespont and Pontus clearly indicates that the dead return to this earth (ἡξουσιν ἐς χῶρον τοῦτον) in their same form and that immortality, with the enjoyment of all the good things, is to be enjoyed somewhere upon this earth itself,<sup>17</sup>—even perhaps somewhere in Thrace itself. For Salmoxis is here said to have reappeared among his fellow Thracians on earth after having been *mourned for as dead*. (One may seriously doubt whether he was able to give them, however foolish they may have been, proof that he was thereafter in enjoyment of all the good things. Nor is it feasible that the Thracians believed their dead were even then upon the same earth as themselves.)

Some of the elements of this story may be discovered in the account given in Strabo<sup>18</sup> that Salmoxis was in fact a man who afterwards pretended to be a god and took abode in a 'certain cavernous place' (ἀντρῶδες τι χωρίον) in Mt. Kogaeonon, deceiving the people to the advantage of the king, to whom he gave counsel. But all that it is safe to assume from this is that Salmoxis must have received cult in this mountain cave and that, while the fact may have proved him to be a god of the dead, it may also have lent itself to the fiction of his concealment in the underground chamber (which, incidentally, Herodotus himself rightly suspects). It is hardly likely that this cave, or any other such place, was held by the Getans to be the Elysium to which their dead went.

15. 156d—157c.

16. s. v. Zalmoxis in *The Oxford Classical Dictionary*. Oxford (1949).

17. See also Phot. Suid. s. v. Ζάλμοξις: ..... τοὺς ἀποθανόντας ὡς Ζαλμοξὶν φασιν οἶχεσθαι, ἦξεν δὲ αὐθις. καὶ ταῦτα αἰεὶ νομίζουσι ἀληθεύειν. θύουσι δὲ καὶ εὐωχοῦνται ὡς αὐθις ἦξοντος τοῦ ἀποθανόντος; also Pomp. Mela ii. 18: 'alii (sc. inter Thraces) redituras putant animas obeuntium'; taking that which returns to earth as the 'animae' of the dead easily gives the doctrine a reincarnation-interpretation. In his interpretation of the 'absurd pragmatizing fable' of Salmoxis in Herodotus, Rohde is gradually drawn to the same view; see *op. cit.* p. 263—264. On the other hand A. B. Cook (see his *Zeus*, Cambridge (1925) vol. II, p. 227) finds in this 'rationalising story' evidence of apotheosis. 'The fearing of the Thracians, the simulated death, the promise of immortal bliss,—what are these but the debris of the very doctrine we are investigating? Salmoxis, like Pythagoras, stands for the caldron of apotheosis.'

18. vii 3. 5

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The Salmoxis-story in Herodotus is accepted without demur by later authors but, as we see, Herodotus himself throws sufficient doubt on it as to discredit it altogether when he remarks that Salmoxis lived long before Pythagoras. But the very fact that Salmoxis, being even humanized for this purpose, is made the slave of Pythagoras, (the usual relationship between Thracian and Greek being one of slave and master), when this is palpably impossible, and the implication that Salmoxis owed his education in the 'more serious practices,' (under which his teachings and doings here must come), to Pythagoras makes it natural to expect similar teachings and doings as belonging to Pythagoras as would have inspired Salmoxis; for is not what is indicated the principle 'like master, like slave'? At the same time, it should not surprise us to find an unfavourable construction put upon the implied doings of Pythagoras, seeing that the Greeks of the Hellespont and the Pontus preen themselves on the score that their fellowmen had not been deluded by some trick or other practised on them by their own 'divine man' and despise the gullible Thracians for having fallen victim to that man's pupil.

Now, when we turn to Pythagoras, we know that he too accepted the fact that the soul did not perish at death but was immortal, and thus far there is no conflict between his teachings and that of Salmoxis. Similarly, there is evidence that, like Salmoxis, he too envisaged a life of eternal bliss for the soul, and it was to be enjoyed in some other state and place than in a physical existence upon this earth itself, though, in his case, it was not consequent on a single life on earth nor yet for any who did not deserve it for merit.<sup>19</sup> On the other hand, Salmoxis' return to earth from the dead, which, if anything, was embarrassing to the teaching of a posthumous immortality of eternal bliss associated with him, would indeed be congruent with the Pythagorean doctrine of reincarnation,—those who die on this earth being sooner or later returned to it. The impression of death and the long period of absence are to be noted in favour of this.<sup>20</sup> But it

19. Ion fr. 4. Bluck cannot be right when he says (see his ed. of *Plato's Meno*. Cambridge (1961) p. 67) that the blissful existence talked of here is to be in a new incarnation, for this is assured Pherecydes, not merely now that he is dead (*φθίμενος*), but expressly for his soul (*ψυχῇ*). Add to this the fact that it is assured to none other than Pythagoras' own *guru* and for his high moral attainment, and it would appear that the allusion is to an ultimate state of liberation from incarnation; see my *Pythagoras, Birth-Rememberer* U.C.R. vol. XXI. no. 2 (Oct. 1963), p. 201 f. Rohde *op. cit.* p. 399 n. 50 remarks that 'without this completing touch Pythagoreanism would be like Buddhism without the promise of a final attainment of Nirvana.' The reference to pure souls being led to the highest (sc. place) by Hermes (*ἀγεσθαι τὰς καθαρὰς (ψυχὰς) ἐπὶ τὸν ὕψιστον*) in Alex. Polyhist. apud Diog. Laert. viii. 31, however does not pertain to this, but to the assignment in Hades after each life.

20. See Guthrie *A History of Greek Philosophy* Cambridge, vol. I (1962), p. 159. Er, we are told, recovered on the twelfth day (*Rep.* 614b), Thespesius on the third (*de sera num. vin.* 563d) and Timarchus within a period of two nights and a day (*de gen. Soc.* 590a-b).

is when the question is asked how Pythagoras, if he was the one who conceived the ruse of the underground chamber, hoped to substantiate his teaching of reincarnation by reappearing on earth *in his own form* rather than by being born anew, that it becomes evident at once that we have here definite traces of a *katabasis* and that someone has, mischievously or otherwise, misconstrued this *katabasis* of Pythagoras as a crude attempt to prove the doctrine of reincarnation thereby.

The classical descents to the underworld in Greek religion seem to have been made through a cave or subterranean cavern and the traditional entrances to Hades are such.<sup>21</sup> Bodily descents, which were certainly the earliest form, would have been thought to have been made through these. Even Odysseus, who in fact does not descend but has Hades served up to him, digs a pit<sup>22</sup> which symbolizes the underground cavern, while Lucan's Menippus,<sup>23</sup> who is also made to emulate Odysseus, is in fact soon afterwards provided a fissure in the earth whereby he descends. So Orpheus is believed to have used the entrance in the land of the Thesprotians,<sup>24</sup> while Vergil's journey to Hades originates from the cave which the Greeks used to call Aornos.<sup>25</sup> What is most interesting, however, is that—if we can go by the Timarchus-myth in Plutarch<sup>26</sup>—even when the descent was recognized as essentially psychic, and perhaps Hades itself a psychic state rather than a physical region, the hero experiences the 'descent' in a subterranean cave. This may not be a *sine-qua-non* of *katabasis*, for the famous

21. See Röhde *op. cit.* p. 186 n. 23. Many of these places were famous as *νεκυρομαντεῖα* or *ψυχομαντεῖα* for consulting the shades of the dead.

23. *Od.* xi. 25.

24. Paus. ix. 30. 6; cf. also Hyg. 88 p. 84, 19—20 Sch. Remarkable in connection with this are verses 962—973 of Eur. *Rhesus* in which the Muse says she will prevail upon Persephone to release the soul of Rhesus so that he shall not have to go to the lower world but instead continue to exist in the upper world (*βλέπων φάος*) as man-god (*ἄνθρωποδαίμων*), lying hidden in a cave in a land with silver viens (Thrace), even as the Bacchic prophet hath taken up abode among the rocks of Mt. Pangaeum, a god revered by those who know (*σεμνὸς τοῖσιν εἰδοσιν θεός*), and she is confident that Persephone will accede to her request because she is under obligation to show honour to any friend of Orpheus. Nock (*The End of the Rhesus*. *Cl. Rev.* vol. XL (1926), p. 184 f. points out that Orpheus was not consciously regarded as a god and suggests that the Bacchic prophet was an unidentified figure like Salmoxis. A being who is man (*ἄνθρωπος*) and also deity (*δαίμων*) concealing himself in a cave (*κρυπτός δ' ἐν ἄντροις*) instead of going to Hades and being worshipped as a god (*σεμνὸς θεός*),—are not all these all-too-familiar features of the Salmoxis-Pythagoras story being brought into association with the descent of Orpheus through his cousin Rhesus?

25. *Aen.* vi. 236—242.

26. *de gen Soc.* 590a. He descends into the crypt of Trophonius at Lebadeia in Boeotia, which was reputed as an oracle (*μαντεῖον*) in which the divine message was learnt through incubation.

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journey of Er, narrated in the *Republic*, does not originate in this manner,<sup>27</sup> but it is quite probable, in view of the Salmoxis-Pythagoras story in Herodotus, that the Pythagorean descent too followed the traditional pattern. And this may have given occasion for detractors, like Hermippus<sup>28</sup> of later times to parody the claimed Pythagorean descent as no more than a descent into a cave. Nor is it surprising if they did not stop at that but went on to suggest that the whole thing was an attempt to prove the doctrine of reincarnation by a cheap trick, little respecting the fact that in *katabasis* the soul returns to the same body instead of being born anew in a new body, which is reincarnation. The imposition of this on Salmoxis must of course owe itself to the ingenuity of the Greeks of the Hellespont and the Pontus, who were in a position to know something of the teachings of the Greek Pythagoras as well as the Thracian Salmoxis, their work being facilitated, if not inspired, by the superficially similar teachings of immortality of these two and their common association with a cave or subterranean chamber.

There is little doubt that Pythagoras and his teachings faced a lot of criticism, and even ridicule, from his very contemporaries onwards.<sup>29</sup> But when we consider that the descent of Orpheus itself was narrated in such a way as to obscure its true meaning and even bring him to disrepute, it is not surprising that Pythagoras' descent suffered the same fate at the hands of his detractors. Hippasus, we learn from Heracleides Lembus<sup>30</sup>, wrote a *μυστικός λόγος* travestying Pythagoras' teachings, and judging from the title attributed to the work, (if there was such a work), it must have parodied the descent account and the descent itself. In the light of this and the very context in which the words appear, I cannot but help thinking that the reference to Pythagoras as a *σοφιστής* in our story from Herodotus must be rendered in a sense that is anything but complimentary.

27. *loc. cit.* Er. 'died' in battle. Similarly Thespesius (Plut. *de sera num. vin; loc. cit.*) 'died away' (*ἐξέθανεν*) from concussion, having fallen from a great height and struck his neck. In such *katabasis*, as in death, the soul is thought to exit from the crown of the head 'whereby the sutures or seams thereof were disjoined and opened' (Plut. *loc. cit.*), this place being known as the 'Aperture of Brahma' (Skt. 'Brahma-randhra'. cf. *Katha Upan.* ii. 6. 16) in India and Tibet, the line of the sagittal-suture, where the two parietal bones articulate, and is examined by the Lama at death to determine if the spirit has departed hence.

28. See p. 12 f. below.

29. Heraclitus called him 'king of swindlers' (*κοπίδων ἀρχηγός*): see fr. 81. See also fr. 40 and 129; Ion of Chios fr. 4 (re this see p. 10 below) and fr. 2 in the light of this; also Hippasus apud Diog. Laert. viii. 7. I cannot agree that Xen. fr. 7 is a satire of Pythagoras' teaching of transmigration, as is generally believed.

30. apud. Diog. Laert. *loc. cit.*

It would appear, then, that the tradition of the Pythagorean descent to Hades was abroad at the time that Herodotus made contact with the Greeks of the Hellespont and Pontus and that not only the descent but also the doctrine of reincarnation were associated with Pythagoras while he was still in Samos,—that is, even before he established his school in Croton in South Italy. Though there is no assurance of the extent to which Empedocles was influenced by Pythagorean teachings, it is possible that his concept of this world, which to him was the equivalent of Hades, as a ‘roofed cavern’ (ἄντρον ὑπόστεγον)<sup>31</sup> owes something to the Pythagorean cave-Hades descent, though it is hardly likely that he, who showed an admiration for Pythagoras which almost amounted to veneration, would have cynically treated the Pythagorean Hades as no more than a cave.

There is, however, better evidence for the Pythagorean descent in Sophocles, for as the Scholiast *ad. loc.* observes, the poet must have had Pythagoras in mind when he made Orestes in his *Electra* (vs. 59-64) say :

τὶ γάρ με λυπεῖ τοῦθ', ὅταν λόγῳ θανῶν  
ἔργοισι σωθῶ κάξενέγκωμαι κλέος;  
δοκῶ μὲν, οὐδὲν ῥῆμα σὺν κέρδει κακόν.  
ἤδη γὰρ εἶδον πολλάκις καὶ τοὺς σοφοὺς  
λόγῳ μάτην θνήσκοντας. εἶθ', ὅταν δόμους  
ἔλθωσιν αὖθις, ἐκτετίμηνται πλέον.

(For where's the harm to be spoken of as dead,  
When really I am alive, and gather fame thereby.  
To my thinking, no rumour hurts if it profits us.  
Why, I have seen men often, men who are wise,  
Have themselves falsely reported dead; then, when again  
They come back home, honoured the more).

Here too the Pythagorean descent is treated as a pretended death and return in the same form, and the whole thing is viewed as a deception. Here too Pythagoras is classed as a σοφός, and even if Orestes thinks such people worth emulating, such chicanery would hardly allow the word to

31. fr. 120. Wilamowitz ('Die *ΚΑΘΑΡΜΟΙ* des Empedocles' *S.P.A.W. Phil. hist. Klasse* (1929) p. 636) takes this 'unaccustomed place' (ἀσυνήθης χώρος of fr. 118) to refer to a place of judgement to which the daemon went at death after each incarnation, and similarly Rathmann (*Quaestiones Pythagorae, Orphicae, Empedocleae* diss. Halle (1933) p. 100—101) and Long (*op. cit.* p. 59) find a conception of hell in Empedocles' teachings. Most recent scholars, however, follow the ancients and rightly understand the place of chastening as this earth itself.

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be translated as 'wise' rather than 'cunning' or, at least, 'shrewd'. Nor is this the only other place in the early evidence in which aspersions are cast on the 'wisdom' (σοφική) of Pythagoras, for Heraclitus calls it 'much learning that gives not intelligence', a polymathy,<sup>32</sup> while some think Ion of Chios too is being sarcastic when he refers to Pythagoras as 'truly the wise' (ἐτύμως ὁ σοφός).<sup>33</sup>

There is a single reference in Aristotle's extant works to a Pythagorean detail of Hades which says that the dead are frightened by thunder there.<sup>34</sup> Though other such details may have been preserved by him in the work *Concerning the Pythagoreans* attributed to him,<sup>35</sup> nothing else survives. On the other hand, the Peripatetic, Hieronymus of Rhodes admits that Pythagoras went down to Hades,<sup>36</sup> even if the punishment of Hesiod and Homer that he is said to have seen there is not above the suspicion of being inspired by Plato's condemnation of them in the *Republic*,<sup>37</sup> and that of men unfaithful to their wives, a subtle allusion to the presence of women in the school. Similarly the descent of Pythagoras is referred to in a fragment of the *Pythagorist*, a Middle Comedy play of Aristophanes,<sup>38</sup> in which the Pythagoreans alone of the dead are said to enjoy the privilege of dining with Pluto in Hades. These Pythagorists, who are a popular subject of ridicule in Middle Comedy, appear to have been ascetic philosophers<sup>39</sup> and to have kept alive the religious teachings and practices of the school, and it is not unlikely that much of the growing information on the descensions came from them. At the same time, a great part of it must have been the invention of comedians, detractors and unscrupulous biographers. A lot of this material would have appeared in the work *Concerning the Things in Hades* (περί τῶν ἐν Ἅιδου) attributed to the resourceful

32. Fr. 40 and 129; also in the light of these, fr. 81.

33. Fr. 4.

34. *An. Post.* B11. 94b33.

35. See Diels-Kranz *Die Fragmente der Vorsokratiker* 6th ed. Berlin (1951—52), p. 98—99 for a collection of these.

36. Fr. 42 Wehrli.

37. 377d f. The same accusation is found in Xenophanes (see esp. fr. 11) and it appears that criticism of Greek theology began with him, though even then the blame was being laid squarely on the shoulders of Homer and Hesiod for the old conception of the gods and heroes. A detail of desperate sinners hung up in Hades is found in *Gorgias* 525c7; see Dodds' ed. *Plato's Gorgias*, Oxford (1959) n. ad loc. (Cf. Vergil *Aen.* vi. 740). Probably Hieronymus derived it from Heracleides of Pontus who took the idea from the references in Plato. See on this I. Levy *Recherches sur les sources de la légende de Pythagoras* Paris (1926), p. 80 f. and see Heracleides fr. 74 Wehrli.

38. See Diels-Kranz *op. cit.* p. 480.

39. See the collection of fragments from Middle Comedy plays in Diels-Kranz *op. cit.* p. 478—480 which refer to them as pale, unshod and eating humble fare, which includes nothing that has had life.

Heracleides of Pontus,<sup>40</sup> though he himself attempted to account for these descriptions of Hades through the remarkable memory (*μνημῆ*) attributed to Pythagoras which enabled him to recollect his prebirth experiences,<sup>41</sup> and thereby confused the *katabasis* with the soul's passage to Hades after each incarnation,—a confusion which was, as we saw, not altogether new.

Most interesting in view of the insinuation in the Salmoxis-anecdote in Herodotus is the story attributed to Hermippus in Diogenes Laertius,<sup>42</sup> for this too, while it confuses *katabasis* and reincarnation, broadly implies that the whole thing about the Pythagorean descent to Hades was a hoax and the crude imposition of a charlatan and a humbug. We do not know whether Hermippus had an independent source for this,—in which case we would have had here an independent account of the supposed doings of Pythagoras which Salmoxis is alleged to have imitated. On the other hand, if Hermippus or his source (at one or more removes) derived it from the Herodotan account, it shows that even the ancients detected features of a *katabasis* there and also associated it with Pythagoras in the first instance.

According to Hermippus' story, Pythagoras, on coming to Italy, made a subterranean dwelling (*κατὰ γῆς οἰκίσκον*) and enjoined his mother to note and record all that transpired outside, and at what hour, and to send her notes down to him until he should ascend. She did so. Pythagoras, some time afterwards, came up withered and looking like a skeleton, then went into the assembly and declared that he had been down in Hades and even read out his experiences to them. The people were so affected that they wept and wailed and looked upon him as divine, going so far as to send him their wives in the hope that they would learn some of his doctrines; and so they were called Pythagorean women.

The story purports to explain how there came to be women in the school of Pythagoras, as perhaps the inclusion of the torments of unfaithful husbands in Hades mentioned by Hieronymous. In this connection it is

40. Diog. Laert. viii. 4—5=fr. 89 Wehrli. According to him Pythagoras claimed to have been in prior incarnations, Aethalides, then Euphorbus, then Hermotimus, and finally, Pyrrhus, a Delian fisherman, before he was born as himself; that when he was Aethalides he received from Hermes the gift of remembering all his soul underwent; that when he was Euphorbus, he used to tell about this 'and the wandering of his soul, how it transmigrated and into how many plants and animals it had come, and all that it underwent in Hades, and all that other souls await there.' (*καὶ ὅσα ἡ ψυχὴ ἐν* 'Αἰδῇ ἔπαθε καὶ αἱ λοιπαὶ τίνα ὑπομένουσιν.)

41. For a study of the evidence on this, see Cameron *op. cit.* and my article referred to in n. 19 above.

42. viii. 41.

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worth noting also that the fake descent here is alleged to have been made in Italy and not sometime when he was still in Samos. What is most remarkable, however, is that Pythagoras here gives proof of his having been in Hades by reading out to the assembly what had happened (*τὰ συμβεβηκότα*); that is, what his mother had passed down to him through notes,—that is, what had gone on *on earth* during his concealment. Clearly this is a parody of his recollection of the past; only, where Heracleides imputes the vision of Hades to this feat of memory, Hermippus associates Pythagoras' reputed memory of the past with the (pretended) descent to Hades. At the same time he maintains the traditional attitude towards the descent as a thoroughgoing piece of chicanery. On the other hand, when the story of the descent finally appears in Iamblichus,<sup>43</sup> the idea is used of carrying letters to the dead, which may have been inspired by Herodotus' account of messengers being sent by the Getans to Salmoxis in the land of the dead. (This is also paralleled in the practice Diodorus<sup>44</sup> observes among these people of casting letters addressed to dead kinsmen into funeral pyres with the expectation that the departing soul might carry them to them). If this is so, needless to say, the singular relationship of the Samian Pythagoras and the Getan Salmoxis has been reversed.<sup>45</sup>

As was mentioned earlier, Pythagoras' descent-visions would have become the content of a *μυστικός λόγος* or a *Book of the Dead* and it may have been this that Hippasus is alleged to have parodied. It would, in that case, have described the travails of the soul upon death and, as the account of Er, what is laid in store for the good and the evil there, and primarily served as a guide for the dead in the manner of the so-called Orphic Tablets.<sup>46</sup> From this work must come the observation in Herodotus

43. *Vit. Pyth.* 178. His source for this may be the Alexandrian doctor, Androcydes, from whom also probably comes the allusion to a judgement in Hades (*op. cit.* 155; 179). It may however contain one or two elements that are genuine, as, for instance, the separate place for the impious (*τῶν ἀσεβῶν τόπος*) in Hades where murderers are punished.

44. v. 28.

45. Similarly later observers reversed the positions and made Pythagoras the pupil of the Thracians. See Hermippus apud Jos. *contra Ap.* i. 22.

46. These tablets are described by Comparetti in *The Petelia Tablet* J.H.S. vol. III (1882) p. 111 and printed by Kaibel in his *Inscriptiones Graecae Siciliae et Italiae*, Berlin (1890), p. 157. He assigns them to the fourth and third centuries B.C. See also J. Harrison *Prolegomena to the Study of Greek Religion*, Cambridge. ed. 3 (1922) p. 572 *f* and the appendix by Prof. Murray in p. 659—673.

of the Pythagorean avoidance of wool at burials,<sup>47</sup> the more genuine of the scraps of information on 'the things in Hades' in Aristotle and other sources, especially the eschatological material in Alexander Polyhistor<sup>48</sup>, (which, unlike the psychological account intermixed with it, seems to come from a layer of old and genuine Pythagorean material.)

The question of whether the legend of the previous lives of Pythagoras appeared in the account of his descent to Hades, or, vice-versa, whether his experiences in Hades appeared in an account of his previous lives has been discussed fairly thoroughly by Rohde and others,<sup>49</sup> but on the basis of little more than conjecture. Rohde once took up the position that the former was the more likely<sup>50</sup>, but in view of the 'decisive objections' raised by G. Ettig<sup>51</sup>, came to favour the latter and assumed that the Pythagorean *anamnesis* included something about 'the things in Hades'.<sup>52</sup>

In our opinion, however, these two acquisitions of knowledge would have been kept as distinct from each other as their modes of acquisition,—though this is not to imply that the Hades-visions did not include visions etc. of the rebirth of souls, (they are found in the accounts of Er, Thespesius, Timarchus and Aeneas), or the eschatology revealed by them any evidence of the doctrine of reincarnation and its associated features. Indeed it should not be remarkable if substantiation was sought in and through *katabasis* for that very form of religious doctrine that makes especial use of *katabasis*, discovering through it a Hades in which, in addition to what is prepared for the good and the wicked, souls not eligible for liberation from the 'sorrowful weary wheel' of rebirth are returned to earth once more in new bodies.

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47. ii. 81. Here Herodotus, talking of the taboo on wool in burials and at temples, says, 'In this they agree with the so-called Orphic and Bacchic, which are really Egyptian, and with the Pythagorean; for it is unholy for anyone who partakes in these rights to be buried in woollen clothes. There is a sacred account (*ἱρὸς λόγος*) mentioned concerning these.' There is a great deal of controversy on the translation and interpretation of this passage. Linforth *op. cit.* p. 49 esp. takes this *ἱρὸς λόγος* to be a 'legend' and Egyptian, while Kern (see his *Orpheus*: Berlin (1920), p. 3 n. 5 and *Orphicorum Fragmenta* p. 249) treats it as a book, and Orphic or Orphic-Pythagorean at that. The allusion appears to be to a written account and of the Egyptians, but it makes it likely that the Orphics and Pythagoreans too included these matters in *ἱροὶ λόγοι* of their own.

48. apud Diog. Laert. viii. 31—32, (*ἐκριφθεῖσαν δ' αὐτήν.....κτλ.*)

49. *op. cit.* append. X, p. 600—601.

50. 'Die Quellen des Iamblichus in seiner Biographie des Pythagoras' Rh. Mus. vol. XXVI (1871) p. 558.

51. *Acheruntica* Leipz. Stud. vol. XIII, p. 289 f.

52. *Psyche* append. X. p. 600.

## *The Gift of a Kingdom*

WHILE traversing the dimly lit corridors of history in search of the older forms of land tenure in the low country, the writer had occasion to consult literature dealing with what must be one of the most exciting periods in the history of this country. It was both new and fascinating to one whose fragmentary knowledge of the period was confined to a few dates and names. The original purpose of the search was temporarily forgotten and it was absorption in the history of the times that has led to this article. A lawyer, however, will not dare turn his hand to writing history without some excuse; in this case, fortunately, there stood out an event which promised to be professionally interesting apart from its historical importance.

When the King of Ceylon, Dharmapāla who reigned from 1551 to 1597, decided that his successor should be no kinsman of his but the King of Portugal he took a decision which was momentous for the country and which had a lasting effect on its history. This decision was implemented by means of a Donation, a Ratification, and a Nomination by Last Will, and these involved solemn ceremonies, notaries, deeds, witnesses, etc. The documents which came into existence can without exaggeration be claimed to be constitutional documents of first rank importance and therefore it came as a surprise to learn that not much attention had been paid to them beyond noting their general content. This article attempts to present the documents in the background of the chief characters and the times, and also to give a critical analysis of their contents. With this statement of intent goes an apology for venturing to make some amateurish excursions into the field of Ceylon history.

### I

#### **Dharmapāla**

The central figure in this drama is Dharmapāla, King of Kotte and Emperor of Ceylon. In an age of stirring events and legendary Sinhalese heroes—Māyādunne, Rājasiṃha, Vidiye Baṇḍāra, Vimaladharma Sūriya, Edirille—Dharmapāla was indeed an important figure but a curiously negative one. No deeds of valour, victories, or military strategy are associated with his name, nor did he display any of the qualities of statesmanship

of the day. These were times when intrigue, treachery, and double-dealing were the accepted tools of statecraft but Dharmapāla was consistent in his policy of collaboration with the Portuguese. He was a Sinhalese king who came under Portuguese influence at an early age and soon not only adopted their religion but affected their manners and way of living as well, and he kept court in truly western fashion. When other Sinhalese kings were moved by sentiments of patriotism, if not actual self-interest, to fight the foreigner, Dharmapāla found himself inevitably ranged against them by difference of upbringing and religion, and above all, by a deep-rooted sense of obligation to his protectors. Something more of the life of this lonely figure must be known before we can fully understand the historic documents connected with his name in their true perspective.

Dharmapāla, the elder son of King Bhuvanekabāhu's daughter Samudra Devi was born in 1539.<sup>1</sup> While he was still an infant he was chosen by his grandfather as the successor to the kingdom of Koṭṭe over the king's sons by an 'inferior' queen.<sup>2</sup> To secure the throne for the young king after his death against the rival claims of Māyādunne, Bhuvanekabāhu enlisted the aid of the Portuguese with whom he was then on terms of friendship. Negotiations with Portugal culminated with the despatch of an embassy from Koṭṭe to Lisbon soliciting the favour of the King of Portugal's confirmation of the nomination of Dharmapāla.<sup>3</sup> There is evidence that Portugal acted with circumspection and had inquiries made as to the rule of succession although it is probably true to say that the final decision was based on political expediency.<sup>4</sup> Thus it was that in the year 1542 (or 1543) in distant Lisbon an image in gold representing the infant prince was crowned with much ceremony by John III, King of Portugal, as heir to the throne of Koṭṭe.<sup>5</sup> An Alvara (royal order or letters patent) of the King of Portugal, probably drawn up when the embassy was about to embark on its return voyage, confirmed the nomination of Dharmapāla

1. This date is assigned by *Ferguson*, 413, n.5.

2. The rule of succession governing kingship is not clear but it is possible that the nomination of a grandson was in keeping with tradition. See *Pieris*, I, 85; *Kandyian Customs*, (being answers given to the Dutch Governor Falck in 1769) quoted in *Pieris*, I, 523.

3. Text of the ola conveying this request is given in *Queyroz*, 234.

4. The King of Portugal was even advised by his Council to repudiate the confirmation if Dharmapāla was found not to be the legal heir. At the same time there is room for suspecting that Dharmapāla's nomination by Bhuvanekabāhu was contrived by the Portuguese as a means of strengthening their position in Ceylon. *Pieris and Fitzler*, I, Doc. 2.

5. The year of this event is given by *Ribeiro*, 9, as 1541 but *Ferguson*, 119, n.5, suggests that it took place in the following year. *Perera*, 26, makes it March 12, 1543, or the same date as the Alvara referred to in the text above.

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as the successor of the King of Ceylon and called upon the Portuguese in the East "to render him all support and assistance he may desire and protect him from all those who attempt to impede or oppose" the succession.<sup>6</sup>

Bhuvanekabāhu died at the hands of an unknown gunman in 1551 and Dharmapāla was without delay proclaimed king at Kotte, the Portuguese factor in Colombo playing no small part in the proceedings. The king who was only twelve years of age at the time had as Regent his father Vidiye Baṇḍāra, a proud and fearless man. Hardly had Dharmapāla ascended the throne when he was dealt a blow from which he was never able to recover and which in large measure accounted for the power exercised over him and the affairs of the country by the Portuguese throughout his reign. On hearing of Bhuvanekabāhu's death the Portuguese Viceroy in India, Noronha, came to Colombo, ostensibly to enquire into the late King's death. His real purpose, however, was to grab the dead king's treasure on which his covetous eyes had lain for some time. He wasted no time in seizing and forcibly carrying away from the capital all the gold, silver, precious stones, money and other treasures of the ancient Sinhalese kings that he could lay his hands on. Even the royal apartments were not spared and the plunder which was estimated at several hundred thousand pardoas was packed off in ships to Goa and Lisbon.<sup>7</sup> Not satisfied with these acquests Noronha forced on the young king an agreement under which the latter undertook to pay a large sum of money for a Portuguese expedition against Māyādunne. Noronha demanded a pre-payment which the king robbed as he was found the greatest difficulty in satisfying.<sup>8</sup> Noronha is also credited with having extracted from Dharmapāla recognition of the overlordship of Portugal.<sup>9</sup>

6. For the original of the Alvara, see *Schurhammer and Voretzsch*, I. Doc. 5. A translation is found in *Pieris and Fitzler*, I. Doc. 13. The Rājāvaliya's record of this event is that it "brought ruin on the country by giving the same into the hands of the Portuguese, and likewise poured contempt upon the religion." (Upham)

7. A number of these ships were reputedly wrecked off the coasts of Cochin and Cape of Good Hope.

8. Noronha was brazen enough to give a completely different account of his actions to the King of Portugal. In a letter to John III he says that what he did was in consideration for his overlooking Dharmapāla's failure to become a Christian, which, he alleged, was a condition laid down by the King of Portugal for supporting Dharmapāla's claims to the throne. He sanctimoniously adds that he was against acting in any way discreditable to the Portuguese! *Pieris and Fitzler*, I. Doc. 59. But his own countrymen in Goa did not share his view. See the letter from the Mesteres of Goa to John III condemning Noronha. *Pieris and Fitzler*, I. Doc. 63.

9. *Perera*, 30. But Couto and other writers do not refer to this. In any case the whole question of the alleged "vassalage" of Sinhalese kings to Portugal from the time of Vīra Parākramabāhu VIII is one deserving closer study. In the first place it has never been made clear exactly what form this feudal concept took when transferred to the international sphere. Secondly, there is difficulty in accepting some of the reasons given for this voluntary subjection, e.g. the hearing of a Portuguese canon being fired, the payment of a tribute of cinnamon in exchange for protection. Finally, although the

The effects of Noronha's deprivations were lasting for the king never recovered from the blow to his fortunes. He did not have the money to finance expeditions against his enemies and had to depend on the Portuguese for help. The Portuguese who were anything but slow to take advantage of the king's plight first got rid of Vidiye Baṇḍāra whose hostility towards them was proving troublesome and appointed his brother Tammiṭa as Regent. The latter was more tractable having been one of Bhuvanekabāhū's ambassadors to Lisbon where he had been specially favoured by the King of Portugal with the hereditary office of Chief Chamberlain to the kings of Ceylon.<sup>10</sup> He was also the first important personage in the royal household to be converted. From the point of view of the Portuguese there was no better person to counsel the young king and they never had cause to regret this decision for Dharmapāla soon became a puppet of the Portuguese. Dharmapāla who earlier resisted attempts to convert him finally became a Christian taking the name of Dom João after the King of Portugal.<sup>11</sup>

A great deal of Dharmapāla's life as king was spent in vain attempts to restore his lost fortunes. He protested against the plunder of Noronha and Lisbon had the grace to blush at the misdeeds of their Viceroy by pretending to treat the matter as a "loan" to Noronha. Noronha was reprehended and ordered to return what he had taken from the king and pay the value of anything sold.<sup>12</sup> Unfortunately for the king there was only a pretext at complying with these orders for he did not receive more than a fraction of what was taken; as for the balance there were vague promises of payment in instalments. When his demands became insistent the Viceroy, Francisco Barreto, arranged for a law suit to be brought against the King of Portugal in Goa in 1558. This unusual action ended in a decision that "the king of Portugal was not under obligation to pay him anything, because the State had spent much more on fleets than he had sent in the way of help."<sup>13</sup> Dharmapāla had also fallen prey to the wiles of Portuguese captains, officials, and other servants who contrived to divert

letters of the Sinhalese kings to the King of Portugal in their Portuguese versions are couched in terms of subjection there is nothing in either the letters or actions of the King of Portugal to suggest that he was dealing with any other than a friendly equal.

10. Alvares of March 16, 1543. Schurhammer and Voretzsch, I. Doc. 14. For translation, Pieris, I. 471.

11. Dom Joan, Dom John, Don Juan are other versions of his new name, the last being a popular Sinhalese form. The date of Dharmapāla's conversion and baptism is not certain but it was probably in 1557. Ferguson, 172-3. Pieris, I. 138, 501.

12. In Noronha's favour it must be said that he had a detailed inventory made of the treasure removed by him. Couto, 150.

13. Couto, 166.

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the money due to him into their own pockets by extracting from him orders for payment of money in their favour, sometimes on the ground of having supplied him with goods, often by way of gifts and favours. The Portuguese in Goa who were niggardly in returning direct to the king what belonged to him found no difficulty when it came to honouring his 'drafts' in favour of their own men and gladly debited it to his account. In short Dharmapāla was allowed to operate a 'bank account' with the money held for him by the Portuguese, the only snag being that he did not have the right to withdraw the money himself or close the account. He was in the impossible situation of being a pauperized monarch and a generous benefactor at the same time.

After Kotte was abandoned in 1565 and Dharmapāla took up residence with the Portuguese in Colombo his fortunes declined further. He was given a house and an allowance or pension for his maintenance by the Portuguese since only a few royal villages were left to him. But the practice of fleecing him continued.<sup>14</sup> True, repeated attempts were made to put a stop to this extortion (not so much, one suspects, in the interests of the king as of the Portuguese exchequer in Goa) but there is little doubt that the practice continued right up to his death.<sup>15</sup> Not only the background of the principal character but the immediate circumstances in which these events took place will help us to acquire a better understanding of them. In 1580, the year of the first donation, Colombo was under the seige of Rājasiṃha and the defenders were reduced to desperate straits when Albuquerque arrived from India with a relieving force. When he gifted away his kingdom Dharmapāla had virtually ceased to rule over his country and the future held no hopes. As in the case of his personal fortunes he acted liberally when his position was seemingly most hopeless—he donated his kingdom when hardly any sovereign rights were left in him. Even when the donation was ratified three years later Rājasiṃha was at the height of his power and Dharmapāla's position had not improved. The irony is that a king who was prevented from making grants of money should gift his kingdom to his protectors.

14. As *Ferguson*, 102, n.2, puts it, he lived "under Portuguese protection (and extortion) for over thirty years."

15. Express prohibitions against obtaining grants of money from the king were made by Barreto (*Ferguson*, 166, n.3), King Dom Sebastian (*Couto*, 242), and King Philip (*Couto*, 167). The position taken by Philip was that the money owing to the king (on Noronha's account) had been exhausted by his past liberality. But Philip insisted that the king should continue to receive a pension while he enjoyed Portuguese hospitality.

## II

## The Donation

The fact of Dharmapāla's donation of his kingdom and the existence of a deed in favour of the King of Portugal were established as historical facts long before the supporting evidence was available. The gifting of a kingdom cannot be considered an unique event for other instances are known of similar gifts during roughly the same time.<sup>16</sup> It was the discovery of a document in the royal archives in Lisbon that makes it possible for us today to reconstruct the events that took place almost 400 years ago. This was a Portuguese deed and it appeared as an appendix to Ribeiro's "The Historic Tragedy of the Island of Ceylon" published in Lisbon in 1836. A translation of this into English was made by Donald Ferguson and published in 1889.<sup>17</sup> The translator was a scholar whose chosen field of study was the Portuguese period and whose "historical studies are noted for the care and accuracy and thoroughness which were his foremost characteristics."<sup>18</sup> The writer feels fully justified therefore in accepting this English version for his analysis and all the more for the reason that Ferguson, no doubt on account of the importance of the document, took no liberties in translating but, as he says, "tried to follow the Portuguese original as closely as possible, even to the peculiar use (and disuse) of capitals and the almost entire absence of punctuation." Naturally this does not make for easy reading and differences in the style of writing deeds have added to the difficulties in construing the document. But this faithful translation not only gives the details of the donation but contains internal evidence testifying to its genuineness and reliability.

A fact which emerges on a careful reading of the translation is that the Portuguese deed in the Lisbon archives could not be the original deed signed by Dharmapāla. A study of the structure of this document reveals its origin and significance. The document is in three separable parts and the whole is in the form of a narrative, each part taking the story a step further. In the first part the narrator is Antonio Ribeiro "notary public of the deeds of our Lord the King in this said city" (i.e. the King of Portugal, not Dharmapāla), and he gives an account of the act of donation and how

16. *Queyroz*, 530, says the King of Portugal acquired the kingdom of Pegu by gift inter vivos. Dharmapāla himself is reputed to have received the kingdom of Kandy as dotal property on his second marriage. *Couto*, 258. *Ferguson*, 256 n.6.

17. *The Orientalist*, Vol. III, p. 28.

18. *Ceylon Literary Register (Third Series)*, Vol. I, p. 1.

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a deed came to be written. This is the material part of the document. The same notary is the narrator of the second part in which is made clear that what preceded is a copy "well and faithfully" transcribed from the original. The notary also relates that four copies in all were furnished by him to Captain Manoel de Sousa Coutinho "in order to send this said gift to the Realms of Portugal by four ways."<sup>19</sup> These copies were "true copies" bearing the notary's public seal. The third part consists of an attestation by Dr. Jorge de Cabedo, chief guardian of the Torre do Thombo, and his secretary, Christovao de Benavente, signed in Lisbon on the 6th of April, 1582. This supplies the information that one of the copies of the deed of gift was sent to the royal archives by order of the king of Portugal and deposited in the "drawer of gifts" and later transcribed "word for word" by Cabedo.<sup>20</sup> It is a true copy of this entry which was published in Ribeiro's book. Ferguson's translation, therefore, is neither of the original nor even of a copy made by notary Ribeiro and sent to Lisbon (in all probability this went back to the "drawer of gifts") but since there is no reason to doubt the statements in the document that the copying at the various stages was accurately done we may be satisfied that we have a good version of the original.<sup>21</sup>

From the first part of the document which as we have seen is a copy of the deed of donation we have the following information of the donation.

*Time and Place.* The deed is dated the 12th day of August, 1580, and the place of its execution is given as the dwelling of Dharmapāla in the city and fortress of Colombo.

*Form of Deed.* The deed was written in the first person by the notary in his 'draft-book.' It was signed by the king with his Royal Seal and also by the following persons as witnesses—Father Sebastian de Chaves (Guardian

19. It was the practice to send despatches in quadruplicate, one in each ship. *Ferguson*, 165 n.1.

20. The entry is in the *Livro de Leitura-nova* entitled "Islands." *Orientalist*, III, 28.

21. Without doubt the copy made by the guardian of the Lisbon archives (and therefore the copy supplied to the editor of Ribeiro) was a "true copy" of the document sent to Portugal. But it would be a mistake to assume on the basis of modern practice that the notary's copy was a verbatim transcription of the original. The notary himself says that the copy was "set in order as is right." Some deviations from the original are easy to spot, as when he says that he wrote the gift in his 'drafts' or 'draft-book' (a fact which would hardly appear in the original but is a useful piece of information since it tells us where the original is to be found). There are some places however where it is not clear whether he was following the original literally, or was commenting on the original, e.g. when he says that the king and witnesses signed the deed was he incorporating in the copy a statement relating to the execution of the original or did this appear in the original. If it is the latter it would mean that the signatures were fixed to the document before the actual writing, a practice which was not unusual at the time. See below p. 119

of the monastery of St. Anthony in Colombo), Father Manuel Luiz (Vicar of the same monastery), Steven Figueira (late Widower Magistrate), Pero Jorge Franquo (Judge ordinary), Antonio Lourenco (householder), Dom Steven (the king's Chief Chamberlain), Dom Antam (noble), Mudaliyars Andre Bajom and Dom Francisco Arriquez, Dom Fernando (the king's Interpreter), and Dom Lourenco Fernandez (the king's Secretary). Acceptance of the gift by Captain Manoel de Sousa Coutinho in the name of the king of Portugal is also stated and he too was probably a signatory to the deed. Even the notary "as a public person stipulating and accepting" accepted the gift in the name of the king of Portugal.

*Contents of Deed.* A characteristic of this deed is that it is a record of a solemn ceremony witnessed by the notary and having a significance quite apart from the formal deed drawn up later. The notary begins his narrative by recounting how he was summoned to the palace of Dharmapāla and how there in the presence of the witnesses the king made an oral declaration to him. The king spoke in Sinhalese notwithstanding, as the deed says, "his being able to speak and understand the Portuguese language" and his words were interpreted by the king's Interpreter. The king first declared his title to the Realms of Ceylon by virtue of being the adopted son and heir of Bhuvanekabāhu "with the authority of the Lord the king of Portugal Dom Joam III." He next referred to the dismal fact that Māyādunne and his son Rājasimha had dispossessed him of his Realms and compelled him to abandon Koṭṭe. What follows is perhaps the most interesting part of Dharmapāla's declaration for he gives the reasons for making a gift of his kingdom.

These are :—

(a) The protection extended by the king of Portugal through his Viceroy and Captains to Dharmapāla and their efforts to restore him to his Realms. He was particularly appreciative of the vigour with which the expensive war against Māyādunne was conducted by the Portuguese at the cost of many Portuguese lives.

(b) The fact that he was old and did not enjoy good health<sup>22</sup> and was "without sons and heirs who would directly succeed on his decease."<sup>22a</sup>

22. He was only 41 years at the time but the unsuccessful attempt to poison him some years earlier had permanently impaired his health.

22a. The two marriages Dharmapāla had contracted by then were without issue. A third marriage shortly before his death also failed to produce an heir.

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(c) That he was much indebted to the kings of Portugal "for many benefits and favours which he has received from them." He mentions in particular: (i) the kind help and advice in their letters, (ii) their directions to the fathers of the order of St. Anthony as a consequence of which he came "to obtain light and knowledge of our holy catholic faith and embraced and was converted to it which he esteems more than all the things of the world," (iii) their maintaining him in his royal estate and being treated by their Viceroy, captains and other vassals "with all honour and respect as is paid to their own persons."<sup>23</sup>

The one substantial motive that emerges is gratitude for his conversion to Catholicism and although Dharmapāla declared that the decision to make the gift was "of his own motion and good and free will" the verdict of historians that it was induced by the Franciscan priests is certainly nearer the truth. In fact Dharmapāla commanded the observance of the terms of the gift "for the good of his soul and the disburdening of his conscience that all may be seen to be of much service to God our Lord and yet is much below what he owes because of the little which he is able at present to do." It was as much a gift to the Church as to the King of Portugal and not surprisingly we find Dharmapāla "with all due humility and reverence as an obedient son" begging the apostolic See of Rome and the Pope to accept the gift.<sup>24</sup>

When it came to declaring the terms of the gift Dharmapāla used words to indicate that it was an absolute and unconditional transfer of power. He made over all his Realms and the right of rulership to the king of Portugal and his successors who "may do with it as with their own property which it is by virtue of this said gift." It was a gift in perpetuity and was to be effective from Dharmapāla's death. The declaration continued with a statement the purpose of which was to silence any objections to the donation on grounds of illegality or *contra mores*. Dharmapāla desired that his grant and gift "be fulfilled in all and by all without any contradiction and if there be any fault or defect, he by his royal authority supplies it and it is supplied and he commands that this be fulfilled and be valid as law and any laws privileges to the contrary notwithstanding forasmuch as he declares this

23. Nothing could be further from the truth. His royal estate comprised a few villages at most and the treatment he received at the hands of the Portuguese was the subject of bitter complaint, at regular intervals.

24. The Pope is also cast in the role of executor for he is expressly asked to see to the fulfilment of the gift.

to be his pleasure and will." This was a bold and surprising assertion that he stood outside the existing law. It is contrary to the view generally held that the Sinhalese king was bound by laws, customs and usages imposing limitations on his royal power.

It was at the conclusion of his declaration that Dharmapāla commanded the notary to make a "deed of gift." As we know the deed took the form of a faithful record of the events that had just taken place and was probably written at the same time or soon afterwards.

The recipient of the gift is described as "Lord Dom Henrique who is now king of the Realms of Portugal and to his successors." This monarch (Cardinal King Henry) had already died seven months earlier but news of his death had apparently not reached Ceylon. King Philip who in due course received the deed of gift probably influenced by the difficulties he had recently met with in establishing his claims to the throne of Portugal asked for a further deed from Dharmapāla formally disinheriting his relatives and his election by the people of Ceylon as their king.<sup>25</sup> This led to the second act of the drama, the ratification of the donation.

### III

#### The Ratification

*Our knowledge of the ratification of the donation by Dharmapāla is largely based on the account given by Queyroz who purports to reproduce a document which was made on the occasion.*<sup>26</sup> This version (the only one available in English) gives the impression that there was only one document on which it was based. But the Dutch documents discovered by Mr. F. H. de Vos and published in the "Orientalist"<sup>27</sup> reveal that the ratification led to the writing of four documents and that Queyroz has combined three of these to appear as the deed of ratification. The fourth is not mentioned by Queyroz. We have no information as to where the Dutch documents were found or as to their authenticity but they are obviously careful translations of the Portuguese text as a comparison with

25. Philip's request is mentioned in a letter to the Viceroy. *Ferguson*, 258, n.2. Both Ceylon and Portugal appear to have had a common problem at the time—the rule of succession. John III was succeeded first by his grandson Sebastian and on the latter's death by his brother Cardinal Henry. When Henry died without naming his successor the direct line of John was extinct and Philip who was John's nephew and also his son-in-law succeeded but only after a struggle.

26. *Queyroz*, 524 et seq.

27. Vol. III, 111, 131, 193.

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Queyroz will confirm. Since the Dutch tried to base their claims to the littoral on the right of conquest from the Portuguese, they were concerned about the legality of Portuguese possession, and this fact probably accounts for the translation of these documents. These documents are also important because they show that Queyroz has given an abridged version and, indeed, that he may not be accurate in certain places. Queyroz is also clearly guilty of mixing up the sequence of events. The Dutch version, on the other hand, is fuller in detail and in presenting the documents separately gives a truer picture of the events that had taken place. The two versions however are substantially in agreement to make Queyroz a safe authority and it is only necessary to refer to the Dutch documents in order to supplement Queyroz or to note discrepancies of some importance.

The four documents were connected and were pursuant to Dharmapāla's intention that the King of Portugal should be his successor. The first three were prepared by the same notary, Antonio Ribeiro, in the same style as the original deed of donation but the fourth which appears as an appendix in the Dutch translation does not show the same formalities of execution as the others. We shall consider the documents in their proper order.

(1) The first we may call the deed of ratification.<sup>28</sup> This deed is in the same narrative style although it begins with a typical notarial flourish.

*Time and Place.* We may fix the date as 4th of November, 1583, which is the date given in the Dutch translation. Queyroz gives it as 12th, November, but since this deed would have been the first in order of execution and the others are dated 4th of November we can only presume that Queyroz has made a mistake. The place is the same, Dharmapāla's palace in Colombo.

*Form of Deed.* As on the earlier occasion the deed records an oral declaration of the king made in the presence of witnesses. The king's declaration was preceded by a statement by the notary made at the request of the king in which he testified to the fact and substance of the original deed of donation. The deed was written in the notary's "draft-book"<sup>29</sup> and signed there by the king and the witnesses who were the guardian and

28. *Perera*, 45, says that the deed (more likely a copy) is in the Torre do Thombo, Gavetas 14-2-24.

29. "testamentaire notulen," according to the Dutch translation. Queyroz omits this information.

the vicar of the Monastery of St. Anthony, the king's Chief Chamberlain, the Commander of the king's guard, the king's Secretary, the king's Interpreter, the Fiscal, the Judge Ordinary, two Vreadores, and two clerks of the factory. Acceptance in the name of the king of Portugal by Captain Joan Corea de Brito is also recorded.

*Contents of Deed.* Dharmapāla ratified the earlier donation and made a further gift of his kingdom to Dom Philip, "King and successor to the Realms and Seignories of Portugal, and to his successors." The gift was to take effect after his death and was subject to the proviso that he left no heirs to succeed him. Then followed the clause, which Phillip had wanted, in which Dharmapāla disinherited any kinsman of his who claimed the right to succeed him. Although Queyroz stops at this point, in the Dutch version the king goes on to denounce such kinsmen as rebels and traitors who deserved to lose all property, right and succession they pretend to have.<sup>30</sup> The proviso saving the rights of his heirs was considered important for it was repeated at the end that if Dharmapāla should have sons or daughters they should inherit and the donation was null and void.<sup>31</sup>

(2) The Instrument of Nomination of the King of Portugal as successor of the King of Ceylon. This is a notarial record of the second event that took place after the ratification. It is also the deed the contents of which find no mention in Queyroz. Dharmapāla in the presence of the same witnesses and such of his subjects who were also there commanded his Interpreter to say after him<sup>32</sup> that he declares Philip, king of Portugal to be his heir and successor to the kingdom of Ceylon after his death. The declaration continued that he "took from all homage and solemn oath which the Christians used to do on their missal books and the heathens according to the manner of their laws and temples as they are accustomed to, that they will obey and acknowledge as their King and Lord, the said King of Portugal and his successors after his death of the King of Ceylon, Dom Joan, as they have similarly in the past sworn and promised and said yes." Difficulties in the text prevent a definite rendering of the last portion of the document but it would seem that the Chief Chamberlain, the Captain of the King's Guard, the Vicar of St. Anthony's, the king's Secretary and his Interpreter conformed (or agreed to conform) to the

30. For some reason Queyroz has transposed this passage to the description of the kingdom of Kandy in the fourth document where it is clearly out of place.

31. In the Dutch translation the notary says that he interpolated this clause between the signatures of certain witnesses, suggesting that this was said after the execution of the deed, but the text is obscure.

32. Dharmapāla would have spoken in Sinhalese as on the previous occasion and wished to be translated into Portuguese.

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king's wishes. All this is testified to by the notary who signed the document and confirmed by other witnesses. It is not mentioned that the king signed the deed but the document carried the king's seal.

This document could be the so-called last will of Dharmapāla which both Couto and Queyroz refer to and which they say they were unable to trace.<sup>33</sup>

(3) Instrument of Acceptance. Following close on the heels of Philip's nomination as heir there took place the final act of this drama. This was the acceptance or approval by the people of Dharmapāla's intentions and acts. In this way it was sought to satisfy the second of Philip's stipulations, namely, that he be elected king by the people of Ceylon. On the same day and in the presence of the same persons with the addition however of all the lieges of the Realm who were summoned by Captain Brito, the notary Ribeiro has recorded, that on the orders of the Captain he read to the assembly from the documents he had made the declarations of the king of Ceylon, that is, the donation and its ratification and also the nomination of the King of Portugal as his heir. Since there remained the question of obtaining the formal approval of the people for the nomination of the heir the people were required to elect procurators<sup>34</sup> who had authority to accept and approve the nomination in the name of the people. Immediately two gentlemen of the (royal) household, Dom Antonio and Dom Alfonso Masante, were elected and after being properly clothed with powers of attorney they in the name of the people accepted the King of Portugal and his successors for their king on the death of Dharmapāla. They also approved the donation and ratification. According to Queyroz they renounced "all right and claim which the said people (i.e. of Ceylon) have or can have to name and elect a king" on the death of Dharmapāla. This account differs from the Dutch document which does not contain a renunciation of the rights of the people. The Dutch version is that the Interpreter, Dom Ferdinando, said (presumably on the Captain's orders) that all the declarations contained in the various documents shall stand confirmed and that the king of Portugal shall enter into the rights, privileges, actions and claims of Dharmapāla on the latter's death, and that the people will have to acknowledge and obey the King of Portugal as if he were their own natural king.

33. *Couto*, 414, *Queyroz*, 523, 528. See also *Pieris*, I. 311. The deed of donation and the last will are sometimes mistaken to be one and the same thing. This may be due to the fact that the deed of donation has certain characteristics of a testamentary disposition. In fact in one place the notary himself calls it a 'testamentary deed.'

34. Or 'proctors' which is the term used by Fr. Per era in his translation of Queyroz.

The signatories to this instrument were the procurators, all the witnesses who signed the deed of ratification, Captains de Brito and Coutinho who accepted in the name of the King of Portugal, and the notary. It was finally sealed with the king's Seal.

(4) The description of Dharmapāla's kingdom. This is given by Queyroz as forming part of the deed of ratification but the Dutch translation shows it as a separate document. It seems generally to be accepted that this description was given partly by the mohottālas<sup>35</sup> who were assembled, and partly by the king but there is no evidence that it was recorded on the orders of the king or that a formal document was drawn up. Without going into details it is sufficient to mention that the various districts of the kingdom are more fully described in the Dutch document. Queyroz has not only left out a number of details but when including the kingdom of Kandy as one of Dharmapāla's territories refers to "the tyrant D. Joao, who may be considered an enemy captain and rebel against the Crown." We know however that in 1583 it was Rājasimha who was ruling in Kandy and therefore if there was any reference to the then ruler of Kandy it should have been to him.<sup>36</sup> But the Dutch translation shows only the words "Do Joao." That the rest of the sentence has been left out is clear enough but what is not clear is why Queyroz should have supplied the hiatus with a clause taken from the deed of ratification to make a sentence which is meaningless. Basing oneself on the preceding sentence a more likely solution is that D. Joao here refers to Dharmapāla who "declared that there pertained to the Crown etc."

#### IV

#### After the Death of Dharmapāla

The account of the transfer of Ceylon to the Crown of Portugal is not complete without describing the events following Dharmapāla's death.

Dharmapāla died in Colombo on the 27th (or 28th) of May, 1597. Almost immediately after his burial there assembled in the fortress on the orders of General D'Azevedo all the fidalgos of the royal household, mudaliyars and principal persons, officials of the Chamber of Colombo, priests, and the magistrate. The magistrate who addressed the audience

35. Were they the "lieges of the Realm" mentioned in the Instrument of Nomination?

36. It cannot refer to Konappu Baṇḍāra, alias Dom Joao of Austria who later became Vimaladharmasūriya I and an enemy of Dharmapāla because he seized the Kandyan crown only in 1592.

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reminded them that Dharmapāla had by his will nominated the King of Portugal as his heir because there was "no one else left to him who by right should succeed him to that crown." He then called upon assembled persons to elect procurators who would take the oath of loyalty to their new king on behalf of all. Eight persons were nominated, all being Christians, and they swore on the missal book (i.e. Roman Catholic book of prayers) "to acknowledge the King of Portugal, whom thus by this present act we elect and swear to as our king and lord ..... there being no other who of right may have and can inherit his (Dharmapāla's) crown and realm." This ceremony was followed by a parade through the streets of Colombo with Dom Antao, who was one of the procurators, carrying a banner bearing the arms of Portugal and in appointed places crying, "Real, real, real, for the most mighty lord, the King of Portugal."<sup>37</sup> Those who accompanied him returned the acclamation. Couto<sup>38</sup> from whom the above account of the events is taken adds that a deed was drawn by Manoel da Costa, "notary public of notes, in the book of notes," and that all those who participated in the ceremony signed it. Couto claims to have based his account on a copy of this deed which he found in the Lisbon archives in the "book of contracts and treatises of peace." All this tallies with our reconstruction of the donation and ratification and lends authority to his account. As to the date of this deed it must have been the same day as the ceremony, i.e. 29th May, 1597.<sup>39</sup>

Ribeiro<sup>40</sup> gives a different version of these events. According to him the Portuguese gave an undertaking to uphold the laws and customs of the Sinhalese before the procurators took the oath of loyalty. This promise is made to appear as a condition to their accepting Philip as King of Ceylon. But this version has confused the proceedings of the Malvāna Convention which took place sometime later with the ceremony of allegiance held in Colombo no sooner Dharmapāla was buried.<sup>41</sup>

37. The word "real" which means "royal" was a word of acclamation used at a coronation. *Ferguson*, 415, n.1.

38. *Couto*, 413 et seq.

39. *Ferguson*, 415 n.3, refers to a letter of Philip to the Viceroy dated 21st November, 1598, in which he requests that formal deeds be drawn up in connection with the inheritance. Probably the copy had not reached him when he wrote the letter.

40. *Ribeiro*, 91 et seq.

41. Even *Pieris*, I. 311, follows Ribeiro in his description of these events except to correct him by saying that the ceremony took place at Malvāna. This, of course, is wrong for the fact of the ceremony in Colombo is clearly established. The confusion is also evident in the same historian's *Ceylon and the Portuguese 1505-1658*, p. 139, where he gives the date of the Malvāna Convention as 29th September, 1597. Doubts have been cast on the Convention of Malvāna by a recent writer. *Abeyasinghe*, *The Myth of the Malvāna Convention* (*The Ceylon Journal of Historical and Social Studies*, Vol. 7, p. 67).

## V

## Some Legal Aspects

Before we leave these historical documents some comment is necessary on questions touching law. The formalities of their execution have already been detailed and a matter arising therefrom is the writing of deeds in formal style by a notary public in sixteenth century Ceylon. The notary, of course, is a very familiar figure today but the question must surely arise, what was a Portuguese notary public doing in Ceylon before the country passed into Portuguese hands? In order to answer this we have to understand the position or status of Colombo at the time of the events described. From the first visit of the Portuguese Ceylon appears to have attracted a number of Portuguese settlers in addition to the officials and servants of the factory that was established by them in Colombo. They were settled chiefly in Colombo and Kotte. Even in the time of Bhuvanekabāhu their numbers would have been considerable for that king complained to the King of Portugal that many Portuguese settlers had forcibly seized the lands and gardens of his subjects.<sup>42</sup> A magistrate to administer justice among them was left behind by Noronha when he visited Ceylon in 1550,<sup>43</sup> and it is not improbable that the notary public made appearance about the same time. Noronha also ordered the Portuguese settlers, against whom complaints of unruly behaviour had been made, to live together in Colombo which "in course of time grew till it had 500 Portuguese families besides many others of the people of the country, a handsome row of houses, well laid out streets, and four Monasteries of the four (Religious) Orders."<sup>44</sup> It would not be long before such a community developed into a civic body and thus Colombo came to enjoy the rights and privileges of a Portuguese city. Within the city's limits Portuguese law would have applied, at least to the Portuguese themselves. Certainly when Dharmapāla sought refuge in Colombo it was to a Portuguese "Cidade" that he came and although this was undoubtedly part of his kingdom he had long ceased to exercise any authority over it. A notary would have been essential to the needs of this organised community and one of his principal tasks would have been to attend to the property transactions of the settlers, whether it was the writing of gifts, transfers, or last wills. The notary's "draft-book" or "book of notes" mentioned in these documents was where he made a record

42. Schurhammer and Voretzsch, I. Doc. 8. For summarised translation see *Ribeiro*, 27.

43. *Couto*, 154.

44. *Queyroz*, 308. This was a description of Colombo in 1554.

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of these transactions and, as disclosed in the copy of the deed of donation, this book remained in his possession. The suggestion is strong that there was only one notary and he enjoyed an official or semi-official status, in which case the same book would have been continued by his successors.

An interesting question is how the King of Ceylon could have been a party to a deed having many foreign elements. A deed in the Portuguese language and drawn up by a Portuguese notary can easily be mistaken for a Portuguese deed in which case its validity is in question. But in the writer's opinion Dharmapāla did not use any other than conventional Sinhalese forms to give effect to his intentions. This will be clear when the documents are considered in the light of Sinhalese private law.

The right of an owner of property to dispose of it by gift or bequest was recognised in Sinhalese law and gifts were commonly made in consideration of receiving assistance and support or for past assistance and its continuance in the future.<sup>45</sup> Sawers says that "it was exceedingly common for old persons having no children to take up their residence in their old age with relations or strangers, in whose favour they, in the first instance, executed a deed of gift or bequest, transferring the whole of the donor's property to the donee for the sake of assistance and support."<sup>46</sup> Such transfers were in perpetuity (i.e. *praveni*). Dharmapāla's donation containing prefatory remarks as to the reasons for making it and the express statement that it was a gift in perpetuity shows strong resemblance to an ordinary gift. The study of Sinhalese law relating to the different ways of making a gift is also of interest. Gifts and bequests whether of movables or land were made either by oral declaration or in writing, the former being the older form.<sup>47</sup> Oral grants of land by the king had equal validity with a grant ratified by a *sannas*.<sup>48</sup> The intention to dispose by way of gift, and clear and satisfactory proof of an act of donation were sufficient to constitute a valid gift. So a declaration by the donor in the presence of several witnesses accompanied by some ceremony such as the delivery to the donee of a blank *ola* signed by the donor, or the taking of the donee's hand, perfected a gift even of land.<sup>49</sup> When Dharmapāla at the solemn ceremony of August 12, 1580, declared that he "now gives and donates . . . and hands and makes" over his Realms to the King of Portugal he satisfied these requirements of a verbal gift.

45. *Armour*, 96. *D'Oyly*, 61.

46. *Sawers*, 20.

47. *Armour*, 90. *D'Oyly*, 60. *Sawers*, 29, says that written deeds were not common before the reign of King Kirti Sri.

48. *Armour*, 99.

49. *Sawers*, 30. *Armour*, 97.

But even if we are to assume that the intention was to effectuate the donation by a deed it can still be shown that the essentials of a written deed in Sinhalese law were complied with. Sinhalese deeds were not formal documents but "mere written Records of the transaction, being signed neither by the parties, the writer, or the witnesses. In other respects, they are in the nature and bear the tenor of regular vouchers reciting the contracting parties, the amount or object, the condition of transfer, payment and interest, and specifying the names of the witnesses and sometimes that of the writer, and the date."<sup>50</sup> Even in the case of a deed greater importance was attached to the witnesses to the writing than to signatures. If the property transferred was considerable, five witnesses, and frequently more, were necessary<sup>51</sup> but it was not customary for them to sign.<sup>52</sup> The mark or signature of the donor was not essential although the general practice was for the executor of the deed "to make a mark by a mere scratch or by writing one letter on the leaf before it was written upon."<sup>53</sup> Delivery of the deed to the donee was not required and it could be entrusted to some other person.<sup>54</sup>

The style of notary Ribeiro's deeds now becomes clear for in recording the transaction to which he was a witness he was in the role of a writer of a *sannas* to whom the donor had communicated his intentions and delivered a blank ola with his signature.<sup>55</sup> A circumstance also pointing in the same direction is that imprecations against those who would disturb the possession of the donee, as are found in the deed of Ratification, were usual in Sinhalese gifts and had a special significance.<sup>56</sup> There can be no objection as such to the deed being written in Portuguese when it is remembered that Dharma pāla made it a point to speak in Sinhalese and that the record of the transaction was required for despatch to Portugal.

If then Dharmapāla adopted the practice followed by ordinary persons when making gifts or bequests of their property the gift would also attract other rules affecting such transactions—in particular the rule about revocability of gifts. Generally speaking all donations and bequests of land

50. D'Oyly, 61.

51. D'Oyly, 61.

52. Sawers, 29.

53. Sawers, 29. *Armour*, 97, says the deed could be signed before or after writing.

54. *Armour*, 97.

55. The practice was for royal grants to bear the sign manual "Śri" and not the king's signature which was used only in correspondence. *Fr. S. G. Perera*, *The Signatures of the Kings of Ceylon* (Ceylon Historical Journal, Vol. 1, p. 321.)

56. Sawers, 29. *Armour*, 99.

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were revocable by the donor in his lifetime.<sup>57</sup> This is relevant because we know that Dharmapāla was dissatisfied with the behaviour of the Portuguese towards him and that his complaints against them to the King of Portugal and the Pope mounted as he regained his possessions.<sup>58</sup> The king had every reason to feel bitter because the recovery of his lands did not lead to an improvement in his financial position since the Portuguese were already acting as masters of the land. Why did he not revoke the gift which did not even contain a clause debarring his right of revocation? An obvious reason is that Dharmapāla was incapable of taking a strong line of action, and he certainly would have been in an awkward position if he was suddenly presented with an inflated bill of charges for services rendered to him by Portugal. Sinhalese law was on the side of the Portuguese if they demanded money as the price for submitting to a revocation of the donation. This was so because when gifts to strangers were revoked the donee must be indemnified to the extent of what acceptance of the gift had cost him.<sup>59</sup> In this case it would have been the money spent on maintaining Dharmapāla after he took up residence in Colombo and all the expenses of the war against his enemies—altogether a tidy sum.

To conclude these comments we turn to the instrument nominating Philip as heir to Dharmapāla, sometimes referred to as Dharmapāla's testamentary act. The notion of a will was unknown to the Sinhalese<sup>60</sup> and to call this a will would be to dress it in modern garb. It is in fact only a record of the appointment of a successor, something which a king placed in his position was bound to do. In a sense it is the most important of the documents because it was this more than the Donation and Ratification which made Ceylon a possession of the King of Portugal. It was the only document referred to at the historic oath of allegiance ceremony in Colombo after Dharmapāla's death because it was sufficient to establish Philip as legal heir. The Donation and Ratification only bound Dharmapāla closer to the Portuguese and gave the latter a good pretext for prolonging their stay in the country.

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57. *Sawers*, 20. *Armour*, 90, 91.

58. *Pieris*, I. Ch. 15.

59. *Armour*, 90, 91.

60. *Hayley*, 318.

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# The Atomic Theory of the Theravāda School of Buddhism

ONE of the theories of Theravāda Buddhism, without, apparently, any antecedent history in the Pali Canon itself, is the theory of *rūpa-kalāpas*. A post-canonical development in all its essentials, it makes its first appearance in the *Visuddhimagga* and in the Abhidhammic commentaries. In its fully developed form, however, it occurs in the manuals and commentaries of the twelfth century and later, notably the *Abhidhammatthasaṅgaha* of Anuruddha, its Sinhalese *sammē* by Sāriputta, its Pali *ṭīkā* by Sumangala and such Abhidhammic compendiums as the *Nāmarūpasamāsa* and the *Saccasaṅkhepa*.

An examination of the fundamental principles of the above-mentioned theory would show that it is nothing but the Theravāda counterpart of the atomic theory of the schools of Sanskrit Buddhism. Much has been done by modern scholarship to critically examine the atomism of the Vaibhāṣikas and the Sautrāntikas.<sup>1</sup> Very little, however, is known about the theory of *rūpa-kalāpas*, and still less about the close analogy which it presents to the atomic theory of Sanskrit Buddhism.

There are valid reasons to believe that in developing the theory in question the Theravādins were much influenced by the Sanskrit Buddhist scholasticism. De la Vallée Poussin<sup>2</sup> and Mc Govern<sup>3</sup> have drawn attention to the fact that atomism as a subject is discussed in the *Mahāvibhāṣā*. The allusion therein to the opinions of Vasumitra, Bhadanta and Buddhadeva on the question whether the atoms come into contact or not, shows clearly that in its time the atomic theory had become a well established tenet of Sanskrit Buddhism.<sup>4</sup>

1. See De la Vallée Poussin, *AK. Ch. II*, pp. 143 ff., *La Siddhi*, pp. 39 ff.; Mc Govern *A Manual of Buddhist Philosophy*, London, 1923, Vol. I, pp. 125 ff.; Sylvain Lévi, *Matériaux pour l'étude du système Viñāpatimātra*, Paris, 1920, pp. 51 ff.; Stecherbatsky, *Central Conception of Buddhism*, London, 1923, pp. 200 ff.; Murti, *Central Philosophy of Buddhism*, London, 1955, pp. 212 ff.; Rosenberg, *Probleme der buddhistischen Philosophie*, Heidelberg, 1924, pp. 158 ff.

2. *AK. Ch. I*, p. 90, n. 1.

3. *Manual of Bud. Phi.*, London, 1923, Vol. I, pp. 126 ff.

4. On the various forms of Indian atomism and on the question of its origin and development, see Jacobi, *Atomic Theory (Indian)*, *ERE.*; Keith, *Indian Logic and Atomism*, Oxford, 1921; Basham, *History and Doctrines of the Ajīvikas*, London, 1951, pp. 262 ff.; Bhaduri, *Studies in Nyāya-Vaiśeṣika Metaphysics*, Poona, 1947, pp. 54 ff.

It is true that the (earlier) Pali commentaries, where we meet with the theory of *rūpa-kalāpas* in a very undeveloped form, are based on the *Sihala-Aṭṭhakathās* which are not extant now. It is also true that, in view of this circumstance, it is not easy to ascertain how much of the Abhidhamma was developed in the latter before the compilation of the former. However, since the Theravāda scholasticism developed in comparative isolation in Ceylon, it is very unlikely that it influenced the Buddhist schools which flourished in the mainland. Therefore, and in view of the close parallelism that exists between the Theravādins' theory of *rūpa-kalāpas* and the atomic theory of the schools of Sanskrit Buddhism, it seems very probable that the former was formulated on the basis of the latter. In the manuals and the commentaries of the twelfth century and later, where the theory under consideration is presented in its fully developed form, the signs of external influence are more marked and therefore more unmistakable.

This is not to suggest that the theory of *rūpa-kalāpas* is a complete replica of the atomic theory of Sanskrit Buddhism. As we shall soon see, there are certainly some differences. But most of them are unavoidable, stemming as they do from the fundamental differences as to the way the Theravādins and the non-Theravādins have conceived the various elements of matter. For instance, since the Theravādins have postulated a comparatively large number of material elements, it is but natural that this numerical discrepancy should reflect itself in their atomic theory, too. Moreover, there were some differences of opinion between the Vaibhāṣikas and the Sautrāntikas concerning certain aspects of the theory. A close examination of the theory of *rūpa-kalāpas* will show that in regard to some aspects the Theravādins preferred to follow the Vaibhāṣikas and in regard to others the Sautrāntikas.

The Vaibhāṣikas have postulated two kinds of *paramāṇu* (atom), viz. the *dravya-paramāṇu* (the unitary atom) and the *saṃghāta-paramāṇu* (the aggregate atom, i.e. the molecule).

The former is the smallest unit of matter: it is the most subtle (*sarva-sūkṣma*)<sup>5</sup>; it is partless (*niravayavat*) and, therefore, no spatial dimensions (*dig-bhāga-bhedatva*) can be predicated of it.<sup>6</sup> Saṃghabhadra, one of the celebrities of the neo-Vaibhāṣika school, defines it as follows: "Parmi

5. See *AK.*, Ch. II, p. 144 and *AKvy.* I, pp. 34, 125; cf. *sarvasūkṣmāḥ khalu rūpa-saṃskāropadānasaṃcayabhedaparyantaḥ paramāṇur iti prajñāpyate.*—*Abdh.*, p. 65.

6. Cf. *tad etad dig-bhāga-bhedatvaṃ necchanti Vaibhāṣikāḥ. digbhāga-bhedo hi saṃghāta-rūpānameva kalpayate.*—*AKvy.* I, p. 85.

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les *rūpas* 'susceptibles de résistance' (*sapratigha*), la partie la plus subtile, qui n'est pas susceptible d'être scindée à nouveau, s'appelle *paramāṇu*; c'est-à-dire, le *paramāṇu* ne pas susceptible d'être divisé en plusieurs par un autre *rūpa*, par la pensée. C'est ce qu'on dit être le plus petit *rūpa*; comme il n'a pas de parties, on lui donne le nom de 'plus petit'. De même un *kṣaṇa* est nommé le plus petit temps et ne peut être divisé en demi-*kṣaṇas*.”<sup>7</sup>

A *dravya-paramāṇu* can never exist in isolation. It always arises and exists in combination with other *dravya-paramāṇus*. A collection of them, forming a unity and having a simultaneous origination and a simultaneous cessation, is called *saṃghāta-paramāṇu*, “aggregate atom”, i.e. the molecule.<sup>8</sup> The smallest *saṃghāta-paramāṇu* is an octad consisting of the four primary elements of matter, namely *prthivī* (solidity and extension), *ap* (viscosity and cohesion), *tejas* (temperature of cold and heat) and *vāyu* (mobility or motion),<sup>9</sup> and four of the secondary elements of matter, namely *rūpa* (colour), *gandha* (odour), *rasa* (savour) and *bhautika-spraṣṭavya* (the derivative tangible).<sup>10</sup> That the four primary elements always arise simultaneously and that the secondary elements cannot arise independently of the primary, are the two fundamental principles involved in the conception of the *saṃghāta-paramāṇu*.

This is a brief statement of the two kinds of *paramāṇu* postulated by the Vaibhāṣikas. We have given it in brief outline with a view to finding out whether the two varieties are represented in the atomic theory of the Theravādins, too.

At the outset it should be noted that, as far as the medieval manuals and the commentaries wherein the theory of *rūpa-kalāpas* appears in its developed form are concerned, there is no evidence to suggest that the Theravādins have incorporated the Vaibhāṣika conception of the *dravya-paramāṇu*. However, two intriguing passages of the *Visuddhimagga* seem to contain an allusion to such a conception.

In the first passage it is stated that the constituents of the human body such as head-hair, bodily-hair should be understood by way of *kalāpas* (groups): What in common parlance is called head-hair is only a collection

7. AK., Ch. II, p. 144, n. 3.

8. See AK., Ch. II, pp. 144 ff.; AKey. I, pp. 13 ff. (*na vai paramāṇu-rūpaṃ ekaṃ prthagbhūtaṃ asti*—AKey. I, p. 34).

9. On the primary elements of matter, see *Ceylon University Review*, Vol. XXII, Nos. I & II pp. 28 ff.

10. See below, pp. 166-69.

of eight material elements, namely the four primary elements and four of the secondary elements: *rūpa* (colour), *rasa* (savour), *gandha* (odour) and *ojā* or *āhāra* (nutritive essence). Therefore, the passage goes on to say, from the point of view of ultimate analysis, head-hair is an *aṭṭhadhamma-kalāpa-matta*", i.e. merely a collection of eight elements.<sup>11</sup>

The second passage enjoins another way of looking at the matter that enters into the composition of the body, i.e. by way of *cūṇṇa* (particles): "In this body, the *paṭhavī-dhātu*, taken as reduced to fine dust and pounded to the size of *paramāṇu*, might amount to an average *doṇa*-measure full, and that is held together by the *āpo-dhātu* measuring half as much".<sup>12</sup>

In the medieval works of the Theravādins the term *kalāpa* is used in a technical sense, i.e. as referring to the smallest unit of matter, which is a collection of material elements.<sup>13</sup> In this technical sense, *kalāpa* corresponds to the *saṃghāta-paramāṇu* of the Vaibhāṣikas. If one were to understand the *kalāpa* of the first passage (see *aṭṭha-dhamma-kalāpa*) in this technical sense, then one could suggest that *aṭṭha-dhamma-kalāpa* corresponds to the *saṃghāta-paramāṇu* and that *cūṇṇa* or *paramāṇu* of the second passage corresponds to the *dravya-paramāṇu*. However, a close examination of the implications of the two passages, along with a consideration of the contexts in which they occur, would lead to a different interpretation.

That in the *Visuddhimagga* passage the term *kalāpa* is not used in the same sense as it came to be used in the medieval works, is not far to seek. What the *Visuddhimagga* says is that the head-hair, for instance, is an *aṭṭha-dhamma-kalāpa*, a collection or group of eight elements. If it had used the term *kalāpa* in the technical sense, then it should say that the head-hair is a collection of *kalāpas* (each consisting of eight elements). The term should be put in the plural and not in the singular. For, in its technical sense, *kalāpa* means the smallest unit of matter, and as such, the head-hair should

11. *Kalāpato ti yā ayaṃ kesā lomā ti ādinā nayena vīsatiyā ākārehi paṭhavīdhātu, pittaṃ semhan ti ādinā nayena dvādasākārehi āpodhātu niddhiṭṭhā. Tattha yasmā:*

*Vanṇo gandho raso ojā catasso cāpi dhātuyo  
aṭṭhadhammasamodhānā hoti kesā ti sammutī  
tesaṃ yeva vinibbhogā natthi kesā ti sammutī ti,  
tasmā kesā pi aṭṭhadhammakalāpamattam eva ... op.cit. p. 364.*

12. ....*Imasmim hi sarīre majjhīmena pamāṇena parigayhamānā paramāṇubheda-saṅcūṇṇā sukhumarajabhūtā paṭhavidhātu doṇamattā siyā, sā tato upaḍḍhappamānāya āpodhātuyā saṅgahūtā. op.cit. p. 365.*

13. Cf. *ADS.*, p. 29; *ADSS.* p. 156; *ADSVT.* p. 58; *SS.* p. 4; *NRS.* p. 19.

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consist of a large number of *kalāpas*. It is clear therefore that when the *Visuddhimagga* says that the head-hair is an *aṭṭha-dhamma-kalāpa*, it is referring to the eight kinds of material elements that enter into its composition.<sup>14</sup>

As yet, there is no implication here that, in the "ultimate" analysis, material things consist of atoms. Nor is there any contradiction between the two usages of the term, for a given material thing can be described in either sense of the term. One can, from the Buddhist point of view, say that the hair on one's head is a *kalāpa* of eight (kinds) of material elements, because it consists of the four primary elements of matter and four of the secondary, viz. *rūpa*, *gandha*, *rasa* and *āhāra*. One can also say that the hair on one's head consists of an enormous number of *kalāpas*, each consisting of the above-mentioned eight material elements. It is in the former sense that Buddhaghosa, the author of the *Visuddhimagga*, uses the term *kalāpa*. But, for Anuruddha, the author of the *Abhidhammatthasangaha*, *kalāpa* means the smallest unit of matter. For the former, it means a group (the general sense); for the latter, the smallest group (the technical sense).

On the other hand, it can be shown that what the medieval works call *kalāpa* (i.e. in the technical sense) corresponds to what the *Visuddhimagga* calls *cūṇa* or *paramāṇu*.

In this connection, it may be noted here that in the Buddhist works the names of the four primary elements are used in two distinct senses: one in the sense of *lakkaṇa* (characteristic), and the other in the sense of *ussada* (intensity). In the first sense, *paṭhavī* is *kakkhalatta* (solidity). In the second, what is *kakkhala* (solid) is *paṭhavī*, for whatever material thing, wherein the characteristic of *kakkhalatta* is most intense (*ussada*, *sāmatthiya*), is also called *paṭhavī*, although in fact it consists of all the four primary elements and their concomitants.<sup>15</sup>

When the *Visuddhimagga* refers to the atomization of *paṭhavī-dhātu*, it uses the term *paṭhvī-dhātu* in this second sense. In point of fact, at the beginning of the passage in question it is said that head-hair, bodily-hair etc. are *paṭhavī* and that blood, mucus, etc. are *āpo*. It is also said that they are called so on account of the respective prominence of each primary

14. This is also confirmed by the *VismS.* IV, p. 136 where it is stated that *aṭṭha-dhamma-kalāpa* refers to the eight kinds of matter which in their combination make up what is called head-hair: (*aṭṭhadhammakalāpamattaṃ eva*) *yanuḍu keṣa-prajñāptiyaṭṭha kārāṇa vū varṇādīn ekatvāyān geṇa kīha. ovun aṣṭadharmamātra noveyi data yutu.*

15. See *Vism.* p. 357; *Abhk.* p. 274.

element—*ussada-vasena pana paṭhavī-dhātu āpo-dhātū ti saṅgahaṃ gato*.<sup>16</sup> Thus, in the statement, namely that the *paṭhavī-dhātu* of the human body is reducible to *paramāṇu* (atoms), the term *paṭhavī-dhātu* refers to head-hair, bodily-hair etc.

Next, it may be noted here that according to the theory of *avinibhoga-rūpa*, the four primary elements and four of the secondary elements, viz. *rūpa* (colour), *rasa* (savour), *gandha* (odour) and *āhāra* (nutritive essence) are necessarily co-existent (*niyata-sahajāta*) and positionally inseparable (*padesato avinibhoga*).<sup>17</sup> From this it follows that those parts of the human body, which, on account of the intensity of the *paṭhavī-dhātu*, are conventionally called *paṭhavī-dhātu*, consist of the above-mentioned eight material elements. And, since these eight material elements are positionally inseparable, even when the head-hair, bodily-hair, etc. are reduced to *paramāṇus*, each of the *paramāṇu* should in turn consist of the same number of elements. Thus what the *Visuddhimagga* calls *cunṇa* or *paramāṇu* turns out to be an aggregate of eight material elements. It is the same as *kalāpa* in its technical sense, and as such, corresponds to the *saṅghāta-paramāṇu* of the *Vaibhāṣikas*.

Our interpretation of *cunṇa* or *paramāṇu* in this way is also confirmed by the statement, namely that the *paṭhavī-dhātu*, when reduced to the size of *paramāṇus*, might amount to an average *doṇa* measure and that the *āpo-dhātu* to half as much. In a given instance of matter there is no quantitative difference between the primary elements that enter into its composition; the only difference is one of intensity (*ussada*).<sup>18</sup> If the *Visuddhimagga* had used the terms *paṭhavī* and *āpo* in the philosophical sense (in the sense of *lakkhaṇa*), then it would not say that, when reduced to the size of *paramāṇus*, the former might amount to a *doṇa*-measure and the latter to half as much.

From the fore-going observations it should appear that in the two passages of the *Visuddhimagga* there is no allusion to the *dravya-paramāṇu*. Even in the subsequent *Abhidhammic* compendiums and the commentaries the situation remains unchanged. For the *Theravādins*, the ultimate unit of matter is an aggregate—a collection of material elements forming a unity and having a simultaneous origination (*ekuppāda*) and a simultaneous cessation (*ekanirodha*).<sup>19</sup>

16. *Op.cit.* p. 365.

17. See *ADS*. p. 28; *VismS*. p. 389.

18. See *VismT*. pp. 450 ff.; *Abhk.* pp. 273 ff.

19. *Ekuppādā ekanirodhā... rūpakalāpā nāma—ADS*. p. 29.

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In the *Visuddhimagga*, where the theory in question is introduced for the first time, this ultimate unit of matter is called *cunṇa* or *paramāṇu*. In the subsequent works *kalāpa* became the standard term. While the first two terms are indicative of the fact that what is indicated thereby is the smallest unit of matter, the other brings into relief that, although it is the smallest, yet, in the ultimate analysis, it is but a plurality of different material elements. The preference shown by the authors of the medieval works to the use of *kalāpa* instead of *paramāṇu* and *cunṇa*—the two earlier terms—is itself indicative of their desire to emphasize this fact. The use of the term *piṇḍa* in the *Abhidhammatthasaṅgaha* and its paraphrase as *rūpa-samudāya* in the Sinhalese *sannē* of Sāriputta are also suggestive of the same fact.<sup>20</sup>

The fundamental principle underlying this theory is not far to seek. What are called secondary elements of matter (*upādā-rūpa*) are always dependent on the primary elements (*mahābhūta*), for the former cannot arise independently of the latter. Nor can a single primary element arise independently of the other three, and at least four of the secondary elements.<sup>21</sup> Thus there is no material element, whether it is primary or secondary, that can have an independent existence. Hence material elements always arise by way of groups (*piṇḍa-vasena*).<sup>22</sup> Consequently, when a given instance of matter, say, a piece of stone, is reduced to smaller pieces—whatever be the number of pieces or whatever be the size of each piece—the fact remains that each of them is a group or plurality of material elements. The smallest unit of matter, whether we call it *cunṇa*, *paramāṇu*, *piṇḍa*, *kalāpa* or *rūpa-samudāya*, is no exception to this universal law.

The nearest Theravāda term to the *dravya-paramāṇu* of the Vaibhāṣikas is *kalāpaṅga*, literally, “the limb of the group”, i.e. a constituent of a *kalāpa*.<sup>23</sup> The very term *aṅga* (*kalāpa + aṅga*) suggests that it has no independent existence and implies a whole. But is not the part smaller than the whole? Therefore is it not more logical to postulate the *kalāpaṅga* as the smallest (*sabba-pariyantima*) unit of matter?

The Vaibhāṣikas should answer this question in the affirmative. For, in their view, the constituent, i.e. the so-called *dravya-paramāṇu*, though it cannot exist independently—it always arises in combination with seven

20. *ADS*. p. 28; *ADSS*. p. 166.

21. See *ADS*. p. 28; *VismS*. p. 389.

22. Cf. *Etāni rūpāni kammādito uppajjamānāni pi ekekaṃ va na samuṭṭhahanti, atha kho piṇḍato va samuṭṭhahanti* — *ADSVT*. p. 58.

23. See *ADS*. p. 29; *NRP*. p. 51.

others—is the most subtle (*sarvasūkṣma*).<sup>24</sup> They seem to have argued that, since the *saṃghāta-paramāṇu* is an aggregate of *dravya-paramāṇus*, it admits divisibility. To describe as indivisible what admits divisibility is a contradiction in terms.

The Theravādins, on the other hand, seem to have followed a different line of argument: It is true that, since the *kalāpa* is an aggregate, each of the constituents (*kalāpaṅga*) that make up this aggregation, is smaller (subtler) than the aggregate itself. But this is only logically so. In reality, the *kalāpaṅga* does not exist by itself; it is in inseparable association with other *kalāpaṅgas*. With this view the Vaibhāṣikas too agree. The *Atthasālinī* observes that, although it is possible, for the sake of defining the characteristics (*lakṣhaṇato*), to speak of *rūpa*, *rasa*, etc. as separate elements, yet positionally (*padesato*) they are not separable, one from another. *Rūpa*, *rasa*, etc.—so runs the argument—cannot be dissected and separated like particles of sand.<sup>25</sup> The colour (*rūpa*) of the mango, for instance, cannot be separated from its hardness or solidity (*paṭhavi*) or from its taste (*rasa*). This situation is true of the *kalāpaṅgas* of a *kalāpa* too. Hence there is no necessity, other than merely logical, to postulate the *kalāpaṅga* as the *sabba-pariyantima*, for, in actual fact, it is not positionally (*padesato*) separable from the other *kalāpaṅgas* of the same *kalāpa*.

This, it appears to us, is the line of argument that led the Theravādins to observe silence on the question of the *dravya-paramāṇu*, and to define the *kalāpa* as the *sabba-pariyantima*. In taking up this position they seem to have been influenced by the Sautrāntikas.

For, it may be noted here; the Vaibhāṣika conception of the *dravya-paramāṇu* came in for severe criticism on the part of the Sautrāntikas. As a matter of fact it was the most significant issue that divided the two schools over the atomic theory.

What made the Sautrāntikas join issue with the Vaibhāṣika conception of the *dravya-paramāṇu* was that it was sought to be defined as devoid of parts (*niravayavat*) and exempt from *pratighāta*, resistance or impenetrability, which is the fundamental characteristic of matter.<sup>26</sup> The Vaibhāṣikas do

24. Cf. *sarva-sūkṣmaḥ khalu rūpa-saṃskāropādāna-saṃcaya-bheda-paryantaḥ paramāṇur iti prajñapyate. sa tu sapta-dravyāvinīrbbhāgī catubhīr bhūtais tribhī's copādāya rūpais tribhī's tribhīr vā bhūtais caturbhī's copādāya rūpaīr avinīrbbhāgavarty asāv aṣṭama iti* — *Abhd.* p. 65. See also *AK.* Ch. II, p. 144; *AKvy.* I, 123.

25. See *Asl.* p. 311.

26. See *AK.* Ch. II, pp. 89 ff; *AKvy.* I, pp. 85 ff.

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not want to define the *dravya-paramāṇu* as possessing parts, because this implies the divisibility of the atom. Its exemption from *pratighāta*, according to Yaśomitra, is a corollary arising from the first thesis: when there are no parts there cannot be *pratighāta*<sup>27</sup> To the objection that, if the *dravya-paramāṇu* is of this nature, it escapes the definition of matter, the Vaibhāṣikas reply: "Sans doute, la monade est exempt de *rūpana*; mais un *rūpa* de monade n'existe jamais à l'état isolé; en l'état d'aggloméré, étant dans un aggloméré (*saṃghātastha*, *saṃcita*) il est susceptible de détérioration et de résistance".<sup>28</sup>

But this way of defining the atom led to further complications. The *Abhidharmakośa* and the *Vyākhyā* rightly point out that, if the *dravya-paramāṇu* is devoid of parts and exempt from *pratighāta*, then even the aggregate will be devoid of parts and exempt from *pratighāta*, because the aggregate is ultimately constituted of the atoms. What is lacking in the latter cannot be predicated of the former.<sup>29</sup>

In this connection one cannot also forget the severe diatribes launched by the Buddhist Idealists (Vijñānavādins) against the definition of the atom as devoid of spatial division. In order to have a basis for their polemics they provisionally agreed with the objection of the Sautrāntikas that the aggregates are ultimately constituted of, and therefore not different from, the atoms; the difference between one atom and an aggregate being only one of quantity.

It was the failure, on the part of the Vaibhāṣikas of Kāśmīra, to take notice of this fact that gave rise to the fallacy of their assumption that, although the atoms do not touch, the same situation is not true of the aggregates.<sup>30</sup> Once this oneness (*ekatva*) is overlooked, it leads to many mutually incompatible conclusions, and fails to give a rational explanation to many a phenomenon of day to day experience: It is a matter of common experience, for instance, that when the sun rises a given aggregate is found to be illuminated at its eastern direction, or when one sees or touches, say, a wall, one does not see or touch its opposite side—two situations

27. See *AKvy.* I, p. 34; II, p. 355.

28. *AK*, Ch. II, p. 25.

29. See *AK*, Ch. II, p. 143; *AKvy.* I, pp. 34 ff.

30. Cf. *naiva hi paramāṇavaḥ saṃyujyante niravayavatvāt | mā bhūdeśa doṣaprasaṅgaḥ | saṃghātastu parasparaṃ saṃyujyanta iti kāśmīravaibhāṣikāsta idaṃ praṣṭhavyāḥ | yāḥ paramāṇūnāṃ saṃghāto na sa tebhyo'rthāntaraṃ iti* — *Vimś.* p. 7; see also *La Siddhi*, pp. 39 ff.

which unmistakeably point to the conclusion that the aggregates have spatial divisions. This characteristic cannot be predicated of them if the atoms which constitute them do not severally possess it.<sup>31</sup>

It is supposed (by the neo-Sarvāstivādins) that the combination of atoms takes place in such a way that six different atoms occupy six points of space—east, west, north, south, above and below—of another atom. This law of atomic aggregation carries with it the implication that the atom has at least six sides. On the other hand, if it be contended that the locus occupied by one atom is common to all the six, then the atom being devoid of parts and exempt from resistance (*pratighāta*), all the six would coalesce into one; the difference between the magnitude of one atom and that of six would vanish.<sup>32</sup>

These objections and counter-objections between the Buddhist schools show that when it came to the question of defining the atom, the atomists were caught in the horns of a big dilemma. On the one hand, to admit the spatial dimensions (*dig-bhāga-bhedatva*) of the atom is to admit its divisibility—a contradiction in terms if the atom is defined as the smallest and not amenable to further division. On the other hand, to deny the spatial dimensions of the atom is to deny the spatial dimensions of the aggregates—a situation contradicted by common experience. The Vaibhāṣikas followed the first line of argument and the Sautrāntikas the second, each party tenaciously clinging to its own view without attempting a solution to the resulting paradox.

This gave a good opportunity for the Buddhist Idealists to refute both alternatives and to establish their theory that matter is logically inadmissible: If, as the Sautrāntikas say, the atoms “sont étendus (ont *dig-deśa-bhāga*) ... ils peuvent être divisés et par conséquent ne sont pas réels”. If, as the Vaibhāṣikas say, the atoms “ne sont pas étendus ... ils ne pourront pas constituer un *rūpa* massif (*sthūla*)”. If anything, the atom should have

31. Cf. *chāyāvati katham vā yady ekai kasya paramāṇor digbhāgabhedo na syād ādityodaye katham anyatra chāyā bhavaty anyatrātapah/ na hi tasyānyah pradeso'sti yatrātapo na syāt āvaranam ca katham bhavati paramāṇoḥ paramānvantarena yadi digbhāgabhedo neṣyate/ na hi kascid api paramāṇoḥ parabhāgo'sti yatrāgamanād anyenānyasya pratighātāḥ syāt/ — Vims. p. 7.*

32. Cf. *saṭkena yugapadyogātparamāṇoḥ śaḍaṁśatā/ śaḍbhyo digbhyaḥ śaḍbhiḥ paramānubhir yugapadyoge sati paramāṇoḥ śaḍaṁśatām prāpnoti/ ekasya yo deśas tatrānyasya sambhavāt/ saṇṇāṁ samānadeśatvāt piṇḍaḥ syād anumātrakaḥ/ atha ya evaikasya paramāṇor deśaḥ sa eva saṇṇāṁ/ tena sarveṣāṁ samānadeśatvāt sarvaḥ piṇḍaḥ paramānumātraḥ syāt/ — Vims. p. 7.*

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spatial dimensions, but what has spatial dimensions is divisible, and what is divisible cannot be a real entity (*dravyasat*). The inescapable conclusion, they contend, is that matter is logically inadmissible.<sup>33</sup>

The Theravādins, who, as suggested earlier, accepted atomism at a comparatively late period, seem to have been aware of the arguments and counter-arguments involved in this big controversy over the definition of the smallest. They were therefore in a better position to judge the whole situation. They had before them three alternatives. However, there was no possibility of their accepting the conclusion of the Vijñānavādins, because being realists the Theravādins were not prepared to subscribe to the idealistic metaphysic underlying that conclusion. They were thus left with two alternatives—the two interpretations given by the Vaibhāṣikas and the Sautrāntikas. They opted to follow that of the Sautrāntikas for, on the whole, it was less riddled with complications and, therefore, more satisfactory.

This is only a tentative suggestion as to why the Theravādins deemed it proper to recognize an aggregate as *sabba-pariyantima*, while observing a (deliberate) silence on such questions as whether the constituents of this aggregate have spatial dimensions or not.

On the other hand, that spatial dimensions can be predicated of the *kalāpa* is clearly shown by an isolated reference in the *Viśuddhimārgasannaya* which says that the *ākāsa*, the intervening space between two *kalāpas*, “has the function of delimiting the *kalāpa* as: this is the lower side of the *kalāpa* and that is the upper side of the *kalāpa*”.<sup>34</sup>

This is further confirmed by a theory advanced as to the size of the *kalāpa* in relation to a (cubic) inch (*aṅgula*). It occurs in the *Vibhaṅgaṭṭha-kathā*.<sup>35</sup> The term used is *paramāṇu*. We propose to interpret the *paramāṇu* of the Theravādins as identical with *rūpakalāpa*, on the strength of the observations made in the course of this article.<sup>36</sup> The table runs as follows:

33. See *La Siddhi*, pp. 40-1.

34. *ākāsadhātu... me uḍaya me yaṭayayi kalāpayangē paryantaya paḥaḷa kirima kṛtya koṭa ṭṭiyyi* — *VismS.* V, p. 68.

35. *Op.cit.* p. 343; see also *Abhidhānappadīpikā-sūci*, ed. Subhūti, Colombo, 1938, pp. 138 ff.

36. See above, pp. 151-54.

36 <i>paramāṇus</i>	= 1 <i>aṇu</i>
36 <i>aṇus</i>	= 1 <i>tajjāri</i>
36 <i>tajjāris</i>	= 1 <i>rathareṇu</i>
36 <i>rathareṇus</i>	= 1 <i>likhā</i>
7 <i>likhās</i>	= 1 <i>ūkā</i>
7 <i>ūkās</i>	= 1 <i>dhañṇāmāsa</i>
7 <i>dhañṇāmāsas</i>	= 1 <i>aṅgula</i> , "finger-breadth", i.e. one (cubic) inch.

Thus the size of the *paramāṇu* in relation to the cubic inch will be:

$$\frac{1}{36 \times 36 \times 36 \times 36 \times 7 \times 7 \times 7} = 1/581,147,136$$

That this table which gives the size of the *paramāṇu* in relation to the cubic inch is one that is arbitrarily assumed goes without saying. For there were no physical data for a mathematical calculation of infinitesimal units. A somewhat similar table—perhaps the original source of the above—is given by Varāhamihira.<sup>37</sup> Yamakami Sogen<sup>38</sup> and Takakusu<sup>39</sup> have referred to similar tables adopted by the Schools of Sanskrit Buddhism. At best, they all may be described as attempts to emphasize how infinitesimally small the *paramāṇu*, the ultimate unit of matter, is.

For the *paramāṇu* is so small that in the *Vibhaṅgaṭṭhakathā* it is (figuratively) described as a particle of space (*ākāsa-kotṭhāsa*).<sup>40</sup> The *Visuddhimagga-ṭīkā* observes that it comes only within the province of the divine eye (*dibba-cakkhu*).<sup>41</sup> This is similar to the view expressed in some Jaina works, namely that the *paramāṇu* can be known only by those who have realized *kaivalya-jñāna*.<sup>42</sup>

Another problem that was hotly debated by the schools of Sanskrit Buddhism that adopted atomism was whether the atoms came into contact with one another.

37. See Seal, *Positive Sciences of the Hindus*, Delhi, 1925, pp. 82 ff.; Ray, P., *Indian Chemistry*, Calcutta, 1956, pp. 248 ff.

38. *Systems of Buddhist Thought*, Calcutta, 1934, p. 122.

39. *Essentials of Buddhist Philosophy*, Honolulu, 1947, p. 64.

40. *Op.cit.* p. 343.

41. *Op.cit.* p. 286.

42. See e.g. *Pañcastikāyasāra*, ed. A. Chakravartinayanar, Allahabad, 1920, p. 84.

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Since the Vaibhāṣikas believed that the *dravya-paramāṇu* was devoid of parts, any conclusion in respect of this problem should in no way contradict this belief. In point of fact, the Vaibhāṣikas of Kāśmīra take the *niravayavatva*, partlessness, of the atom as the very premise of the expected conclusion. They grant the possibility of two alternatives both of which, they say, are inadmissible: (i) si les atomes se touchaient dans leur totalité, les choses (*dravya*), c'est-à-dire, les différents atomes se meleraient, c'est-à-dire n'occuperaient qu'un lieu; (ii) si les atomes se touchaient par un endroit, c'est donc qu'ils auraient des parties (*avayava*): or les atomes n'ont pas de parties.<sup>43</sup> Another argument, the one attributed to Vasumitra, is based on the theory of momentariness (*kṣaṇikatā*): Si les atomes se touchaient, c'est donc qu'ils dureraient deux moments.<sup>44</sup> That is to say, an atom should arise first (1st moment) in order to touch (2nd moment)—a view which, if accepted, would go against the doctrine that an element of existence endures but for one moment (*kṣaṇa*). It may be noted here that, according to Vasumitra's interpretation of the Buddhist theory of moments,<sup>45</sup> all elements, mental as well as material, which make up the empirical world, endure but for one moment, arising and perishing in continual succession, and thereby projecting a picture of static existence.

On the strength of these arguments the Vaibhāṣikas conclude that atoms do not come into contact with one another, and that between two atoms there is always an intervening space (*antara*). In this intervening space there is no *āloka* (light), and it is so small that another atom cannot occupy it.<sup>46</sup> The presence of *āloka* has to be ruled out, because *āloka* being included in the category of matter,<sup>47</sup> to affirm its existence is to deny the vacuity between the two atoms. To the possible objection that, if there is *antara* between atoms how is it that the aggregates which are ultimately composed of these atoms do not fall into pieces when struck, the answer is that *vāyu-dhātu*, the air element, keeps them together.<sup>48</sup>

It is to be expected that the Sautrāntikas should challenge this conclusion, for it is mainly based on the premise that the atom is *niravayavat* (partless)—a belief to which they did not want to subscribe. Hence it is

43. *AK*. Ch. I, p. 89.

44. *Ibid.* Ch. I, p. 91.

45. See *AK*. Ch. I, pp. 22 ff.; *AKvy.* I, pp. 23 ff.

46. Cf. *yan madhye nāsti kiṃcid iti bruvāṇā Vaibhāṣikā madhye ālokādi necchanti. anya-paramāṇu-praveśanāvakāśaṃ tu na bruvate.* — *AKvy.* I, p. 85.

47. See *AK*. Ch. I, pp. 23 ff.

48. *AK*. Ch. I, pp. 89-90; *AKvy.* I, pp. 84-85.

that the author of the *Abhidharmakośa*, whose sympathies are more with the Sautrāntikas, and his commentator criticise this theory. In their opinion the interpretation given by Bhadanta, namely that contact is another expression for “*nirantaratva*”, is the best. They propose to interpret *nirantaratva* in this context as indicating absence of interval.<sup>49</sup> For otherwise, the argument runs, what would prevent the atoms from moving within the interval?<sup>50</sup> In putting forth this objection they seem to have overlooked the fact that in the case of momentary elements, as reminded by Vasumitra, there is no motion: wherever an element arises there itself it perishes—*yatraivotpattiḥ tatraiva vināśaḥ*.<sup>51</sup> On the other hand, Saṅghabhadra, a celebrity of the Vaibhāṣika school, interprets *nirantaratva* of Bhadanta as lending support to the theory that there is *antara*, interval between atoms.<sup>52</sup> The main objection directed against the Vaibhāṣika theory is that it is but absurd to deny contact between the atoms while recognizing contact between the aggregates.<sup>53</sup>

Since the theory of *rūpa-kalāpas*, as suggested earlier, is modelled on the atomic theories of the schools of Sanskrit Buddhism, it may be interesting to consider what position the Theravādins took up in respect of this problem. According to the Theravādins, since the *kalāpaṅgas* that constitute a *kalāpa* are positionally inseparable, the possibility of their being separated does not arise. Hence the problem boils down to this: Can two *kalāpas* come into contact?

The question is not raised, let alone being answered, in the earlier commentaries where we meet with the theory in its rudimentary form. The authors of the medieval works took up the matter and provided the answer: *rūpakalāpas* do not come into contact; between them there is space.

Every *kalāpa* is delimited (*paricchindate*) by the environing *ākāśa*, space.<sup>54</sup> This *ākāśa* is so small that the fact of delimitation is described as

49. Cf. *nirantare tu sprṣṭa-samjñe ti Bhadantaḥ. Bhadanta-mataṃ caṣṭavyaṃ iti. Vaibhāṣika-mataṃ kasmān naiṣṭavyaṃ . nanu Vaibhāṣikair apy evaṃ uktam. tad evaiṣaṃ nirantaratvaṃ yan madhye nāsti kiṃcid iti. asty evaṃ sāvakāśaṃ tu tad vacanaṃ. — AKvy. I, p. 85.*

50. Cf. *anyathā hi sūntarāṇaṃ paramāṇūnāṃ śūnyeso antareṣu gatiḥ kena pratibādhyeta gatimata iti vākya-seṣaḥ—Ibid. loc.cit.*

51. *AKvy. I, p. 23.*

52. See *AK. Ch. I, p. 91, n. 3.*

53. *AK. Ch. I. p. 92; Vism. p. 7; cf. na ca paramāṇubhyo'nye saṃgātāḥ yathā Vaibhāṣikā kalpayanti. ta eva te saṃghātāḥ. paramāṇavaḥ spṛśyante yathā rūpyanta iti — AKvy. I, p. 85.*

54. See *VismT. p. 453; ADSVT. p. 98; Abhk. p. 279; VismS. p. 67.*

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“as if delimiting” (*paricchindantī viya*).<sup>55</sup> The *kalāpas* are not touching one another, for each *kalāpa* is described as “not touched” (*asamputṭha*) by the other *kalāpas*.<sup>56</sup> The implication is that the vacuity is a fact, although it is infinitesimally small.

In maintaining this view the Theravadins were anxious to stress the separateness of each *kalāpa*. Sāriputta, the author of the Sinhalese *sammē* to the *Abhidhammatthasaṅgaha*, takes special care to emphasize the fact that each *kalāpa* is in itself an entity, physically separated from the others. This separation is not possible if there is contact. And it is the *ākāsa*, the so-called *paricchēdākāsa*, that is responsible for their being prevented from mixing together (*asaṃkara-bhāva*).<sup>57</sup>

The admission, on the part of the Theravadins, of *ākāsa* between *kalāpas* suggests Vaibhāṣika influence. However, the reasons given for accepting this view are quite different. This is inevitable, because the Vaibhāṣika theory of non-contact between the *dravya-paramāṇus* is mainly based on the denial of their spatial dimensions (and the denial of motion), whereas for the Theravādins the question as to the possibility or otherwise of physical contact is a question relating to the *kalāpas*, the spatial dimensions of which are not denied.

Hence it is that the author of the Sinhalese *sammē* to the *Visuddhimagga* attempts to show how the non-contact of the *kalāpas* is only a logical corollary arising from the fact that the *kalāpaṅgas* of a *kalāpa* are positionally inseparable (*padesato avinibhoga*). It is argued that if the *kalāpas* are not separated by *ākāsa*, then this leads to the acceptance of one of two alternatives, both of which are not compatible with the above-mentioned principle.

The first alternative is to deny that there is no *ākāsa* between two *kalāpas*.<sup>58</sup> The *kalāpaṅgas* of a *kalāpa*, be it repeated here, are positionally inseparable. Now, if there is no actual separation between two *kalāpas*, then the characteristic of positional inseparability, which applies only to the

55. See *VismT.* p. 453.

56. *Ibid.* loc.cit.

57. Cf. *Ekkeka-kalāpa-gata-rūpāṇaṃ kalāpantarehi asaṃkiṇṇābhāvāpādānavasena paricchēdakaṃ rūpaṃ paricchēda-rūpaṃ*.—*ADSS.* p. 156; Dhammapāla takes the fact of separateness as synonymous with untouchedness—*abyāpitā hi asaṃphutṭhā*—*VismT.* p. 453; see also *Abhk.* p. 279.

58. See *VismS.* V, p. 68.

*kalāpaṅgas* of a *kalāpa*, has to be extended to the two *kalāpas* as well.<sup>59</sup> That is to say, the separateness of each of the *kalāpas* vanishes and both combine to form a bigger *kalāpa*. If the principle could be extended to two *kalāpas*, then it could also be extended to three or more, and so the process could be indefinitely extended. If a given piece of stone is composed, let us say hypothetically, of one billion *kalāpas*, then this billion *kalāpas* would become one big *kalāpa*, precisely as big as the piece of stone. This would undermine the very foundation of the theory of *kalāpas*.

In the first place, it goes against the established thesis that the *kalāpaṅgas* of a *kalāpa* are not separable from one another. For if the piece of stone in question is a (big) *kalāpa*, then it should be of such a nature that no part of it can be separated. The moment one breaks the piece of stone, we are speaking of, into smaller pieces, then the theory, namely that the constituents of a *kalāpa* are not separable, one from another, too, so to say, breaks into pieces.<sup>60</sup>

In the second place, it would also go against the view of a plurality of *kalāpas*. For, according to this alternative under consideration, the Mount Himalaya would be one big *kalāpa*. But the Mount Himalaya is not completely separated from the rest of the physical world. If the physical world is characterized by unbroken continuity in the sense that no part of it is completely separated from the rest, then one will be forced to the conclusion that the whole physical world is one mighty *kalāpa*.

In this connection it is interesting to note that one of the arguments advanced by the Vaibhāṣikas of Kāśmīra to deny contact of the atoms is that, if two of them touch in their totality, then the atom being non-resisting (*apratigha*) and partless (*niravayavat*), all the atoms would coalesce into one, the whole universe would coalesce into one atom, so small that no spatial dimensions can be predicated of it.<sup>61</sup>

The objection of the Theravādins, when its implications are fully developed, is that if *kalāpas* are not separated by *ākāsa*, then the whole physical world would become one enormous *kalāpa*. The Vaibhāṣika objection is that the world will be reduced to a partless atom; the Theravāda objection is that the atom will be inflated to the size of the world—two situations literally with a world of difference.

59. Cf. *Esē hot nan kalabūyēhi rū da ekakalabuyēhi rū seyinma avinirbhogabavaṭa pēminena heyin hē no mēnava.* —*ibid.* loc.cit.

60. Ledi Sadaw, the Burmese Thero, argues that it is solely because there is *ākāsa* around *kalāpas* that "lumps of stone and iron can be broken up, or cut into pieces, or pounded into dust, or melted." — *Buddhism in England*, 1930, Vol. V, No. 4, p. 21.

61. See *AK*. Ch. I, p. 89.

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The other alternative is to affirm that the *kalāpaṅgas*, not the *kalāpas*, are separated by *ākāsa*. This too would lead to many difficulties somewhat similar to the ones that stem from denying the separateness of the *kalāpas*. If it were assumed that in a given *kalāpa* the *kalāpaṅgas* are separated by *ākāsa*, then the separateness and independence of the *kalāpas* would fade away, establishing the separateness and independence of the *kalāpaṅgas*.<sup>62</sup> The ultimate unit of matter, then, would be the constituent (*kalāpaṅga*) and not the aggregate (*kalāpa*). For the reasons we have given above, the Theravādins were not prepared to accept such a conclusion. Although it is logically true that the *kalāpaṅga* should be smaller (subtler) than the *kalāpa*, yet in a given *kalāpa* the *kalāpaṅgas* are not separable, one from another. They arise, exist and perish as one unit. There is therefore no point in postulating the *kalāpaṅga* as the ultimate unit of matter. The refutation of the second alternative, although it is not explicitly stated, does amount to a criticism of the Vaibhāṣika stand-point.

There are in all seventeen kinds of *kalāpas*. The various elements of matter, often referred to as *rūpa-dhammas*, are the constituents that enter into their composition. Therefore, before we come to an examination of the different kinds of *kalāpas*, it is necessary that we should, at least briefly, go through the Theravādins' list of *rūpa-dhammas*.

By *rūpa-dhammas* Buddhism means the ultimate irreducible factors or data that make up the physical world. Any instance of matter is analysable into these (ultimate) factors. Although each *rūpa-dhamma* is postulated as if it were a discrete entity, this does not imply that it has an independent existence. It is only for the purpose of description that it is so postulated. In actual fact, it always exists in inseparable association with a set of other *rūpa-dhammas*. Their inter-connection is sought to be explained with reference to laws of causation and conditionality. One does not inhere in another; nor is one a substance of another. In brief, no distinction between substance and quality is introduced.

The Theravādins recognize in all twenty eight such *rūpa-dhammas*, or material elements. They are: the four *mahābhūtas* or the primary elements of matter, namely (1) *paṭhavī* (solidity and extension), (2) *āpo* (viscosity and cohesion), (3) *tejo* (temperature of cold and heat), (4) *vāyo* (mobility and distension); five material sense-organs, namely (5) *cakkhu*

62. Cf. *Ekkaḷāpayakama* ē rū ven ven koṭa piriṣindīyen. Mē esē vuvahot ek kalabuyehi rū da nānā kalāpayehi rū seyyinma vinirbhogavavaṭa pēminena bēvin hē da no mēnevi. — *Vism.S.* V, p. 68.

(organ of sight), (6) *sota* (organ of hearing), (7) *ghāna* (organ of smell), (8) *jivhā* (organ of taste), (9) *kāya* (organ of touch); four<sup>63</sup> objective fields, namely (10) *rūpa* (the visible), (11) *sadda* (sound), (12) *gandha* (smell), (13) *rasa* (taste); three faculties, namely (14) *itthindriya* (faculty of femininity), (15) *purisindriya* (faculty of masculinity), (16) *rūpa-jīvitindriya* (material faculty of life); (17) *āhāra* (material "quality" of nutrition); (18) *hadaya-vatthu* (the physical basis of mental activity); two modes of self-expression, namely (19) *kāya-viññatti* (bodily expression), (20) *vacī-viññatti* (vocal expression); three characteristics of matter, namely (21) *lahutā* (lightness), (22) *mudutā* (plasticity), (23) *kammaññatā* (wieldiness); four phases of matter, namely (24) *upacaya* (intergration), (25) *santati* (continuity), (26) *jaratā* (decay), (27) *aniccatā* (impermanence); (28) *ākāsa-dhātu* (space-element).

Nos. 1—4 of the above list are called the primary elements of matter (*mahābhūta*), and the rest, Nos. 5—18 the secondary elements of matter. The main difference between the two categories is that the latter cannot arise or exist independently of the former.

Ten of the items in the list, i.e. Nos. 19—28, are not real *rūpa-dhammas* in the sense that they are representative of certain phases, characteristics, limitations, etc. of what Buddhism recognizes as matter proper. In other words, they are nominal entities with no corresponding objective reality. It is only as a matter of convention (*rūlhiyā*) that they too are designated as *rūpa-dhammas*. They are distinguished from the rest by being further designated as *anipphanna*. The remaining eighteen items, i.e. Nos. 1—18, are real *rūpa-dhammas* in the sense that they properly answer to the definition of the term. As opposed to *anipphanna*, they are called *nipphanna*.<sup>64</sup>

After this short digression we may now come back to our subject of the *kalāpas*. As stated earlier, there are in all seventeen kinds of *kalāpas*. The smallest is an octad consisting of the four primary elements and four of the secondary, namely *rūpa* (colour), *gandha* (odour), *rasa* (savour) and *āhāra* (nutriment). This collection of eight material elements, called *suddhatṭhaka*, the bare octad,<sup>65</sup> corresponds to the smallest *saṃghāta-paramāṇu* of the *Vaibhāṣikas*, but for two differences:

63. The fifth material objective field consists of three of the primary elements, namely *paṭhavī*, *tejo*, and *vāyo*.

64. See *Vism.* p. 381; *Abhv.* p. 74; *Asl.* p. 343; *ADSVT.* p. 112.

65. See *ADS.* p. 29; *SS.* p. 6; *NRP.* p. 39.

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Firstly, in place of *āhāra* the Vaibhāṣika list contains *spraṣṭavya* (the tangible).<sup>66</sup> The difference is unavoidable. For, according to the Theravādins *phoṭṭhabba* (the tangible) includes only the primary elements with the exception of one, i.e. *āpo-dhātu*. Hence from the point of view of the Theravādins, it is not necessary to repeat *phoṭṭhabba*, because it is already represented by the enumeration of the primary elements. According to the Vaibhāṣikas *spraṣṭavya* includes the four primary elements, i.e. the *bhūta-spraṣṭavya*, and eleven secondary elements, i.e. the *bhautika-spraṣṭavya*.<sup>67</sup> It is in order to represent the latter that *spraṣṭavya* is repeated, although one aspect of it is represented by the primary elements. A similar situation is responsible for the inclusion of *āhāra* in the Theravāda list. While the Theravādins have postulated *āhāra* as a separate element of matter, the Vaibhāṣikas have conceived it as a combination of *rasa*, *gandha*, and *spraṣṭavya*,<sup>68</sup> which three items occur in the list.

The two lists are thus representative of the same items except for the fact that *bhautika-spraṣṭavya* is not represented in the list of the Theravādins. This is unavoidable, because the latter do not admit that any of the secondary elements of matter come under the object of touch.

The other difference is more significant. It is a Vaibhāṣika principle, with which the Sautrāntikas do not agree, that each secondary element is dependent on a separate tetrad of the primary elements. Those primary elements which serve as a support (*āśraya*) for a given secondary element, say, colour, do not at the same time serve as a support for another, say, smell.<sup>69</sup> Hence, as the *Abhidharmakośa* rightly points out, the smallest *saṃghāta-paramāṇu* should consist of, not eight, but twenty, elements; for, since each secondary element is dependent on a separate tetrad of the primary elements, the four secondary elements of the *saṃghāta-paramāṇu* should have for their support, sixteen separate primary elements.<sup>70</sup> The Vaibhāṣikas reply that “la nature (*jāti*) de la tetrade de grands éléments reste la même, que ceux-ci supportent la matière dérivée odeur, ou les matières dérivées visible, saveur, tangible” and that therefore there is no anomaly in counting the primary elements as four, although there are four of each

66. See *Dhs.* p. 143.

67. See *AK.* Ch. I, pp. 18 ff.

68. See *Abhm.* p. 40; *AK.* Ch. III, pp. 120 ff.

69. Cf. *yad bhūta-catuṣkaṃ āśraya ekasyopādāya-rūpasya nīlasya pītasya vā. na tad evānyasyopādāya-rūpasya gandhasya rasasya v'āśrayaḥ. kiṃ tarhi. anyad eva bhūta-catuṣkaṃ tasyāśraya iti Vaibhāṣika-siddhāntaḥ.* — *AKvy.* I, p. 123.

70. *AK.* Ch. II, pp. 148 ff.

type.<sup>71</sup> In contrast, the Theravādins believe that the four primary elements of the *suddhaṭṭhaka* are the common support (*eka-nissaya*) of the four secondary elements.<sup>72</sup>

These, then, are the two significant differences between the *suddhaṭṭhaka* of the Theravādins and the octuple *saṃghāta-paramāṇu* of the Vaibhāṣikas.

The conception of the octuple *saṃghāta-paramāṇu*, on which the *suddhaṭṭhaka* is modelled, reminds one of the Nyāya-Vaiśeṣika theory of the four elemental substances and their respective qualities. The Nyāya-Vaiśeṣikas maintain that odour (*gandha*), taste (*rasa*), colour (*rūpa*) and touch (*sparsa*) are respectively the special qualities (*viśeṣa-guṇa*) of earth, water, fire, and air.<sup>73</sup> It will be seen that it is the same items that constitute the octuple *saṃghāta-paramāṇu*. The special qualities, as the Nyāya-Vaiśeṣikas maintain, are invariably associated and co-existent with their respective elemental substances.<sup>74</sup> The eight constituents of the *saṃghāta paramāṇu*, as the Vaibhāṣikas maintain, are necessarily co-existent (*niyata-sahotpanna*). It should of course be admitted that in the Buddhist schools the secondary elements are not recognized as the qualities of the primary. However, by recognizing four items of the octad as secondary to the other four, rather than assigning equal status to all the eight, the resulting picture appears to be a veiled recognition of the Nyāya-Vaiśeṣika theory. It should be more logical and more in keeping with the Buddhists' denial of the duality between substance and quality to have given equal status to the eight items in question. In point of fact, a suggestion in this direction was given by the Sautrāntikas.<sup>75</sup> Perhaps it was the desire to escape from this seeming similarity with the Nyāya-Vaiśeṣika view that impelled the Vaibhāṣikas to declare that each secondary element of the octad is dependent on a separate tetrad of the primary elements.

The remaining sixteen *kalāpas* are formed according to the same principle as adopted by the Vaibhāṣikas in forming the *saṃghāta-paramāṇus* other than the octad. The eight items of the octad are the basic material elements; they are present in every instance of matter.<sup>76</sup> Therefore in all the *kalāpas*

71. See *AK*. Ch. II, p. 148.

72. See *ADSS*. p. 166; cf. *suddhaṭṭhakan ti cattāri mahābhūtāni tannissitā vaṇṇa-gandha-rasa-ojā ti idaṃ*. — *Abhk.* p. 297.

73. See Bhaduri, *Nyāya-Vaiśeṣika Metaphysics*, Poona, 1947, pp. 52 ff.

74. *Ibid.* loc.cit.

75. Cf. the Sautrāntika criticism of the principle of reciprocal causation (*sahabhū-hetu*) in *AK*. Ch. II, pp. 254 ff.

76. See *ADS*. p. 28; *VismS*. V, p. 389.

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these eight material elements are present as their basis. The other *kalāpas* are formed by adding one or more, as the situation demands, of the remaining material elements to the basic octad.

Next to the basic octad comes *sadda-navaka*, the sound-nonad, which, according to both schools, is formed by adding one element of sound to the basic octad.<sup>77</sup>

As to the formation of the five sense-organ *kalāpas* or *saṃghātas* the two schools follow two slightly different methods.

According to the Vaibhāṣikas, of the sense-organs the *kāyendriya*, the organ of touch, consists of the minimum number of *dravya-paramāṇus*. It is a nonad consisting of the basic octad and one *dravya-paramāṇu* of *kāyendriya* added to it. Each of the other four sense-organ *saṃghātas* is formed by adding one *dravya-paramāṇu* of each of them to the *kāyendriya*-nonad. Thus while the *kāyendriya-saṃghāta* is a nonad the other sense-organ *saṃghātas* are decads.<sup>78</sup>

For the Theravādins every sense-organ *kalāpa* is a decad (*dasaka*). First one *kalāpaṅga* of *rūpa-jīvitindriya*, the material faculty of life, is added to the basic octad to make it organic. The resulting nonad is called *jīvita-navaka*, the vital nonad. The five sense-organ *kalāpas* are then formed by adding each of the sense-organ *kalāpaṅgas* to the *jīvita-navaka*. Thus there are *cakkhu-dasaka* (eye-decad), *sota-dasaka* (ear-decad), *ghāṇa-dasaka* (nose-decad), *jivhā-dasaka* (tongue-decad) and *kāya-dasaka* (body-decad).<sup>79</sup>

The Vaibhāṣikas add one *dravya-paramāṇu* of *kāyendriya* to the other four sense-organ *saṃghātas*, because the other four sense-organs are said to be associated with *kāyendriya* (*tat-pratibaddhavarṇitvāt*).<sup>80</sup> They seem to have taken the view that the organs of sight, hearing, taste and smell are certain modifications of the organ of touch—a view accepted by certain Nyāya-Vaiśeṣikas, too.<sup>81</sup> It is rather strange that the Theravādins do not add one *kalāpaṅga* of *kāyendriya* to the other four sense-organ *kalāpas*. For, in the commentaries we are told that the organ of touch is present in every

77. See *AK*. Ch. II, p. 144; *AKey*. I, p. 123; *ADS*. p. 29; *SS*. p. 5.

78. Cf. *kāmeṣṭadravyakośabdalā paramāṇūṇaṃ anindriyāḥ* / *kāyendriyo navadravyo dasadravyo parendriyāḥ* || — *AK*. Ch. II, p. 22.

79. See *ADS*. p. 29; *SS*. p. 4; *NRP*. p. 38.

80. See *AKey*. I, p. 123.

81. See Bhaduri, *Nyāya-Vaiśeṣika Metaphysics*, Poona, 1947, p. 96.

part of the body (*sabba-sarīra-byāpaka*), existing as it were like oil soaked in cotton.<sup>82</sup> Why the *Vaibhāṣikas* do not include *jīvitendriya* in the sense-organ *saṃghātas* is not far to seek. For, unlike the Theravādins, they have recognized only one variety of *jīvitendriya*, which is common to both mind and matter, and is therefore included in the category of *citta-viprayukta-saṃskāras*.<sup>83</sup>

Since the Theravādins have defined the two faculties of sex as separate elements of matter, rather than conceiving them as part of the organ of touch,<sup>84</sup> as is done by the *Vaibhāṣikas*,<sup>85</sup> and since they have postulated the heart-basis (*hadaya-vatthu*) as the seat of mental activity,<sup>86</sup> these three items too are explained by way of *kalāpas*, to which corresponding *saṃghāta-paramāṇus* are not found in Sanskrit Buddhism. The method of their formation is like that of the sense-organs. That is to say, one *kalāpaṅga* of *itthindriya* (the faculty of femininity), *purisindriya* (the faculty of masculinity) and *hadaya-vatthu* (the heart-basis) is added to the *jīvita-navaka*. The resulting three decads are called *itthibhāva-dasaka* (femininity-decad), *pumbhāva-dasaka* (masculinity-decad) and *vatthu-dasaka* (basis-decad) respectively.<sup>87</sup>

The *kalāpaṅgas* or the constituents of the *kalāpas* which we have considered so far are all *nipphanna-rūpa*. Of the ten *anipphanna-rūpas*, five are not recognized as *kalāpaṅgas*. They are (1) *ākāsa-dhātu*, (2) *upacaya*, (3) *santati*, (4) *jaratā*, and (5) *aniccatā*. Why they are excluded needs hardly any explanation. *Ākāsa-dhātu*, i.e. space delimited by matter,<sup>88</sup> is not something that enters into the composition of the *kalāpas*; on the other hand, it is that which intervenes between the *kalāpas*. That is to say, it sets bounds to, and is itself bounded by, the *kalāpas*. The other four items are merely indicative of certain phases of matter.<sup>89</sup> As such, they are not material constituents of the *kalāpas*.<sup>90</sup>

82. See *Asl.* p. 311; *Vism.* p. 432.

83. See *AK.* Ch. II, pp. 178-9.

84. See *Asl.* pp. 321 ff.

85. See *AK.* Ch. pp. 108 ff.

86. See *VismT.* p. 449; *Abhk.* p. 271.

87. See *ADS.* p. 29.

88. This is what is called *pariccheda-rūpa* which stands for crevices, interstices, etc. and is often distinguished from *ākāsa* which represents boundless space. See *Dhs.* p. 144; *Kvu.* p. 330.

89. See *Dhs.* p. 153.

90. *Kalāpāṇaṃ pariccheda-lakkhaṇattā vicakkhaṇā/*  
*na kalāpaṅgaṃ icc'āhu ākāsaṃ lakkhaṇāni ca* || — *ADS.* p. 29.

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The five *anipphanna-rūpas* which are recognized as *kalāpaṅgas* are the two modes of self-expression, i.e. *kāya-viññatti* and *vacī-viññatti*, and the triad of *lahutā*, *mudutā* and *kammaññatā*. We have already shown that, although *anipphanna-rūpas* are called *rūpa-dhammas*, they do not stand for something distinct from the *nipphanna-rūpas*. Accordingly, although some *anipphanna-rūpas* are recognized as *kalāpaṅgas*, they do not stand for something distinct from the *nipphanna-kalāpaṅgas*. Let us take one example to clarify the situation.

*Kāya-viññatti*, it may be noted here, signifies an *ākāra-vikāra* (a particular position or situation) of a set of *citta-samuṭṭhāna-rūpas* (mind-conditioned material elements), which are *nipphanna*.<sup>91</sup> According to the theory under consideration, *kāya-viññatti* signifies an *ākāra-vikāra* of the *citta-samuṭṭhāna-kalāpas* (for the *citta-samuṭṭhāna-rūpas* too exist by way of *kalāpas*). Now each of these *kalāpas*, an *ākāra-vikāra* of which is called *kāya-viññatti*, is indicated by the addition of *kāya-viññatti* as one of its *kalāpaṅgas*. Thus the recognition of *kāya-viññatti* as a *kalāpaṅga* does not carry the implication that it is something distinct from the *nipphanna-kalāpaṅgas*. Its purpose is to indicate the type of *kalāpas*, an *ākāra-vikāra* of which is represented by the *kāya-viññatti*. It is in this manner that one should understand the significance of the five *anipphanna-kalāpaṅgas*.

Let us now examine those *kalāpas* some of the *kalāpaṅgas* of which are *anipphanna-rūpa*.

The first, called *kāyaviññatti-navaka* (bodily-expression-nonad), is formed by the addition of one *kalāpaṅga* of *kāyaviññatti* to the basic octad. It represents the *citta-samuṭṭhāna-kalāpa* an *ākāra-vikāra* of which is called *kāyaviññatti*. Next comes *vacīviññatti-dasaka* (vocal-expression-decad) which is formed by the addition of two *kalāpaṅgas* of sound and *vacīviññatti* to the basic octad. This represents the *citta-samuṭṭhāna-kalāpa* an *ākāra-vikāra* of which is called *vacīviññatti*.<sup>92</sup> The addition of sound is necessary because *vacīviññatti* is intimately connected with vocal sound.<sup>93</sup> Since the Vaibhāṣikas treat *kāyavijñapti* as a part of *rūpāyatana*, the sphere of the visible,<sup>94</sup> they do not postulate a separate *saṃghāta-paramāṇu* corresponding

91. *Citta-samuṭṭhāna-rūpas* are those material elements which arise in response to consciousness, as in the case of bodily movements. See *Dhs.* pp. 147 ff.

92. *Vacīviññatti* is an *ākāra-vikāra* of vocal sound which is conditioned by consciousness, as in the case of speech. See *Dhs.* pp. 143 ff.

93. See *Dhs.* p. 143.

94. See *AK.* Ch. IV, p. 4; *KSP:MCB*, IV, pp. 212-3; *La Siddhi*. p. 48.

to it. The same is not true of *vāgvijñapti*. Although it is treated as a part of *śabdāyatana*, the sphere of the audible,<sup>95</sup> its composition as a *saṃghāta* is more complex than that of ordinary sound. For, "le son (*śabdāyatana*) qui est produit par les grands éléments qui font partie de l'organisme (*upātta*) n'existe pas indépendamment des organes".<sup>96</sup> Hence in the case of a *saṃghāta-paramāṇu* of *vāgvijñapti* sound, the usual sound-nonad becomes an undecad by the addition of two *dravya-paramāṇus* of *kāyendriya* and *jihvendriya*.<sup>97</sup>

The last four *kalāpas* to which, except perhaps to one, no corresponding *saṃghāta-paramāṇus* can be traced in Sanskrit Buddhism, have as their *kalāpaṅgas* the usual eight inseparables of the basic octad, the triad of *lahutā*, *mudutā* and *kammaññatā* and the two *viññattis*.

The first, called *lahutād'ekādasaka* (undecad of plasticity), consists of the basic octad plus three *kalāpaṅgas* of *lahutā*, *mudutā* and *kammaññatā*.<sup>98</sup> It may be noted here that the last three items, which represent the body of a living being when it is healthy and efficient, arise always together (*na aññam'aññam vijahanti*).<sup>99</sup> This explains why the three items are included in the same *kalāpa* rather than establishing three different *kalāpas*.

The second and the third, called *kāyaviññatti-lahutādidvādasaka* (dodecad of bodily expression and plasticity) and *vacīviññatti-sadda-lahutādi-terāsaka* (tredecad of vocal expression, sound and plasticity) are formed by adding *lahutā*, *mudutā* and *kammaññatā* to the previously mentioned *kāyaviññatti-navaka* and *vacīviññatti-dasaka* respectively.<sup>100</sup> The occurrence of the two *viññattis* could be accompanied (facilitated) by the triad of *lahutā*, etc.<sup>101</sup> It seems that it is in order to explain such situations that these two *kalāpas* have been postulated.

The last *kalāpa* is *sadda-lahutādi-dvādasaka* (dodecad of sound and plasticity). It is the same as the previously mentioned *vacīviññatti-sadda-lahutādi-terāsaka* except for the absence of one constituent, namely *vacīviññatti*. Since the triad of *lahutā*, etc. is included here, it certainly concerns itself with a phenomenon associated with the physical body of a living

95. See *AK*. Ch. IV, p. 14; *KSP: MCB*. IV, pp. 156, 260; *Mdhv. Vrt.* p. 307.

96. *AK*. Ch. II, p. 145.

97. *Ibid.* loc.cit.

98. See *ADS*. p. 28.

99. *Abhv.* p. 281.

100. See *ADS*. p. 28.

101. See *VismT.* p. 453.

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being.<sup>102</sup> And since *vacīviññatti* is lacking, we may interpret it as representative of vocal sound unaccompanied by *vacīviññatti* as well as sound produced by the other parts of the body. In the *Abhidharmakośa* there is reference to a *saṃghāta-paramāṇu*, called the sound-decad, which consists of the basic octad and two *dravya-paramāṇus* of sound and the organ of touch. It represents the phenomenon of *upāttamahābhūtika* sound, i.e. sound produced, say, by the clapping of hands, etc.<sup>103</sup> Cases like these, it may be observed, are represented by the *kalāpa* in question. The non-inclusion of *kāyendriya* as a constituent of this *kalāpa* is explained by the fact that, unlike the Vaibhāsikas, the Theravādins do not add *kāyendriya* either to the *kalāpas* of the first four sense-organs or to the *kalāpa* of *vacīviññatti*-sound.

This brings us to an end of our survey of the seventeen kinds of *kalāpas*. They all are again classified into four groups on the basis of the four generative conditions of matter (*rūpa-samuṭṭhāna-paccaya*), namely (i) *kamma*, (ii) *citta* (consciousness), (iii) *utu* (temperature) and (iv) *āhāra* (nutriment). If a *kalāpa* is conditioned by more than one of the above-mentioned factors, say, by three (*ti-samuṭṭhāna*), then that particular *kalāpa* is counted thrice. In this way, although there are seventeen distinct *kalāpas*, the number is brought up to twenty one.

Since the eight *rūpa-indriyas* and the *hadaya-vatthu* are recognized as coming into being through the action of *kamma*,<sup>104</sup> the five sense-organ *dasakas*, the two sex *dasakas*, the *jīvita-navaka* and the *vatthu-dasaka* are brought under *kamma-samuṭṭhāna*. Since the two *viññattis* represent *ākāra-vikāras* of *citta-samuṭṭhāna-rūpa*, the four *kalāpas*, namely *kāyaviññatti-navaka*, *vacīviññatti-dasaka*, *kāyaviññatti-lahutādi-dvādasaka* and *vacīviññatti-saddalahutādi-terasaka* are brought under *citta-samuṭṭhāna*. The two *kalāpas*, *sadda-navaka* and *sadda-lahutādi-dvādasaka*, are *utu-samuṭṭhāna*.<sup>105</sup> These two *kalāpas* refer to two varieties of sound, the first to sound produced in the body of a living being, and the second to sound produced in the insentient (*aviññānika*) world. Here it may be noted that, although sound is said to arise owing to the concussion (*ghaṭṭana*) of the primary elements, *utu* (the temperature of cold and heat) is recognized as a special condition for its continuity.<sup>106</sup>

102. The triad refers to some characteristics, not of matter in general, but of the matter that enters into the composition of a living being. See *Abhk.* p. 281; *VismT.* p. 453.

103. *Op.cit.* Ch. II, p. 145.

104. See *Dhs.* p. 146; *Asl.* p. 336.

105. See *ADS.* p. 29 ff.

106. See *ADSS.* p. 167.

On the other hand, the two *kalāpas*, *lahutādekādasaka* and *suddhatṭhaka*, are *ti-samuṭṭhāna* in the sense that they are alternatively conditioned by *citta*, *utu* and *āhāra*.

The first which refers to the triad of *lahutā* etc. is *ti-samuṭṭhāna*, because bodily efficiency which is implied by the triad could be brought about by a wholesome state of mind (*citta*), or by agreeable nutrition (*āhāra*) or by good temperature (*utu*).<sup>107</sup>

When the *suddhatṭhaka*, which consists of the eight inseparable material elements, is brought into relation with consciousness, as in the case of bodily movements arising in response to a thought, it is called *citta-samuṭṭhāna*. When it arises conditioned by temperature or nutrition, it is called *utu-samuṭṭhāna* and *āhāra-samuṭṭhāna* respectively.<sup>108</sup> All matter other than that which enters into the composition of living beings is ultimately constituted of *suddhatṭhakas* and *sadda-navakas*, both conditioned only by *utu*. For the temperature of cold and heat is an essential factor for the arising, continuity and all changes of all such matter.<sup>109</sup>

Why the *suddhatṭhaka* is not *kamma-samuṭṭhāna* needs explanation. It is true that the (eight) constituents of this octad enter into the composition of all *kalāpas* including those that are *kamma*-conditioned. It should, however, be noted that, although some material elements come into being, being conditioned by *kamma*, their uninterrupted continuity is said to depend on the *rūpa-jīvitindriya*.<sup>110</sup> Therefore a *kamma-samuṭṭhāna kalāpa* should at least be a nonad (*navaka*), consisting of the eight inseparables (basic octad) and one *kalāpaṅga* of *rūpa-jīvitindriya*. An octad in itself can never be *kamma-samuṭṭhāna*.

Before we conclude this article a few comments are called for on the position of *kalāpas* in relation to *Rūpa-loka*, the second plane of existence according to Buddhist cosmology.

The Theravādins and the Vaibhāṣikas share the view that all elements of matter exist in the *Kāma-loka* and none in the *Arūpa-loka*. Therefore the same situation is true of the *rūpa-kalāpas/saṃghāta-paramāṇus* in relation to these two planes of existence.<sup>111</sup>

107. See *ADSS*, p. 165.

108. See *ADS*, p. 29.

109. See *ADS*, p. 29; *ADSS*, p. 163.

110. See *Asl.* p. 339.

111. See *AK*, Ch. I, pp. 55 ff; *ADS*, pp. 29 ff.

## ATOMIC THEORY OF THE THERAVADA SCHOOL

That some material elements exist in the *Rūpa-loka* is admitted by both schools. But opinion differs as to what they are.

The Vaibhāṣika view is that odour (*gandha*), savour (*rasa*) and the two faculties of sex which are a part of the organ of touch (*kāyendriya*),<sup>112</sup> do not obtain in the *Rūpa-loka*.<sup>113</sup> The first two are eliminated, because along with the tangible (*spraṣṭavya*) they form what is called *kavaḍḍikārāhāra* (material food). Since "personne ne nait dans le *Rūpadhātu* qui ne soit détaché de cet aliment",<sup>114</sup> it has to be excluded. But the tangible (*spraṣṭavya*) which is also a part of *kavaḍḍikārāhāra* is retained, partly because in itself it cannot constitute *kavaḍḍikārāhāra*, and partly because—this is the more important reason—the four primary elements are included in it.<sup>115</sup> Since the primary elements are the support (*āśraya*) of the secondary, the presence of the former must be admitted. The reason given for the elimination of the two faculties of sex is that they arise as a result of the desire for tactile consciousness, from which desire the beings who are destined to be born in the *Rūpa-loka* are completely free.<sup>116</sup>

Since the two faculties of sex are recognized, not as two independent material elements, but as a part of the organ of touch, the elimination of the former does not affect the principle of atomic aggregation. On the other hand, since savour (*rasa*) and odour (*gandha*) are recognized, not only as two separate elements of matter, but also as two of the constituents of the basic octad, their elimination necessitates the reduction of every *saṃghāta-paramāṇu* of the *Rūpa-loka* by two *dravya-paramāṇus*. Consequently, the smallest *saṃghāta-paramāṇu* of the *Rūpa-loka* becomes an aggregate of six constituents; and this quantitative deficiency is reflected in the composition of the other *saṃghāta-paramāṇus*, too.<sup>117</sup>

The Theravādins agree with the Vaibhāṣikas in eliminating the two faculties of sex,<sup>118</sup> presumably for the same reason. However, they disagree with the latter over the other elements of matter to be eliminated.

112. See *AK*. Ch. I, pp. 108 ff.

113. See *AK*. Ch. I, pp. 55-8; *AKvy*. I, p. 61.

114. *AK*. Ch. I, p. 55.

115. See above, p. 166

116. See *AK*. Ch. I, p. 55; *AKvy*. I, p. 63.

117. Cf. *ya ihāṣṭa-dravyaka ukto nirindriyośabdah. sa tatra ṣaḍ-dravyakah. yo nava-dravyakah kāyendriyā. sa sapta-dravyakah. yo daśa-dravyako'parendriyah. so'ṣṭa-dravyakah. sa-śabdakāḥ punar ete saptaṣṭa-nava-dravyakā ity avagantavyam.* — *AKvy*. II, p. 125; see also *AK*. Ch. II, pp. 147 ff.

118. See *ADS*. p. 30.

Instead of savour and odour, they have excluded the two sense-organs corresponding to them and also the organ of touch.<sup>119</sup> Consequent on this reduction, the two *bhāva-dasakas*, the *jīvhā-dasaka*, the *ghāna-dasaka* and the *kāya-dasaka* get eliminated from the *Rūpa-loka*.<sup>120</sup>

A comparison between the two lists of material elements eliminated by the two schools should show that the differences are of a considerable nature, the Vaibhāṣikas eliminating the sense-objects and the Theravādins the sense-organs. Although it might appear that the two schools have completely parted ways, yet, on closer examination, it will be seen that they are following two different methods for a common purpose.

Both schools agree on the view that *jīvhā-viññāna* (gustatory consciousness) and *ghāna-viññāna* (olfactory consciousness) are absent in the *Rūpa-loka*;<sup>121</sup> the Theravāda eliminates, in addition, *kāya-viññāna* (tactile consciousness).<sup>122</sup> If this latter fact is overlooked for the moment, then there is complete agreement between the two schools. Since consciousness requires for its arising the conjunction between the sense-organ and the sense-object, its absence can be indicated in one of two ways: either by the exclusion of the sense-organ or by the exclusion of the sense-object. The Theravādins have followed the first alternative and the Vaibhāṣikas the second.

However, although the two methods brought the two schools to a common conclusion, they separated them over one vital issue, an issue concerning the composition of the *saṃghāta-paramāṇus/rūpa-kalāpas*: In pursuance of the second alternative, the Vaibhāṣikas had to eliminate *gandha* (odour) and *rasa* (savour) from each and every *saṃghāta-paramāṇu* of the *Rūpa-loka*. Thereby the theory of *avinirbhāga-rūpa* according to which the four *mahābhūtas* and *rūpa* (colour), *rasa* (savour), *gandha* (odour) and *bhautika-spraṣṭavya* (the derivative tangible) are necessarily co-existent (*niyata-sahotpanna*) and positionally inseparable, could not be retained in the same form both in the *Kāma-loka* and in the *Rūpa-loka*.

On the other hand, the adoption, on the part of the Theravādins, of the first alternative did not necessitate such a course. For, what required reduction was not the number of constituents of each *kalāpa*, but the number of *kalāpas* themselves.

119. See *ADS*. p. 30.

120. *Ibid.* p. 31.

121. See *AK*. Ch. I, p. 55; *AKvy.* I, p. 60.

122. See *ADS*. p. 32.

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The concern of the Theravādins to retain the theory of *avinibhoga-rūpa* unmodified is also shown by the way they solved the problem of *āhāra-rūpa*. They too were of the opinion that the beings in the *Rūpa-loka* were completely detached from *kabalikāra-āhāra*. But, since *āhāra* is one of the *avinibhoga-rūpas*, it could not be eliminated from the *kalāpas*. The desired effect was realized by the elimination of all *āhāra-samutṭhāna-kalāpas* from *Rūpa-loka*.<sup>123</sup> Thereby they admitted that there was *āhāra-rūpa* in the *Rūpa-loka*, but denied that the beings therein were nourished by it.

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123. See *ADS*. p. 31.

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## *Key to Kalāpaṅgas*

- 1 = paṭhavi-dhātu (earth element).
- 2 = āpo-dhātu (water element).
- 3 = tejo-dhātu (fire element).
- 4 = vāyo-dhātu (air element).
- 5 = rūpa (colour).
- 6 = sadda (sound).
- 7 = gandha (odour).
- 8 = rasa (savour).
- 9 = āhāra (nutriment).
- 10 = cakkhu (organ of sight).
- 11 = sota (organ of hearing).
- 12 = ghāna (organ of smell).
- 13 = jivhā (organ of taste).
- 14 = kāya (organ of touch).
- 15 = jīvitindriya (faculty of life).
- 16 = itthindriya (faculty of femininity).
- 17 = purisindriya (faculty of masculinity).
- 18 = hadaya-vatthu (heart-basis).
- 19 = kāyaviññatti (bodily expression).
- 20 = vacīviññatti (vocal expression).
- 21 = rūpassa lahutā (lightness of matter).
- 22 = rūpassa mudutā (pliancy of matter).
- 23 = rūpassa kammaññatā (wieldiness of matter).

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## COMPOSITION OF THE RUPAKALĀPAS

Rūpakalāpas	Kalāpaṅgas
Suddhaṭṭhaka (Basic octad)	1+2+3+4+5+7+8+9
Sadda-navaka (Sound-nonad)	1+2+3+4+5+7+8+9+6
Jīvita-navaka (Vital nonad)	1+2+3+4+5+7+8+9+15
Cakkhu-dasaka (Eye-decad)	1+2+3+4+5+7+8+9+15+10
Sota-dasaka (Ear-decad)	1+2+3+4+5+7+8+9+15+11
Ghāna-dasaka (Nose-decad)	1+2+3+4+5+7+8+9+15+12
Jivhā-dasaka (Tongue-decad)	1+2+3+4+5+7+8+9+15+13
Kāya-dasaka (Body-decad)	1+2+3+4+5+7+8+9+15+14
Itthibhāva-dasaka (Decad of femininity)	1+2+3+4+5+7+8+9+15+16
Pumbhāva-dasaka (Decad of masculinity)	1+2+3+4+5+7+8+9+15+17
Vatthu-dasaka (Decad of heart-basis)	1+2+3+4+5+7+8+9+15+18
Kāyaviññatti-navaka (Nonad of bodily expression)	1+2+3+4+5+7+8+9+19
Vacīviññatti-dasaka (Decad of vocal expression)	1+2+3+4+5+7+8+9+6+20
Lahutādekādasaka (Undecad of plasticity)	1+2+3+4+5+7+8+9+21+22+23
Kāyaviññatti-lahutādi-dvādasaka (Dodecad of bodily expression and plasticity)	1+2+3+4+5+7+8+9+19+21+22+23
Vacīviññatti-sadda-lahutādi-terasaaka (Tredecad of vocal expression, sound and plasticity)	1+2+3+4+5+7+8+9+20+6+21+22+23
Sadda-lahutādi-dvādasaka (Dodecad of sound and plasticity)	1+2+3+4+5+7+8+9+6+21+22+23

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## Abbreviations

<i>Abhd.</i>	<i>Abhidharmadīpa</i> (with <i>Vibhāṣāprabhāvṛtti</i> ), ed. P. S. Jaini, Tibetan Sanskrit Works Series, Vol. IV, Patna, 1959.
<i>Abhmṛ.</i>	<i>Abhidharmāmṛta</i> , restored from Chinese into Sanskrit by Sānti Bhikṣu, Sāntiniketana, 1953.
<i>Abhek.</i>	<i>Abhidhammatthavikāśinī</i> , ed. A. P. Buddhadatta, Colombo, 1961.
<i>Abhvt.</i>	<i>Abhidhammāvatāra</i> , ed. A. P. Buddhadatta, Buddhadatta's Manuals, I, pp. 1-142, PTS., 1915.
<i>ADS.</i>	<i>Abhidhammatthasaṅgaha</i> , ed. T. W. Rhys Davids, JPTS., 1884, pp. 1-48.
<i>ADSS.</i>	<i>Abhidhammatthasaṅgaha-sannaya</i> , included in <i>Abhidharmāthasaṅgrahaya</i> , ed. Paññāmolī Tissa, 3rd Edition, Ambalangoda, 1926.
<i>ADSVT.</i>	<i>Abhidhammatthasaṅgaha-Vibhāvinī-Tīkā</i> , ed. Paññānanda, Colombo, 1998.
<i>AK.</i>	<i>L'Abhidharmakośa de Vasubandhu</i> , tr. L. de la Vallée Poussin, Societe Belge d'Etudes Orientales, Paris, 1923-31.
<i>AKey.</i>	<i>Abhidharmakośavyākhyā</i> ( <i>Sphūṭārthā</i> ), I-II, ed. U. Wogihara, Tokyo 1932-36.
<i>Asl.</i>	<i>Atthasālinī</i> , ed. E. Muller, PTS., 1897.
<i>DhS.</i>	<i>Dhammasaṅgaṇī</i> ed. E. Muller, PTS., 1885.
<i>ERE.</i>	<i>Encyclopaedia of Religion and Ethics</i> , 1-13, ed. J. Hastings, Edinburgh, 1908-26.
<i>KSP.</i>	<i>Karmasiddhiprakaraṇa</i> , tr. E. Lamotte, MCB., Vol. IV, 1936, pp. 151-228.
<i>La Siddhi.</i>	<i>La Siddhi de Hiuan Tsang</i> , tr. L. de la Vallée Poussin, Paris, 1928-29.
<i>MCB.</i>	<i>Melanges Chinois et Bouddhiques</i> , l'Institut Belge des Hautes Etudes Chinoises, Bruxelles.
<i>Māhy. Vṛt.</i>	<i>Mādhyamaka-Vṛtti</i> , ed. L. de la Vallée Poussin, Bibliotheca Buddhica, Vol. IV, St. Petersburg, 1903-13.
<i>NRP.</i>	<i>Nāmarūpapariccheda</i> , ed. A. P. Buddhadatta, JPTS., 1913-14, pp. 1-114.
<i>NRS.</i>	<i>Nāmarūpasamāsa</i> , ed. P. Dhammārāma, JPTS., 1915-16, pp. 1-19.
<i>JPTS.</i>	<i>Journal of the Pali Text Society</i> , London.
<i>PTS.</i>	<i>Pali Text Society</i> .
<i>SS.</i>	<i>Saccasaṃkhepa</i> , ed. P. Dhammārāma, JPTS., 1917-19, pp. 1-25.
<i>Vimś.</i>	<i>Vimśatikā</i> ( <i>Vijñaptimātratāsiddhi</i> ), ed. S. Levi, Paris, 1925.
<i>Vism.</i>	<i>Visuddhimagga</i> , ed. Mrs. Rhys Davids, PTS., 1917.
<i>VismS.</i>	<i>Viśuddhimārga-Sannaya</i> , I-VI, ed. M. Dharmaratna, Colombo 1890-1917.
<i>VismT.</i>	<i>Visuddhimagga-Tīkā</i> , ed. M. Dhammānanda, Colombo, 1928.

## Some Aspects of Cola Administration of Ceylon in the Eleventh Century\*

**D**URING the greater part of the eleventh century A.D. the Cōlas were the masters of the northern half of Ceylon, which comprised of Rajaraṭa, and the northern parts of Rohaṇa and Dakkhina-deśa.<sup>1</sup> These territories were administered by the Cōlas themselves, but the finer details of their administration in Ceylon remain unrevealed from contemporary sources. The *Cūlavamsa*, which is the most important source for the study of the history of mediaeval Ceylon, does not record anything of any great significance about the conditions in the area occupied by the Cōlas. However, the presence of Cōla officials, or Sinhalese officials disposed towards the Cōlas in the Rajaraṭa, is suggested by a few stray references in the *Cūlavamsa*, which allude to Cōla *āyuttakas* who were defied by the Sinhalese in Rajaraṭa,<sup>2</sup> and also to the changes effected by Vijayabāhu soon after his expulsion of the Cōlas from Rajaraṭa.<sup>3</sup>

The Cōla inscriptions which provide such a great deal of information for the study of their administration in South India have paid very scanty attention to such matters in Ceylon. The few Cōla inscriptions found in Ceylon, on the other hand, provide very inadequate but yet useful information for the reconstruction of the administration and a study of the economic conditions of the time.

The period which immediately preceded the Cōla occupation of Ceylon appeared to have witnessed a general break-down in the administration in Rajaraṭa. According to the *Cūlavamsa*, the reign of Sena V (972-982 A.C.), and the first ten years of Mahinda V (982-992) in Anurādhapura, were marked by lawlessness and a gradual surrender of the administrative machinery to the hands of the unruly elements.<sup>4</sup> The Tamil

\*For abbreviations see the end of the paper.

1. According to the *Cūlavamsa*, chap. lviii, verses 42-46, when the armies of Vijayabāhu set out to expel the Cōlas, they encountered them in the heart of Dakkhinadeśa, at Muhunnaru in the west, and in the east as far south as Caggāma, located near the mouth of Gal-oya, in the eastern province, *JRASCBS* (NS), vol. vi, p. 30. This would roughly demarcate the boundaries between the areas occupied by the Cōlas and the Sinhalese. See also *Cv.*, lv. 16-23.

2. *Cv.*, lviii. 12.

3. *Cv.*, lviii. 59, lix. 13-14.

4. *Cv.*, liv. 57-67. lv. 1-7, 12.

mercenaries had plundered the country and made life difficult for the people, and all the time nothing appears to have been done by these effete rulers to halt the forces of deterioration and prevent the collapse of the economy and the administration of the island. Conditions became so chaotic and unbearable that as the king's (Mahinda V) authority became ineffective, the people refused to pay their taxes to the king.<sup>5</sup> At this turn of events, Mahinda had abandoned Rajaraṭa and fled to Rohaṇa. The control of Rajaraṭa had then passed into the hands of the Keraḷa, Sinhala and Kaṇṇāṭaka mercenaries, who were in revolt against Mahinda. It is remarked that they carried on the government in Rajaraṭa "as they pleased". Perhaps before long they were replaced by the Cōḷas who invaded Ceylon about the same time. To some extent at least, whatever the adverse effects in general, the establishment of Cōḷa power may have provided a degree of protection denied to them by the forces of anarchy.

Before the conquest of Rajaraṭa by the Cōḷas in the time of Rājaraṇja I, Ceylon was only referred to as *Īlam* or *Siṅgalam* in the Tamil inscriptions, but following the aforesaid events, and still later the capture of Mahinda V in 1017 A.D., it became the practice to refer to Ceylon as *Īlamanḍalam* or *Mummuḍiśōḷa-maṇḍalam*. This is a very clear evidence of the change that took place in the political relations between the Cōḷas and the Sinhalese. The whole of Ceylon, at least in name, was considered as a Cōḷa *maṇḍala*, and the remaining pockets of Sinhalese resistance in Rohaṇa and Malayadeśa were perhaps treated as rebellious areas. And probably to make their conquest appear as real as possible even the Sinhalese king, who was taken captive to the Cōḷa country, had to spend the rest of his life as a prisoner of the Cōḷas. But their authority over the whole of Ceylon was more nominal than real is implied by their own claims to have repeatedly captured the crowns or the heads of the kings of Ceylon throughout their period of rule over Rajaraṭa. In the Rajaraṭa, however, their power seems to have been quite secure, and remained unchallenged by the Sinhalese for nearly seventy-five years. On the other hand, opposition to their rule continued almost without a break in Rohaṇa and Malayadeśa, and the Cōḷas had to accept the realities of the situation, and be content with frequent raids into these areas. Thus only the northern half of Ceylon actually experienced the effects of the administration of the Cōḷas, while the other areas only nominally belonged to the Cōḷa-maṇḍala in Ceylon.

5. *Cv.*, liii. 3.

The imposition of new names coined after the personal names and titles of Cōḷa monarchs on the lands they conquered, was a regular practice of the Cōḷas. This, however, did not lead to the complete exclusion or discontinuance of the older and traditional names. They were always used in association with one another. Thus Ceylon or *Īlam* became at the same time *Īlamanḍalam* alias *Mummuḍiśōḷamanḍalam*.<sup>6</sup> Polonnaruwa (Pulaththinagara or Pulainari) which became the headquarters of the Cōḷas in Ceylon was renamed *Jananāthamaṅgalam* or *Jananāthapuram*.<sup>7</sup> A Śiva temple erected there, probably about the same time, was named *Vāṇavanmādēvī-Īśvara-mudaiyar* after the chief queen of Rājārāja.<sup>8</sup> Another similar shrine built at Mahātitttha (Mannar) was called *Rājārājeśvara*, while the place itself was designated *Rājārājapuram*.<sup>9</sup> The eastern coast of Ceylon with the excellent harbour of Gokaṇṇa (Trincomalee) also appears to have attracted some attention. The villages which formed the subject of Rājārāja's own grant to the Tanjore temple<sup>10</sup> were located not very far from Gokaṇṇa. The interest of the Cōḷas in this particular area is also evident from the patronage given to an ancient Buddhist temple, named Abagara-vehera at Velgama, also called the *Rājārājaperumpalli*.<sup>11</sup>

The Cōḷa empire, including Ceylon, appears to have been divided into eight *maṇḍalas* or provinces. They were the Cōḷa-*maṇḍala*, Pāṇḍya-*maṇḍala*, Koṅgu-*maṇḍala*, Malaināḍu or *maṇḍala*, Gaṅgavādi or *maṇḍala*, Nulambapāḍi, Toṇḍai-*maṇḍala* and Īla-*maṇḍala*. These *maṇḍalas*, excepting the Cōḷa-*maṇḍala*, were administered by Cōḷa viceroys who were often members of the royal family. The appointment of princely viceroys is mentioned in some of the Cōḷa inscriptions in South India, and some of the inscriptions are dated in their vice-regnal years.<sup>12</sup> The Maṇimaṅgalam inscription of the ninth year of Rājādhirāja (1046) for the first time refers to the grant of the title of "*Īlaṅgaiyarkirraivan* (the King of the people of Laṅkā), as well as the dominion over Ceylon to a member of his family, presumably to one of his sons.<sup>13</sup> In the same *praśasti* both sons and brothers

6. *ARE.*, 1912, no. 616; *SII.*, vol. ii, no. 92; vol. iv, no. 1412.

7. *ASCAR.*, 1906, p. 27.

8. *SII.*, iv, nos. 1388, 1390.

9. *SII.*, iv, nos. 1412, 1414.

10. *SII.*, ii, no. 92, pp. 424—8.

11. *ASCAR.*, 1953, pp. 9—12, 27—28.

12. *EI.*, xi, pp. 292—8; *ARE.*, 1896, nos. 34—45, 1916, nos. 615—620; *SII.*, ii, no. 76; iii, Intro., p. 18; *The Cōḷas.*, p. 203; *TAS.*, iv, pp. 134—5; v, p. 106; vi, pp. 6—7.

13. *SII.*, iii, no. 28; *EC.*, ix, Dev. T. 75. The following titles were also bestowed on the same occasion: *Vāṇavaṇ* (Cera king), *Vallavaṇ* (King of the Cālukyās), *Miṇavaṇ* (Pāṇḍya king), *Gaṅgan* and *Pallavan*.

of Rājādhirāja are mentioned as the recipients of such titles and dominions. But since no names have been mentioned it is difficult to ascertain who were the recipients of particular areas. But if the order in which these honours are mentioned is taken into consideration it can be suggested that it was one of his sons who received the dominion of Ceylon. There is another similar grant of titles and dominions dated in the reign of Virarājendra.<sup>14</sup> But none of the inscriptions of Rājarāja or of his son Rājendra which so often refer to the appointment of their sons as rulers of Paṇḍya and Keraḷa allude to any such appointment over Ceylon. One could assume from the above facts that the entrusting of the dominion of Laṅkā to one of the Cōḷa princes may have been rather titular than real, and the prince concerned may not have been himself resident in Ceylon. In fact the practice of granting such titles was known in Ceylon too, as may be inferred from the references to “Cōḷarāja” and “Paṇḍirad” in the *Cūḷavaṁsa* and in the Sinhalese inscriptions.<sup>15</sup>

According to the Cōḷa inscriptions we have references to the following officials, who had at some time or other, some connection with Ceylon; a *senāpati* who was also a *nāḍālvān*,<sup>16</sup> a *Cō a-pallavaraiyan*,<sup>17</sup> a *perundanattupanimagan*,<sup>18</sup> another *nāḍālvān*,<sup>19</sup> a *mūvendavēlān*,<sup>20</sup> a *kilavan*<sup>21</sup> and an *adhikaraṇan*.<sup>22</sup> But none of these officials can be definitely identified as the highest Cōḷa dignitary in Ceylon. The Tiruvālaṅgāḍu copper-plate inscription of Rājendra I, on the other hand, mentions the exploits of an un-named Cōḷa *daṇḍanātha* who invaded Ceylon during the reign of his father.<sup>23</sup>

During the period of Cōḷa occupation of the northern half of Ceylon the remaining parts were hot-beds of opposition to the Cōḷas. This state of affairs may have had an important effect on the nature of the Cōḷa

14. *SII.*, iii, no. 20; v, no. 976.

15. *Cv.*, lii, 34; *EZ.*, i, p. 159; ii, pp. 8, 33—34; iii, p. 105.

16. *SII.*, iv, no. 1408.

17. *SII.*, iv, no. 1388.

18. *SII.*, iv, no. 1414B.

19. *SII.*, iv, no. 1393C.

20. *SII.*, iv, no. 1393B. The inscriptional term *mūvendavēlān* which often followed the personal name refers, according to Dr. Arokiaswami, to a class of people who were considered *adhikāris* fit for high administrative duties. The many references to *mūvendavēlān* and their administrative positions are supposed to indicate their importance, and their varied positions of responsibility, *JIH.*, xxxiv, pp. 191—3.

21. *SII.*, iv, no. 1412. An elder (*jeṭṭha*) or village headman.

22. *SII.*, iv, no. 1398. The date of this short record is not absolutely certain.

23. *SII.*, iii, p. 421, v. 80.

administration and their general policy in Ceylon. As a result they would have had to maintain a chain of military outposts along the frontiers of the area under their direct control. This is confirmed by the *Cūḷavaṃsa* which refers to the many strongholds captured by the forces of Vijayabāhu, when they invaded Rajarāṭa.<sup>24</sup> There was opposition in Rajarāṭa too, and its continued submission would have depended on strong garrisons stationed at strategic places. Under these circumstances one could expect a very close co-ordination between the military and civil administrators.

The *Cūḷavaṃsa* also furnishes some information on the Cōḷa official hierarchy in Ceylon. It mentions a few Cōḷa titles and officials, but not in a very consistent manner, perhaps having confused them with those of the Sinhalese. Earliest of the Cōḷa officials mentioned therein are those who had come to Ceylon in command of the expedition sent to capture Kassapa, the son of Mahinda V. They are called *mahāmaccas*.<sup>25</sup> The next reference is in connection with the Cōḷa officer who brought an army to fight Vijayabāhu. He is perhaps rightly referred to as a *senāpati*, while the alternate title *seninda* is also used in the same place for the same person.<sup>26</sup> Again, the officer sent by Virarājendra to chastise Vijayabāhu, is in the first instance called *sacīva* and soon after referred to as *seninda* and also as *camūpati*, and before he lost his life at the hands of the Sinhalese, he is for the last time designated *mahācōḷa-sāmanta*.<sup>27</sup> Lastly, we have the Cōḷa general (*camūpati*) who led a lightning attack on the Sinhalese, and chased them as far as Vātagiri.<sup>28</sup> In addition to these bits of evidence we also have a solitary reference in the *Cūḷavaṃsa* to some of the Tamil civil officials in Ceylon, who are designated as *āyuttakas*.<sup>29</sup>

One of the most important and well organized sections of the Cōḷa government in Ceylon would have been the military organization. The army and the navy were in fact two of the most efficiently organized arms of the Cōḷa empire. The political conditions in Ceylon would have made it necessary to have a large and an efficient army, under experienced commanders. We have already seen the references to Cōḷa *senāpatīs*, *camūpatīs*, *daṇḍanāthas*, and *sāmantas* in the *Cūḷavaṃsa* and in the Tamil inscriptions.

24. *Cv.*, lviii. 42—46. The Cōḷa strongholds were as follows: Muhunnaru, Bada-lattthala, Vāpinagara, Buddhagāma, Tilagulla, Mahāgalla and Caggāma.

25. *Cv.*, lv. 24.

26. *Cv.*, lviii. 4—6.

27. *Cv.*, lviii. 13, 16—17, 20.

28. *Cv.*, lviii. 31.

29. *Cv.*, lviii. 12.

The other officials whom we have noticed would also have had military duties in addition to their other official functions. Both in Polonnaruwa and in the other parts of Rajarāṭa, especially along the coast and along the frontiers, there appear to have been permanent garrisons of troops.<sup>30</sup> Such garrisons in South India were called *nilappadai*, and they formed the backbone of the Cōḷa defensive system.<sup>31</sup> Cōḷa armies were composed of regular troops and those drawn from corporate commercial organizations, such as the *Vaḷaṇṇiyars* and the *Kaikkolars*, which went to form the famous *Vēḷaikkāra* regiments.<sup>32</sup>

The revenue administration of the Cōḷa empire was one of its remarkable features. The thoroughness with which the Cōḷas conducted land surveys in the Cōḷa country shows the importance attached to the efficiency and organization of their revenue system. The most minute details of their revenue administration in South India are available to us from the Cōḷa inscriptions. But unfortunately, with what success and with what thoroughness they applied their revenue policies in Ceylon is not clearly known. There are however a few helpful references in the Tamil records in India and in Ceylon. The proportion of the produce claimed by the Cōḷa kings in South India itself is known from the contemporary records. It seems to have varied according to different periods, ranging from one-sixth to one-half.<sup>33</sup> If the conditions prevailing in the Cōḷa country were such one could expect a similar if not a worse state of affairs in the conquered territories. The position in Ceylon can also be inferred from the statement in the *Cūḷavaṃsa* that after expelling the Cōḷas Vijayabāhu appointed his own officials with orders to collect the taxes in the kingdom in a fitting manner.<sup>34</sup>

A considerable amount of information about the payment of produce as revenue to the Cōḷas by their subjects in Ceylon is found in the contemporary Tamil inscriptions. An inscription from Tanjore<sup>35</sup> records the grant of revenue of five villages in Koṭṭiyāram on the eastern coast of

30. See n. 24 above.

31. *TAS.*, vi, p. 3; *JBHS.*, v, p. 111.

32. *SIL.*, ii, Intro., p. 9, and pp. 95—105, 299.

33. *SIL.*, v, no. 641; iii, p. 117; A. C. Burnell, *Elements of South Indian Palaeography*, p. 119, London, 1878.

34. See n. 3 above.

35. *SIL.*, ii, pp. 424—428. None of these villages can be positively identified today. Sampur in Kottiyar Pattu (Eastern Province), however, seems to resemble Māppisumbu-Koṭṭiyāram of this inscription.

Ceylon, to the Rājarājesvara temple in Tanjore by Rājarāja I. This grant forms only a part of similar grants of revenue from villages from various parts of the Cōḷa empire, such as Toṇḍai-maṇḍalam, Pāṇḍi-maṇḍalam, Gaṅgapāḍi and Nūlambapāḍi. The absence of the usual details with regard to the grant in Ceylon is a conspicuous feature, and it is in sharp contrast to the profusion of such details in similar grants in the Cōḷa country itself.

Out of the five villages of which revenue was granted three belonged to Māppiṣumbu-Koṭṭiyāram *alias* Rājarāja-vaḷanāḍu, and the other two were from Māsār in Kaṇakkan-Koṭṭiyāram *alias* Vikkiramāśōḷa-vaḷanāḍu. These villages were expected to pay to the temple authorities the land revenue paid as tax (*kāṇikadan*) including “*pāvumaṇaittum pāyappāgādi tarāṇḍu vachchāl*” in paddy and money. In addition to these, quantities of *iluppaipāl* (oil of the seeds of *Mī* (Sinh.) or *Bassia Longifolia*) had to be supplied.<sup>36</sup> Further payment had to be made in specified sums of money (*kāṣu*). Both paddy and oil were paid in *kalams*, *tūni*, *kuruṇi* and *nāli*, and to be accepted according to the royal measure of *marakkāl* called *Ādavallān*,<sup>37</sup> which is said to be equal in capacity to the measure *Rājakeśarī*. There is no direct evidence as to the basis on which these quantities of paddy, oil and *kāṣu* were determined, but it can be suggested that the Cōḷas may have made their own land and revenue surveys and fixed these amounts, or were guided by previous data, according to which such revenues were paid to the Sinhalese kings.

It is however unfortunate that in this grant the sections which deal with the extent of the villages concerned have not been well preserved, and in the only instance where the measurements can be read the amount paid as tax is obliterated. Otherwise it would have been possible to determine on what rate the taxes were paid (i.e. number of *kalams* of paddy per *vēli* etc.) to the Cōḷa officials. It may also be noticed that the amount of revenue due from each village or group of villages also seems to differ from each other, perhaps owing to differences in extent or the differences in the grading of the respective lands.<sup>38</sup> The corresponding figures for fertile

36. The *Mī* tree seems to have been of special interest because of the oil obtained from its seeds, and which was used for devotional lamps. This tree has been granted immunity from destruction in the tenth century inscriptions of Ceylon, *EZ.*, i, no. 7, p. 107, n. 2; *ALTRC.* p. 54ff.

37. The specific amounts due were as follows: The land in Māppiṣumbu-Koṭṭiyāram *alias* Rājarāja-vaḷanāḍu had to pay as tax including *pāvumaṇaittum pāyappāgādi tarāṇḍu vachchāl*, one hundred and seventeen *kalam*, two *tūni*, three *kuruṇi* and two *nāli* of paddy; twenty-two *kāṣu* and three *kalam*, one *kuruṇi* and four *nāli* of oil, *SII.*, ii, pp. 427—428.

38. *SII.*, iii pp. 154—155; *ALTRC.*, p. 30.

lands in Tanjore and Tiruchirapalli districts are estimated to have been one hundred *kalams* per *vēli* by the *Ādavallān* measure.<sup>39</sup> Incidentally the Tamiḷ inscription in the Colombo Museum which is partly a grant of land, has the boundaries and the extent of the land well preserved, but again not the amount paid as tax.<sup>40</sup> The manner in which these grants outside the Cōḷa country were executed, and their revenues were collected also have escaped notice in the records. The Cōḷa inscriptions in South India and the Sinhalese inscriptions, before and after the eleventh century, furnish such details for local grants.<sup>41</sup> What we can assume in this connection is that it may have been the *sabhā* or the local assembly of the village that was held responsible for the collection of these taxes, which were then handed over to the administrative officials to be sent to Tanjore. It may also have been convenient to realise the value of produce in *kāṣu* and remit the money to the temple authorities. The revenue terms "*pāvumaṇaittum pāyappāgādi taṭāṇḍu vachchāl*" which seem to be peculiar to Ceylon, have not been satisfactorily interpreted to this day. In addition to these details we can also form some idea of the revenue administration in the towns, as furnished by the Māntoṭṭam record, now in the Colombo Museum.<sup>42</sup> According to its contents, tolls or taxes (*vaṭṭam*) appear to have been collected from spinners and weavers, and traders along the highways of the town.<sup>43</sup>

Further evidence of the imposition of Cōḷa rule in Ceylon is furnished by the frequent mention of the units of currency, weights and measures which were in use among the Cōḷas. *Kalañju*, *mañjāḍi*, *kahāpaṇa* and *aka* were some of the units of currency which were in circulation in Ceylon, both before and after the period of Cōḷa occupation. Many inscriptions belonging to the reigns of Parāntaka I and Parāntaka II refer to *Īlakkāṣu*, assumed to have been the standard coin of Ceylon. It is also possible that it is another name for the Ceylonese *kahāpaṇa*. In the Cōḷa country itself the best known and the standard unit of currency was the *kāṣu*, some times referred to as *Rājarājan-kāṣu* or *Rājendra-kāṣu*.<sup>44</sup> The period when this standard *kāṣu* was introduced into the Cōḷa country has been a topic of

39. *Madras Review*, 1903, pp. 14—15.

40. *SII.*, iv, no. 1412.

41. *SII.*, iii, nos. 142, 151, 205; *HAISI.*, pp. 262—266; *EZ.*, ii, no. 1, 37; iii, no. 32.

42. *SII.*, iv, no. 1412.

43. See p. 26 below.

44. *ARE.*, 1908, no. 421. One of the Cōḷa inscriptions (*ARE.*, 1916, C, no. 157) states that 37 *kāṣu* were the equivalent of 10 *kalañju* and 9 *mañjāḍi* of gold, the fineness of which is equal to that of *Madhurāntakadevan-māḍai*. In *ARE.*, 1916 B, no. 252, *Madhurāntakadevan-māḍai* is stated to be of the standard fineness and purity in gold, and *Īlam* or *Īlakkāṣu* is stated to be of the same fineness, *ARE.*, 1916, p. 118.

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controversy. Codrington<sup>45</sup> holds the view that it was copied from Ceylon after the conquest of Rajarāṭa by Rājārāja I. Nilakanta Sastri, on the other hand, is inclined to take the view that it was in the time of one of the predecessors of Rājārāja, either Parāntaka I or II, that the Cōḷas became familiar with the Ceylon *kāṣu* and adopted its weight and shape.<sup>46</sup> *Īlakkāṣu* or the Ceylon *kāṣu* seems to have been well known in the Cōḷa, Pāṇḍya and Keraḷa countries during the decades which immediately preceded the fall of Rajarāṭa to the Cōḷas. Perhaps they had been taken there by merchants and the Tamil mercenaries who had served in Ceylon. There was a further influx with the invasions of Ceylon in the times of Parāntaka I and II, when hoards of money would have been taken as booty to South India. From the time of Rājārāja I, however, *Īlakkāṣu* is very rarely mentioned, and in its place the equivalent Cōḷa *kāṣu* seems to have been introduced for circulation in the Cōḷa dominions including Ceylon. This can be inferred from the frequent references to only *kāṣu* in the Tamil inscriptions in Ceylon.<sup>47</sup>

The weights and measures with which lands, grains and liquids were calculated during the period of Cōḷa occupation of Rajarāṭa also reveal the introduction of a few innovations by the new rulers. Before they established their rule in Ceylon it had been the age-old practice here to measure land according to its sowing capacity. But the Cōḷas departed from this method and replaced it with linear measurements which they had perfected in South India. The most important unit of this system was the *vēli*,<sup>48</sup> and the land grants in the Tamil inscriptions in Ceylon are also in *vēli* or *kōḷ*,<sup>49</sup> one of the lower units of measurements in South India. The existence of regional differences with regard to units of measurements was one of the important characteristics of the Cōḷa system, and it was therefore necessary to indicate the correct extent implied by the specific name of the particular unit of measurement.<sup>50</sup> Thus we have in Ceylon in the "*Vitāṅga.....naipperum-kōḷ*" one such unit of measurement applied here.<sup>51</sup> The Tanjore inscription<sup>52</sup> of Rājārāja also refers to the extent of land in Koṭṭiyāram in terms of *mā*, which was another subsidiary unit of measurement known at the time.

45. *CCC.*, p. 7; *HC.*, vol. i, pt. ii, p. 551; *JRASC.B.*, xxiv, no. 68, p. 117.

46. *The Cōḷas.*, pp. 617—618.

47. *SII.*, iv, nos. 1388, 1403—4, 1414B.

48. *vēli*: 6.74 acres, *TL.*, vi, p. 3838.

49. *SII.*, iv, nos. 1406, 1411, 1412; *kōḷ*: rod of 8 cubits or 12 feet in length, *TL.*, ii, p. 1194; *ALTRC.*, p. 54.

50. *SIP.*, pp. 156, 159ff.

51. *SII.*, iv, no. 1412.

52. *SII.*, ii, no. 92, pp. 424—428; see also *SIP.* p. 152.

The units of measurement of grains and oil also show the application of new standards, and also indicate the regional differences distinguished by their different names. We have, for example, the grant of oil from some villages in Ceylon to the Rājarājeśvara temple, to be paid in *kalam*, *tūni*, *kuruṇi* and *nāli*, and to be received according to the *marakkāl* called *Ādavallān*, which was the equivalent of the royal measure *Rājakeśari*. In addition to the measures of oil, which were also used to measure paddy and other grains, reference is also made to two other measures of liquid, called *uḷakku* and *ālākku*.<sup>53</sup>

Some of these coins, weights and measures introduced by the Cōḷas to Rājaraṭa were also adopted by the Sinhalese, and were used for some time even after the Cōḷas had departed from Ceylon.<sup>54</sup> But this practice did not last very long, and the Sinhalese appear to have reverted to the exclusive use of those standards with which they were more familiar. Owing to the fact that the whole of Ceylon did not come under the authority and the influence of the Cōḷas, the Sinhalese coins and weights and measures had continued to be used in the areas free of the Cōḷas. In the Cōḷa country too some of the standards used by the imperial Cōḷas were given up after the disappearance of the Cōḷa empire.

The system of village organization and rural self-government was another of the remarkable features in South India at this time.<sup>55</sup> It is possible that at the time the Cōḷas invaded Ceylon village assemblies were not unknown in Ceylon.<sup>56</sup> Perhaps they were not so well developed, or occupying such an important place in the country as they did in South India. According to the tenth century Sinhalese inscriptions there were councils of villagers, called "*gam-vāsiyo*,"<sup>57</sup> but how they were constituted or who were eligible for membership of these councils remain unknown. We have comparatively more information with regard to the corporate commercial organizations which were found in the market-towns (*niyamgam*,

53. *SII.*, iv, nos. 1388, 1395; *ASCAR.*, 1909, p. 27; *uḷakku*-2 *uḷakku* equal to quarter measure, *TL.*, i, p. 466.

54. *EZ.*, ii, p. 225; *SII.*, iv, no. 1406; *ALTRC.*, pp. 33, 54; *ASCAR.*, 1909, p. 27; *UCR.*, xviii, pts. i-ii, pp. 46-49; *EZ.*, iv, pp. 195-196.

55. see *Madras Review*, 1903, pp. 1-9; *DRBhC.*, pp. 58-61; *HAISI.*, pp. 130-245; *EI.*, xxii, pp. 145-150; *SIP.*, pp. 333-393; *The Cōḷas*, pp. 486-519; *QJMS.*, xxxi, pp. 134-144; xxxix, p. 17; lxii, p. 102.

56. *HC.*, I, pt. i, p. 373.

57. *EZ.*, i, no. 8; iii, no. 4; *ALTRC.*, p. 3.

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*nigama*) in ancient and mediaeval Ceylon.<sup>58</sup> We have, however, no evidence to ascertain in what way the rural administration or organization in Ceylon was affected by the establishment of Cōḷa rule in Ceylon.

The terminology of the rural divisions at this time is also interesting. The village, which was the smallest unit of administration, was known as *grāma* or *gāma* in Ceylon. In South India, the village was not generally known by the same term everywhere, being called *ūr*, *kūrram* and *kōṭṭam*. *Nāḍu* and *valanāḍu* denoted a complex of villages, with the latter specially used to describe a larger unit. *Ūr* or *kūrram* does not appear to have been known in Ceylon, but *nāḍu* and *valanāḍu* occur frequently in the Tamil inscriptions in Ceylon.<sup>59</sup> These divisions were mostly known in the northern parts of Ceylon, with Polonnaruva, the centre of Cōḷa power in Ceylon, being the only exception.<sup>60</sup> *Nāḍu* in the Tamil records in Ceylon seems to correspond to a village and *valanāḍu* to the next larger division. The widespread use of these new terms in Ceylon probably started with the Cōḷas, as implied by the Cōḷa names which are invariably associated with these terms. But in some of the localities at least where Tamils have been settled for some time, such terms may have been in vogue even before the time of the Cōḷas.

The administration of the important towns of the Cōḷa-maṇḍala in Ceylon also deserves some attention. Polonnaruva, which was the headquarters of the Cōḷas in Ceylon, would have had a large concentration of Tamils. The names of Tamils recorded in the inscriptions in its vicinity indicate the presence of Tamils drawn from various social and official ranks, and also reveal their places of origin in South India.<sup>61</sup> Polonnaruva seems to have been a well fortified city, but its limits may have extended outside its walls, as suggested by the reference to its divisions into *nāḍus* and *valanāḍus*.<sup>62</sup> However, the nature of the city administration itself is not known. The conditions in the other towns, with the exception of Mahātittha, are equally obscure.

58. *EZ.*, iii, pp. 71—100, 172—188; *HC.*, I, pt. i, pp. 225—6, 373.

59. *SIL.*, iv, nos. 1405, 1412; *ASCAR.*, 1906, p. 27, 1909, p. 27, 1953, p. 27. According to the inscriptions, Kōṭṭiyāram on the east coast of Ceylon appears to have been divided into at least 2 *valanāḍus*, each of which was further divided into *nāḍus*, *SIL.*, ii, no. 92. At Māntoṭṭam (Mannar), on the other hand, *valanāḍu* was only an alternate term for *nāḍu* itself, *SIL.*, iv, no. 1412.

60. *ASCAR.*, 1906, p. 27, 1909, p. 27.

61. *ARE.*, 1910, p. 9.

62. see n. 60 above.

Along the north-eastern and north-western coasts of Ceylon were located a number of towns and sea-ports, where the Tamils had been living for quite some time. Mahātitttha (Mannar) was one such town, occupying an important position strategically, commercially and culturally. For the Cōḷas in Ceylon it occupied a vital position, and it seems to have been well guarded too.<sup>63</sup> The meagre evidence available to us suggests that it was a busy port producing its own wares for sale. The presence there of a Cōḷa official (*perudanātu paṇimagan*) is attested by an inscription.<sup>64</sup> There is also an allusion to a palace or a mansion (*Māligai*),<sup>65</sup> presumably being the residence of an high official, or of the leader of one of the commercial organizations there. How the town was administered is not all too clear. There is, however, a reference to a committee which was probably responsible for the collection of various custommry dues (*piḍilikai-vāriyum*),<sup>66</sup> from the marts and industries along the highways. There is also an interesting allusion to traders in betel and plantains (*veṇṇilai vāṇiyar* and *vāḷaikkai vāṇiyar*) at Māntoṭṭam (Mannar), who also acted as petty bankers with whom small amounts of money were deposited to carry out certain temple services.<sup>67</sup>

An important aspect of urban and rural life in South India and Ceylon was the existence of corporations engaged in commercial and many other activities. Commercial corporations had been known in Ceylon from very early times, as proved by the Tōnigala rock-inscription<sup>68</sup> of the fourth century A.D. While the local or indigenous organizations continued to hold their own, foreign, mainly South Indian commercial organizations also had found their way to Ceylon. The best known among these were the *Valaṇṇīyars*, *Kaikkōḷars* and the *Nānādēśis*. These organizations have been noticed in many parts of South India, Ceylon and South-east Asia. Such corporations, mostly of South Indian origin, seem to have continued to flourish under the Sinhalese kings and the Cōḷa governors in Ceylon without prejudice to their own interests.<sup>69</sup> The *Valaṇṇīyar* and the

63. *ASCAR.*, 1950, p. 15.

64. *SII.*, iv, no. 1414B.

65. *SII.*, iv, no. 1412.

66. A committee by this name is not known in South India. But it may be a special committee found only in the towns. The only term which has some resemblance to this is the *taḍivalivāriyam*, the committee which exercised supervision over the construction and repair of roads and streets, *DRBhC.*, pp. 58—61; *HAISI.*, pp. 133—135; *SII.*, iii, no. 156; *SIP.*, pp. 344—356.

67. *SII.*, iv, no. 1414B.

68. *EZ.*, iii, pp. 172—188; *HC.*, I, pt. i, p. 373; see also *EZ.*, iii, pp. 78, 192, no. 1.  
69. *HC.*, I, pt. ii, pp. 536, 550, 562, 622; *ASCAR.*, 1953, p. 27; *EZ.*, ii, pp. 242—255; *ARE.*, 1922, no. 505; *CJSc.* ii, no. 566.

## COLA ADMINISTRATION OF CEYLON

*Kaikkōlar* communities played an important part in providing contingents of troops to both the Cōḷa and the Sinhalese kings.<sup>70</sup> Other such organizations mentioned in the contemporary inscriptions are the *Nagarattars* and the *Ganattars*.<sup>71</sup> The services of these organizations as bankers and money-lenders were often engaged by those making grants to Buddhist and Hindu shrines. Money and grains were deposited with them, and it was with the interest accruing from such investments that the expenses for stipulated duties were met.<sup>72</sup> There are also instances of the *Vēḷaikkāra* regiments belonging to the *Valaṇṇiyyar* and the *Kaikkōlar* corporations being appointed custodians of Buddhist and Hindu shrines.<sup>73</sup>

The manner in which the Cōḷas administered justice in Ceylon cannot be gleaned from any of the contemporary sources. A solitary statement in the *Cūḷavanīsa* however suggests that the spirit of justice of the Cōḷas differed from that of the Sinhalese. It is said that after Vijayabāhu had defeated the Cōḷas and established his own rule in Rajarāṭa, he had found the administration of justice neglected since a long time, and therefore restored it and personally administered justice in keeping to the ancient laws.<sup>74</sup> A Tamil inscription from Polonnaruwa, the date of which is not absolutely certain, however refers to an *adhikaraṇan* Sāranan who was also a *Vēḷaikkāra*.<sup>75</sup> According to his titles he may be considered a military and a high judicial officer. *Mūvendavēḷān* was another officer who performed judicial functions in South India.<sup>76</sup>

The establishment of the authority of the Cōḷas in Rajarāṭa is also reflected from the use of Tamil for all their transactions. Owing to the presence of Tamils in Ceylon from very early times, at least some of the Sinhalese would have been acquainted with their language. We may note, however, that not a single inscription in Sinhalese assignable to the Cōḷas has been so far found. All their inscriptions are in Tamil, including even those which deal with grants to Buddhist shrines.<sup>77</sup> The use of Tamil in the inscriptions was given up after the expulsion of the Cōḷas, and once

70. see n. 32 above; *EZ.*, ii, pp. 242—255; iv, pp. 191—196; *JBHS.*, v, pp. 104—105.

71. *EZ.*, ii, pp. 242—245; *SII.*, iv, nos. 1403—4.

72. *SII.*, iv, nos. 1388, 1403—4, 1408, 1411—1412.

73. *UCR.*, xviii, pts. i-ii, pp. 46—49; *CJSc.*, ii, pp. 199; *ASCAR.*, 1953, p. 28, 1955, pp. 27—28; *EL.*, xviii, pp. 330—338; *QJMS.*, xxxii, pp. 144—145; *CHJ.*, iv, pp. 19—20.

74. *Cv.*, lix, 14.

75. *SII.*, iv, no. 1398.

76. see n. 20 above; *SII.*, iv, no. 1398.

77. *ASCAR.*, 1953, pp. 9—12, 27—28; *CJSc.*, ii, p. 199; *SII.*, iv, no. 1402.

again Sinhalese was used exclusively by Vijayabāhu I. But after the death of Vijayabāhu, his immediate successors, some of whom were perhaps inclined towards Hinduism, resumed the use of Tamil in some of their records.<sup>78</sup> The contemporary Tamil commercial and military organizations were always attached to the use of Tamil.<sup>79</sup>

According to the *Cūḷavaṃsa*, following the expulsion of the Cōḷas, Vijayabāhu is credited to have placed the Rajaraṭa on a sure foundation, ordered his officials to collect the taxes in his kingdom in a fitting manner, and restored the administration of justice.<sup>80</sup> These remarks would suggest that Cōḷa rule was severe and vexatious and would have compelled many of the Sinhalese to abandon their ancestral homes and take refuge in Rohaṇa and Malayadeśa. But the conditions in these areas were equally uncertain is suggested by the contents of the Panākaḍuva copper-plate of Vijayabāhu.<sup>81</sup> Thus there was little to choose between the protection provided by the weak Sinhalese kings and princes of Rohaṇa, and the oppressive rule of the Cōḷas. The reference in the *Cūḷavaṃsa*<sup>82</sup> to a revolt of the people in Rajaraṭa against their Cōḷa overlords also suggests that all the Sinhalese had not followed Mahinda V to Rohaṇa, but continued to live and chafe under the new masters. There is, on the other hand, some indirect evidence which suggests that there was a noticeable dislocation of the population of Rajaraṭa. The Ambagamuva<sup>83</sup> and the Panākaḍuva<sup>84</sup> records indirectly suggest that parts of Malayadeśa, which were not thickly populated in earlier times were now under cultivation. The increasing importance of Malayadeśa, once referred to in the *Cūḷavaṃsa*<sup>85</sup> as a forested area, also suggests a general drift of the population towards the south. The strikingly few references to the Anurādhapura area in the campaigns of Parākramabāhu I also indicate the decrease in importance of this part of the island. The need for extensive irrigational works in Dakkhinadeśa and in the Polonnaruva area during this period also lends support to this conjecture. If such was the situation, it would have created serious economic and administrative problems for the Cōḷas, who were left with the greater part of Ceylon, but without sufficient manpower to sustain the economy and maintain the administration.

78. *EZ.*, ii, pp. 242—255; iii, pp. 302—312; *SIL.*, iv, nos. 1397, 1406, 1410.

79. *EZ.*, iv, pp. 191—196; *CJSc.*, ii, p. 122; *ASCAR.*, 1953, p. 27, 1954, p. 38.

80. *Cv.*, lviii. 59, lix. 13—14.

81. *EZ.*, v, pp. 1—27.

82. *Cv.*, lviii. 11—12.

83. *EZ.*, ii, pp. 202—208.

84. see n. 81 above.

85. *Cv.*, li. 114.

## COLA ADMINISTRATION OF CEYLON

One of the most vital factors in the economy of Ceylon at this time was the irrigational network, which had to be maintained with the highest possible efficiency. To what extent the Cōḷas would have succeeded in doing so deserves some attention. Irrigation was indeed an important field of activity of the Cōḷas in South India, but it was of a much less grandiose and complicated nature. The large number of breached reservoirs stated to have been repaired by Vijayabāhu I, and later by Parākramabāhu I,<sup>86</sup> would suggest that the Cōḷas had not been able to pay much attention to this aspect of the economy. All this would imply that the eroding effect of the Cōḷa occupation was not confined to the wilful damage done to buildings, tanks and other material things, or to the devastation caused by their frequent invasions of Rohaṇa and Malayadeśa, but also included this neglect of a very vital section of the economy of the country. As a result the whole country would have been in a state of impoverishment at the end of their rule in Ceylon.

W. M. K. WIJETUNGA

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86. *Cv.*, lx. 48—54, lxxix, 13—14, 58—60, 68—69.

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## Abbreviations

ALTRC.,	— <i>Ancient Land Tenure and Revenue in Ceylon</i> , H. W. Codrington, Colombo, 1938.
ARE.,	— <i>Annual Reports on Epigraphy</i> , Madras.
ASCAR.,	— <i>Archaeological Survey of Ceylon, Annual Reports</i> .
CCC.,	— <i>Ceylon Coins and Currency</i> , H. W. Codrington, Colombo, 1924.
CHJ.,	— <i>Ceylon Historical Journal</i> .
CJSc.,	— <i>Ceylon Journal of Science</i> , Section G.
Cv.,	— <i>Cūlavamsa</i> , Tr. W. Geiger, 2 parts, London, 1929, 1930.
DRBhC.,	— <i>D. R. Bhandarkar Commemorative Volume</i> , Calcutta, 1940.
EC.,	— <i>Epigraphia Carnatica</i> .
EI.,	— <i>Epigraphia Indica</i> .
EZ.,	— <i>Epigraphia Zeylanica</i> .
HAISI.,	— <i>Hindu Administrative Institutions of South India</i> , S. K. Aiyengar, Madras, 1930.
HC.,	— <i>History of Ceylon</i> , University of Ceylon, vol. I, pts. i & ii, Colombo, 1959, 1960.
JBHS.,	— <i>Journal of the Bombay Historical Society</i> .
JIH.,	— <i>Journal of Indian History</i> , Madras.
JRASCB.,	— <i>Journal of the Royal Asiatic Society</i> , Ceylon Branch.
JRASCB(NS).,	— . . . . . (New Series).
QJMS.,	— <i>Quarterly Journal of the Mythic Society</i> , Madras.
SII.,	— <i>South Indian Inscriptions</i> , Madras.
SIP.,	— <i>South Indian Polity</i> , T. V. Mahalingam, Madras, 1955.
TAS.,	— <i>Travancore Archaeological Series</i> .
The Cōlas,	—K. A. Nilakanta Sastri, <i>The Cōlas</i> , Madras, 1955 (2nd Ed.).
TL.,	— <i>Tamil Lexicon</i> , Madras.
UCR.,	— <i>University of Ceylon Review</i> .

# *Developments in University Education: The Growth of the University of Ceylon (1942 – 1965)*

UNTIL the establishment of the two Pirivena Universities in 1959, the University of Ceylon, constituted in 1942 by Ordinance No. 20 of 1942 as an autonomous corporate body, was the premier institution of higher learning in Ceylon. Therefore, at a time when far reaching changes in University and tertiary education are being contemplated, it may be useful to review and scrutinise the development of this institution over the last two decades in order that future policies of higher education may be meaningfully evolved in the light of this experience.

The literature on Higher Education in Ceylon is exceedingly scanty and there are only a few studies relating to the University of Ceylon. Chandrasegaram's (3) unpublished University of London dissertation on Higher Education Policy during the British period provides a well documented, extremely valuable survey of developments prior to 1942 and in particular, the controversies about the nature of the University—its residential status and location. Ralph Pieris (18) has analysed, from a sociological angle, some of the developments outlined by Chandrasegaram as well as more recent aspects of University educational policy, and Fischer (12) of the University of California, Berkeley, has recently included a descriptive essay on the University of Ceylon in a monograph on a comparative study of Universities in Southeast Asia. Besides these studies, Sir Ivor Jennings (13), the first Vice-Chancellor of the University, and Strauss (20, 21), formerly of the Department of Sociology, have studied the social composition of University students and new entrants respectively in terms of factors such as family background, ethnicity, religion etc.

In this paper—partly an exercise in the analysis of social statistics—an attempt is made to analyse some of the main characteristics of University development during the period 1942-1965 from the available University statistics, as published in the Annual Reports of the University Council to Court<sup>1</sup>, and the Annual Statistical Abstracts of Ceylon, published by the Department of Census and Statistics. In doing so, I am, in part discharging an obligation and duty cast upon the department of Sociology by Sir Ivor when, in the 1949 Council Report, he wrote: "The establishment of the

1. abbreviated hereafter as 'Council Reports'.

department of Sociology makes it more than ever necessary that the University's statistics should be kept up to date." (p. 5). The publication of the (1963) Robbins Report on Higher Education in the United Kingdom, including Appendices, (4, 5, 6, 7 & 8) has drawn attention to the urgent need for accurate documentation of University statistics as a prerequisite to sound University planning; and this fact together with the needs of research into higher education, casts an obligation on the University to maintain its data more systematically than is presently the case.<sup>2</sup>

It is not possible within the compass of this paper to present a comprehensive picture of the growth of the University. Hence the ensuing discussion will be confined to a review of developments in four main areas: (i) Students, with special reference to the changing character of the student population; (ii) Academic developments, in so far as they pertain to the expansion of Faculties and courses of study, admissions and the award of degrees; (iii) Staff, including questions relating to staffing developments, and, in particular, an examination of staff/student ratios; and finally, (iv) the Financing of University Education during the period 1942-65.

## PART I

### Students

The rapid growth of the University in the last two decades is evident from the phenomenal increase of the student population from 904 in 1942 to 10,723 in 1965—divided between two campuses, each comparable in size to any one of the smaller 'Redbricks' in the U.K. An examination of Appendix Table I (see page 94), also presented graphically in Diagram I (p 33), showing the distribution of University students by faculties, indicates that the growth in student numbers has been accelerated over the last five or six years, whereas in the early phase the increase was much more gradual. A discussion of this expansion will be found in Part II which deals with Academic Developments.

Here we shall examine in detail some of the more significant features of this rapid growth, such as the changing social composition of the student population in the period 1942-65, especially with regard to ethnic origin (referred to as "Communities" in the published University Statistics) and religion—the two aspects on which well documented statistical information is available—and to a lesser extent the social background and family characteristics of students, their age-structure, and home residence.

2. See Robbins Report, Appendix Four, Pt. I (7) entitled "Statistical needs in Higher Education" pp. 63—70ff.

# DEVELOPMENTS IN UNIVERSITY EDUCATION

## NUMERICAL DISTRIBUTION OF FULL TIME STUDENTS ACCORDING TO FACULTY OF ENROLMENT

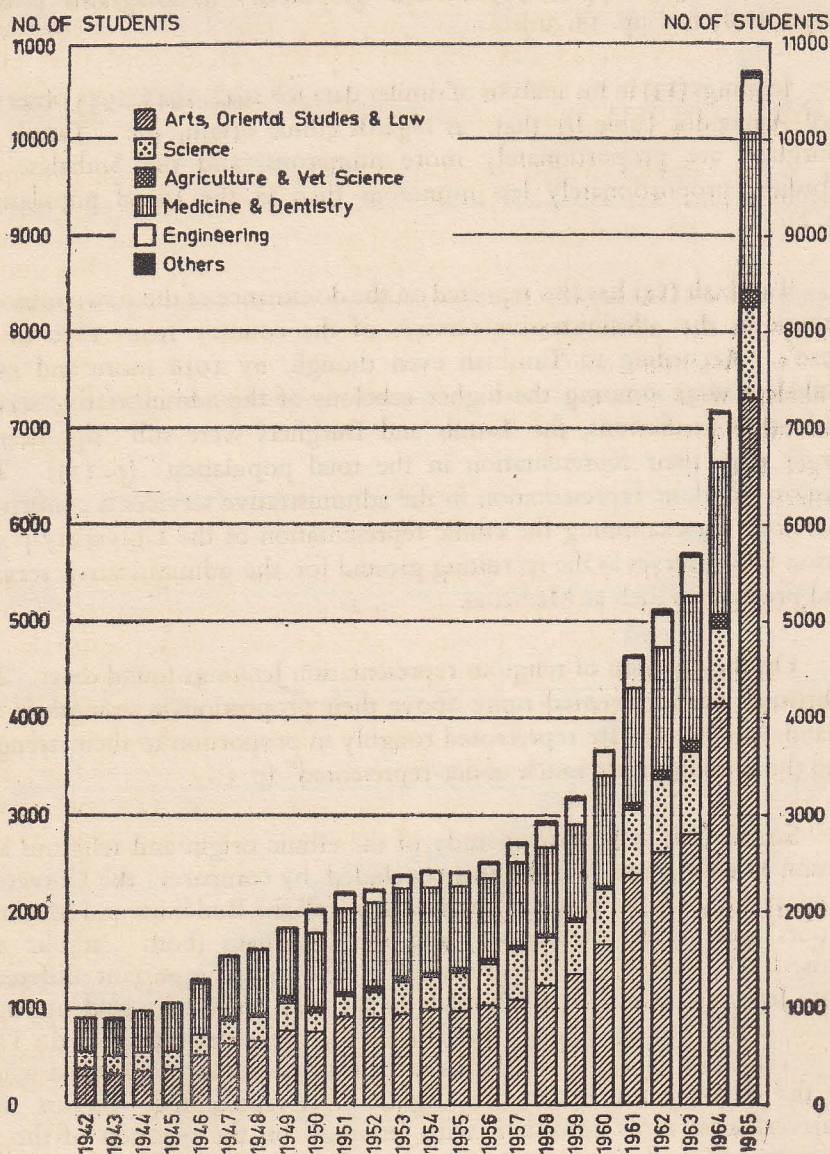


DIAGRAM I

*Ethnic and Religious representation*

The distribution of students according to ethnic origin and religion in the University as a whole for the period 1942-1965 is given in Appendix Tables II & III (see pp. 95,96) and also graphically in Diagrams II & III respectively (see pp. 35, 36).

Jennings (13) in his analysis of similar data for 1942, 1943, 1944 observed, (see Appendix Table II) that, as regards ethnic origin, the "Tamils and Burghers are proportionately more numerous, and the Sinhalese and Muslims proportionately less numerous than in the Island population" (p. 2).

Tambiah (22) has also reported on the dominance of these two minority groups in the administrative services of the country from 1870 to the 1920's. According to Tambiah even though, by 1946 more and more Sinhalese were entering the higher echelons of the administrative service and other professions, the Tamils and Burghers were still "significantly larger than their representation in the total population" (p. 133). This pattern of ethnic representation in the administrative services is confirmed, therefore, by examining the ethnic representation of the University population which serves as the recruiting ground for the administrative services and professions such as Medicine.

On the question of religious representation Jennings found that: "The Christians are represented more above their proportionate strength in the Island, the Hindus are represented roughly in proportion to their strength, and the Buddhists are much under-represented" (p. 3).

Strauss (20) in his (1950) study of the ethnic origin and religious affiliation of University new entrants concluded, by comparing the University proportions with the 1946 Census data, that still the Buddhists and Muslims/Moors were under-represented, and the Christians (both Catholic and Protestant) "sharply over-represented". The only important difference from Jennings' findings (which relate to the total University student population) is that Strauss suggests that Hindus too are under-represented. This, however is not the case if one looks at the total university population where on the contrary the Hindus are slightly over-represented. Strauss' data is nevertheless more consistent with Jennings' on the question of the representation of ethnic groups.

# DEVELOPMENTS IN UNIVERSITY EDUCATION

## NUMERICAL DISTRIBUTION OF UNIVERSITY OF CEYLON STUDENTS ACCORDING TO ETHNIC COMPOSITION (1942-1965)

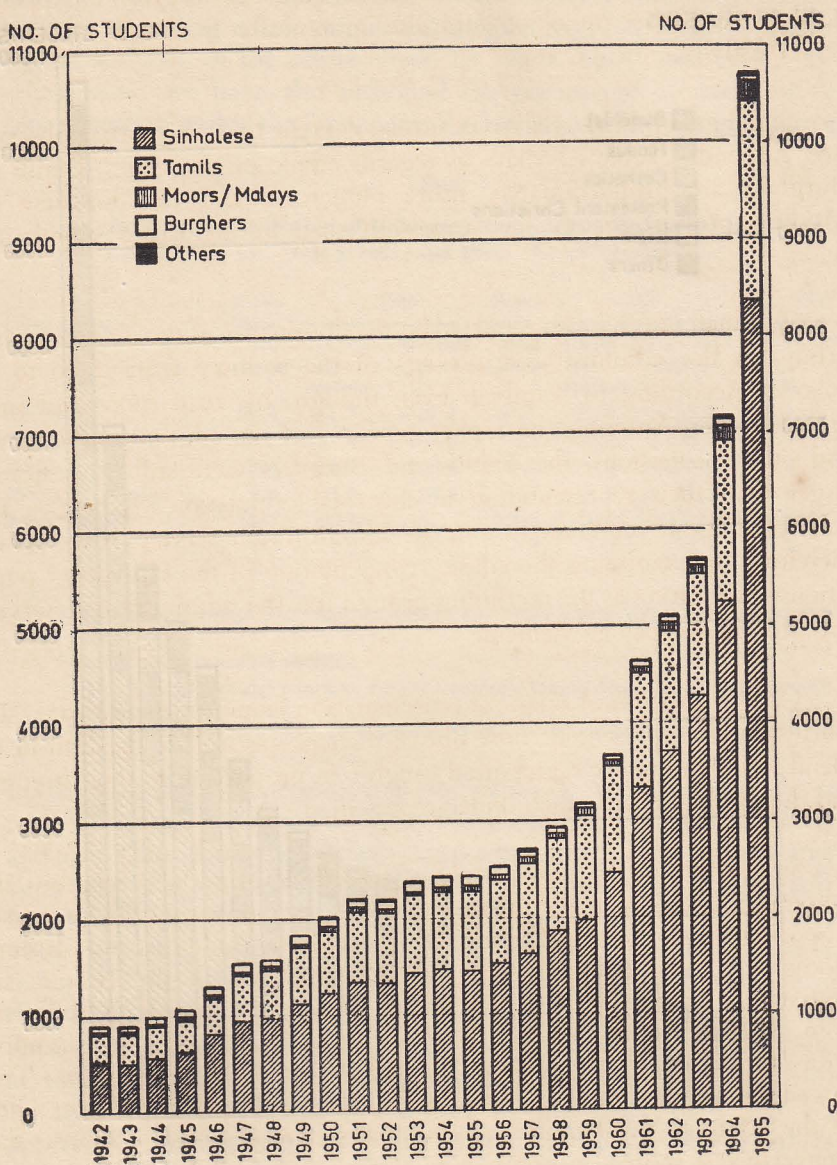
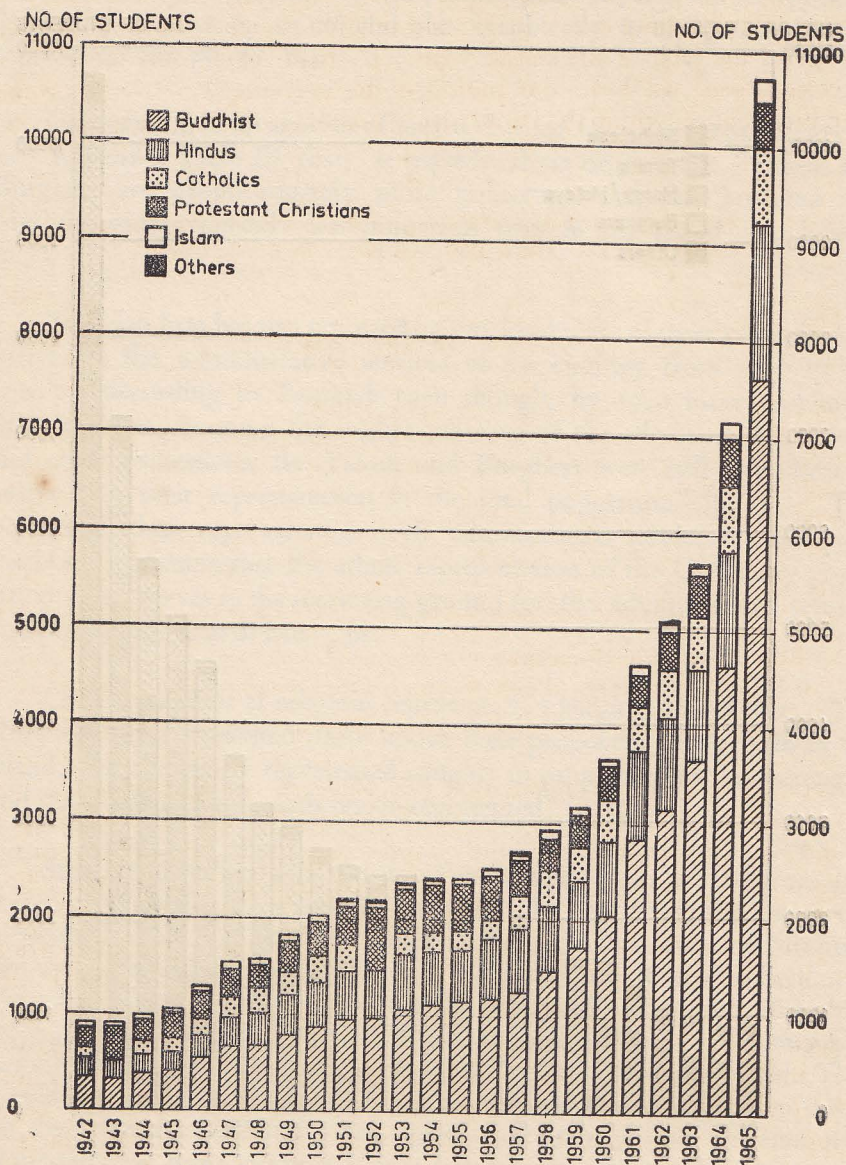


DIAGRAM II

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## NUMERICAL DISTRIBUTION OF UNIVERSITY OF CEYLON STUDENTS ACCORDING TO RELIGION (1942-1965)



Note:- Data on the distribution of Catholic students for the years 1943 & 1952 is not available.

DIAGRAM III

## DEVELOPMENTS IN UNIVERSITY EDUCATION

This picture however began to change somewhat sharply after 1950 and has continued on this course up to the present day. To depict this change we give a comparative Table showing the University proportions regarding ethnic origin and religion together with the Population figures for each of the census years, i.e., 1946, 1953; and 1965. In each comparison, we have also indicated the percentage of over- or under-representation within the University in relation to ethnic origin and religion.

TABLE 1

**Percentage distribution of University Students and Population in the  
Census years i.e. 1946 & 1953; and 1965: by Ethnic Origin.**

Ethnic Group		Popu- lation 1946 Census	1946		Popu- lation 1953 Census	1953		1965 <sup>3</sup>	
			Univer- sity students	Per Cent <sup>1</sup> + or —		Univer- sity students	Per Cent + or —	Univer- sity students	Per Cent + or —
Sinhalese	..	69.4	61.7	—11.1	69.3	60.2	— 13.2	78.1	+12.8
Ceylon Tamil	..	10.0	29.4	+167.2	11.0	33.7	+226.4	19.1	+73.6
Burgher	..	0.6	4.9	+716.6	0.6	3.2	+230.7	0.4	—33.3
Moors and Malays	..	5.6	2.8	—50.0	6.0	1.7	— 71.7	2.0	—66.6
Indian Tamil	..	11.7	n.i. <sup>2</sup>	—	12.0	n.i.	—	n.i.	—
Other	..	1.7	1.2	—	1.0	1.2	+1.2	0.4	—

*Notes:*

1. Indicates percentage over-representation (+) or under-representation (—) in relation to population figures.
2. n.i. — no information available.
3. The 1965 data are also related to the latest available Census data—viz. the 1953 Census.

Source: Annual Reports of Council, University of Ceylon, and Statistical Abstracts of Ceylon.

Looking at ethnic representation (see Table 1), we note that the under-representation, characteristic of the Sinhalese, had been corrected by 1965 and now they tend to be slightly over-represented. This improvement has been mainly at the expense of the Ceylon Tamils, who, though still over-represented, are not as numerous relative to population as they were in 1953. (No University information is available about the proportion of Indian Tamils. Mr. P. T. Rajan, J.P., a respected and influential leader of this community, estimates that there are about 20 graduates who are products of the Ceylon University, and approximately another 60 registered as undergraduates.) The Indian Tamils and the Muslims, continue to be under-represented, and in the case of the latter there has been no appreciable improvement over the last two decades. The Burghers who were greatly over-represented in 1943, declined in 1956, and their proportion now is slightly less than their numbers in the population warrant.

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TABLE 2

**Percentage distribution of University Students and  
Population in the Census years i.e. 1946 & 1953;  
and 1965 : by Religion.**

Religion		1946			1953			1965	
		Population Census	University students	Per Cent + or —	Population Census	University students	Per Cent + or —	University students	Per Cent + or —
Buddhist	..	64.5	42.4	—34.3	64.3	44.7	—30.5	71.0	+10.4
Hindus	..	19.8	18.5	—6.6	19.9	24.0	+20.6	15.0	—2.46
Catholics	..	7.6	13.2	+73.6	7.5	9.5	+36.6	7.3	—3.0
Other Christians	..	1.5	21.6	+1,340.	1.5	18.3	+1,220.	4.6	+206.6
Islam	..	6.6	2.8	—57.6	6.7	1.7	—74.6	2.0	—70.1
Other	..	—	1.5	—	0.1	1.8	—	0.1	—

See Table 1 above for explanatory notes.

Source: Annual Reports of Council, University of Ceylon and Statistical Abstracts of Ceylon.

This change in the pattern of ethnic representation is to be explained in terms of the far reaching educational changes that have taken place in the country since the introduction of compulsory free education in 1945, and the consequent equalization of educational opportunity which has enabled larger numbers of the less well-to-do sections of the society, especially among the Sinhalese, to seek the benefits of education. This process has been further strengthened by the opening up of secondary schools in rural areas, known as Central Schools, and the introduction of swabhasha (Sinhalese and Tamil) as the medium of instruction. Thus, the pre-eminent position enjoyed by the urban educated English Literates such as the Burghers, in the era when University education was in English and concentrated in the main urban centres no longer obtains today, at any rate, so as far as the Faculties of Arts and Oriental Studies are concerned. The position in the other faculties which still conduct their work in English is, therefore, of special interest.

Before turning to the question of ethnic and religious representation in the respective faculties, it is necessary to describe the changes in religious representation in the University as a whole (see Table 2). Once again we note that the Buddhists in 1965 are no longer grossly under-represented

## DEVELOPMENTS IN UNIVERSITY EDUCATION

as before for much the same reason that the Sinhalese, who are predominantly Buddhists, are no longer under-represented in the University population. Of the Christian groups, the Catholics are now proportionately much less numerous than they were in 1946, and in fact, are slightly under-represented. The Protestant and other Christian groups still remain over-represented in the University population though to a very much lesser extent than in previous years.

The reason adduced by Jennings for the preponderance of Protestant Christians in the University, viz., that, though small in numbers, they belong to the economically well-to-do section of the society still holds true. Scientific education is still the privilege of the economically favoured classes who have access to well equipped and well staffed private tutorials, and private fee levying schools, and even competent private tutors. The evidence for this will be found in the distribution of students according to ethnic origin and religion in the "Non Arts" faculties, especially Medicine, Science and Engineering (see Tables 3 and 4).

In 1965 the Hindus are found to be proportionately less in number in the University than in the general population due largely to the fact that the Indian Tamils who are almost 100% Hindus are still poorly represented in the University population. The Muslims remain under-represented in the University figures, owing to the disproportionately small number of Moors/Malays in the University.

Relating these University figures, analysed according to ethnic origin and religion, to the social composition of the respective faculties, we observe the following pattern of distribution for the year 1964—the latest year for which complete information is available.

TABLE 3

### Percentage distribution of University students for 1964: by Faculty and Ethnic Origin

		<i>Arts/Oriental Studies/Law</i>	<i>Science and Engineering</i>	<i>Medicine, incl. Dentistry</i>	<i>Agriculture/ Vet. Science</i>	<i>All Faculties.</i>
Sinhalese	..	85.0	59.0	54.5	54.7	73.1
Ceylon Tamil	..	12.0	37.2	40.5	41.9	23.4
Moors/Malays	..	2.0	2.5	2.5	2.6	2.1
Burgher	..	0.5	1.1	1.0	—	0.7
Others	..	0.5	0.2	1.5	0.8	0.7
Total (=100%)	..	(4183)	(1279)	(1601)	(177)	(7180)

Source: University of Ceylon.

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TABLE 4

**Percentage distribution of University students for 1964:  
by Faculty and Religion.**

	<i>Arts/Oriental Studies/Law</i>	<i>Science &amp; Engineering</i>	<i>Medicine, incl. Dentistry</i>	<i>Agriculture/ Vet. Science</i>	<i>All Faculties.</i>
Buddhist ..	80.3	45.7	41.0	49.6	64.9
Hindus ..	8.7	26.7	27.5	30.8	16.5
Catholics ..	6.0	13.8	14.8	7.7	9.3
Other Christians ..	2.8	11.0	13.5	9.4	6.7
Islam ..	1.9	2.4	3.0	2.5	2.3
Others ..	0.3	0.4	0.2	—	0.2
Total (=100%) ..	(4183)	(1279)	(1601)	(117)	(7180)

The pattern of representation characteristic of the University as a whole in 1964, is evident only in the Faculties of Arts and Oriental Studies (Colombo and Peradeniya combined)—the only faculties which have so far felt the full impact of free education and instruction in swabhasha. In the other faculties, one notes the continuance of the pattern of representation characteristic of the University as a whole before the sixties. The Tamils, Christians and Hindus are sharply over-represented in the “Non Arts” faculties, especially Science, Engineering and Medicine. The predominant position of Christians (including Catholics) in Science, Medicine, and Engineering, is partly accounted for by the over-representation in these faculties of Burghers, who are virtually all adherents of the Christian faith, and partly by the greater access they have to a scientific type of education in the schools. The Hindu and Tamil<sup>3</sup> over-representation is indicative of a swing away from the Arts to the Sciences since the early fifties,—a consequence of a variety of factors such as the higher percentage of English literacy among the Tamils, the greater facilities for scientific education in the secondary schools of the Northern Province—the area from which the Tamils and Hindus are mostly drawn, and a realistic appraisal of the wider opportunities available to those with a scientific education,<sup>4</sup> especially after the adoption of Sinhala as the language of administration.

3. The bias towards scientific subjects among pupils from Jaffna schools—where the bulk of the Tamil University students are drawn from—has been commented upon at different times in Council Reports. Thus, for example in the 1949 Council Report, it is reported that nearly three-fourths of the candidates seeking admission to the Faculties of Science and Medicine came from Jaffna schools. Though this proportion may have declined somewhat in recent years, the same bias towards science continues up to the present day.

4. The Council Report of 1950 confirms this impression: “The heavy concentration of Tamils in the Faculties of Medicine and Engineering is noteworthy . . . many students were seeking to enter these two faculties not because they had any vocation for or even interest in Medicine and Engineering, but because their parents thought that these professions offered “prospects”. This is, of course, a general tendency but it was particularly noted among Jaffna Students” (p. 8).

## DEVELOPMENTS IN UNIVERSITY EDUCATION

The Moors and Malays still stand out as the educationally most neglected ethnic group, being poorly represented in the University as a whole and in every single faculty. In the long run, however, the expansion of educational opportunities in the field of scientific education is likely, in due course, to correct in considerable measure, if not wholly, the existing faculty disproportions, as has happened in the case of the University taken as a whole.

### *Sex Ratios*

The other significant feature of the changing characteristics of the student population is the relative proportion of the sexes in the University. The distribution of the sexes for the University as a whole is depicted in the Table below.

TABLE 5  
Numerical and Percentage distribution of University  
of Ceylon Students: by Sex.

Year	Men	Percentage	Women	Percentage	Total (=100%)
1942	813	89.9	91	10.1	904
1943	800	88.5	104	11.5	904
1944	874	87.8	122	12.2	996
1945	932	87.5	133	12.5	1065
1946	1124	86.3	178	13.7	1302
1947	1312	84.4	242	15.6	1554
1948	1335	82.8	277	17.2	1612
1949	1519	82.4	325	17.6	1844
1950	1655	81.3	381	18.7	2036
1951	1761	79.7	449	20.3	2210
1952	1752	78.5	480	21.5	2232
1953	1784	74.6	608	25.4	2392
1954	1814	74.5	620	25.5	2434
1955	1781	73.3	650	26.7	2431
1956	1872	73.9	662	26.1	2534
1957	1990	73.2	728	26.8	2718
1958	2118	71.8	832	28.2	2950
1959	2231	70.2	946	29.8	3177
1960	2548	69.2	1136	30.8	3684
1961	3108	66.8	1547	33.2	4655
1962	3388	66.2	1729	33.8	5117
1963	3733	65.4	1973	34.6	5706
1964	4445	61.8	2740	38.2	7182
1965	6144	57.3	4579	42.7	10723

Source: Annual Reports of Council, University of Ceylon.

Over the period 1942-65, there has been a dramatic increase in the proportion of women students—an increase from as little as 10% to nearly 43% in 1965. The increase in women students is mainly in the Faculty of Arts where over 50% are women (see Table 6 below) while in Medicine and

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Science approximately one quarter are women students. Very few women take to Engineering and just a handful, about 10%, take to Agriculture and Veterinary Science.

TABLE 6

**The Percentage distribution of the sexes: by Faculty (1964).**

	<i>Men</i>	<i>Women</i>
Arts/Oriental Studies/Law ..	49	51
Science ..	76	24
Medicine/Dentistry ..	74	26
Engineering ..	99	1
Agriculture/Vet. Science ..	90	10

It is also of interest to note the distribution of women students among the different ethnic groups. In 1942, 46% of the women students were Sinhalese, 35% Tamils, 13% Burghers, and Others (including Moors and Malays) accounted for the balance 6% out of a total of 93 women students. The present position, as revealed by the 1964 data, shows a sharp increase in the proportion of Sinhalese women students (78%) and a decline in the proportion of Tamil and Burgher women students—now 20% and 0.6% respectively.

The proportion of women students (43%) is higher than in several Western countries. For example, in the Netherlands the proportion of women students in the Universities is 18%, and the comparable figure in the U.K. is 24% (vide: Robbins Report, Appendix Four, 7, p 110).

The extreme sharpness of the increase over the last few years is to be attributed to a variety of factors such as the limited opportunities available to women in higher education other than the universities, the greater persistence and diligence of women rather than men students, their keenness to study and willingness to forego other satisfactions for the sake of education, and the gradual breakdown of the traditional concepts of womanhood and marriage which has created a new social and economic role of the woman as a bread winning partner. In general, however, the rapid growth of women's secondary and tertiary education in Ceylon represents a significant social development, the analysis of which deserves separate investigation. The wider implications of this development too merit careful scrutiny in future educational planning.

### *Age and Social Background*

Other aspects of the social composition of the student population such as the social background of the students, and their age-structure, do not

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lend themselves to any very precise quantitative examination in the absence of sufficiently detailed information published by the University pertaining to the occupational and educational background of the students, or their age-structure.

As regards the social background from which the undergraduate population is drawn, it is evident from the early Council Reports (e.g. 1945 Report) that during the first decade the students came mainly from the western educated urban middle class which also constituted the more privileged and affluent section of the society who patronized the leading denominational and other public schools. This is confirmed by Strauss (20) in his study of 1950 University entrants, where he states that "the vast majority of the student population come from families in the Upper socio-economic categories" (i.e. the professional, managerial and entrepreneurial classes). There also appears according to Strauss moderate representation of what may be termed the middle-middle and lower-middle class i.e. small businessmen, white-collar workers, teachers etc. with a scattering of students from a peasant or working class background.

With the expansion of educational facilities and equalization of educational opportunities in certain fields of primary and secondary education, the social base of those entering higher education began to broaden, especially after the swabhasha intake in the early sixties.

No comparable data to that of Strauss exists to document the position as it is today. However, some light may be thrown on this issue, by an examination of data relating to social background obtained in an inquiry on University Students' Attitudes conducted by the author in 1963. The occupational data i.e., parents' occupation as given by the sample of Arts students<sup>5</sup> revealed a large concentration of students, well over two-thirds, from a markedly rural and working class background. The occupations of parents ranged from Farmer/Cultivator, Skilled Labourer/Craftsmen, Tailor, Police Sergeant to Teacher, Mill Owner, and Public Servant. A third of the Arts students were drawn from the lower-middle class. The upper and middle class were very poorly represented in the Arts sample, but were more evident in the samples drawn from the Peradeniya Medical and Science Faculties. Interestingly, the lower-middle class and middle-

5. The sample of Arts students was drawn from those following the Intensive course in English, held just before admission to the University for the benefit of new entrants whose command of that language was found to be inadequate, and hence, this may explain to some extent the dominance of the Sinhalese rural students. The results of this inquiry are as yet not published.

middle class seemed to be fairly well represented in both these faculties. At the same time there was evidence, though not very marked, of students coming from a distinctly rural and working class background. A more systematic inquiry is urgently needed to document the nature of the social background of the present University student population.

The average size of family of University students appears to have changed over the period 1942-65 if the available information on the size of family of bursary applicants each year can be taken as a guide. Even assuming *a priori* that bursary applicants are likely to come from large families, it is significant that the average size of family of University students has changed, from about a median size of 4 to approximately 6, as revealed by the information given below.

Year	Median size of family	Number of Bursary Applicants
1948	3.7	401
1952	4.7	184
1957	5.3	260
1962	5.7	542
1964	5.9	1527

The median size of family of the samples of students included in the 1963 Attitude study referred to previously was as follows:— Arts/Oriental Studies, 6.2; Science, 5.6; and Medicine, 4.6. This data, especially that of the Arts sample, confirms the size of family data obtained from Bursary applicants, who, incidentally, are drawn mainly from the Arts faculty. The differences in the social composition of the three faculties is also indicated by the above data. The data pertaining to the Medical faculty, the faculty with the smallest size of family, would suggest that, as in Western countries, the upwardly mobile come from smaller families. A more direct test of this hypothesis is necessary before coming to any definite conclusion.

Compared to Strauss' (1950) investigation based on University new entrants, which reported an average size of 5.2 for male and 5.4 for female students, the present data—bursary applicants as well as the Attitude survey—indicate that the average size of family has increased. Contrary, however, to the inference drawn by Strauss against "the existence of differential fertility between social classes in Ceylon", the present data, especially the

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existence of variations between faculties would suggest that the differences are related to differential fertility of social classes as reflected in faculty differences. Again, a more systematic study is required to resolve this issue.

The statutory age of admission to the University of Ceylon is defined by Act as 17+. Unfortunately, the University does not publish information relating to age. Strauss mentions in passing that the "students (in his 1950 sample of new entrants) average just over twenty years of age", but he does not examine age as a specific variable. The information available from the 1963 Attitude Survey suggests that there has been no marked change in the average age mentioned by Strauss. The average is 20 years 5 months for the Arts sample, 20 years 11 months for the Medical and 21 years 2 months for Science, yielding a composite average of about 21 years. More accurate data on age-structure of the University student population needs to be obtained in a subsequent inquiry.

### *Home Residence of Students*

From its inception the University has published data on what it calls "Home Residence", meaning the geographical area of residence of parents at the time of a student's entry, classified according to the nine provincial divisions of the country. This information for the period under review is set out in Appendix Table IV (see page 97).

This data should be interpreted with some degree of caution as the Council Reports themselves have observed that "Home Residence is not a very safe guide" (p 9, Council Report of 1950) to student residence. For one thing changes of residence after initial enrolment are not shown in the Tables published. Furthermore, residence is itself an ambiguous term; it may mean one of many things, for example, place where one's parents reside, the traditional family home, or residence from where you last went to school etc.

Subject to these limitations, we note that in the early years approximately four fifths of the University students are drawn from three main provinces in the order Western (55-60%), Northern (15-20%) and Southern (10-12%). The Central Province comes next with about 5-6% and the other five provinces (North-Central, North-Western, Eastern, Sabaragamuwa and Uva) contributed in all about 5%—6% of the University population. Throughout the fifties this position remained unchanged except that the proportion in the Western province was falling slightly at the expense of the Central Province.

The major change in this pattern of distribution of residence is evident only in the sixties. Now the Western Province contributes only a little over two-fifths as compared to over half in the early years. Another significant feature is the decline of the proportion of students from the Northern Province from roughly one-sixth or one-fifth in the early days to about one-eighth. This corroborates the finding relating to the decline in the proportion of Tamil students in the University as most of them come from the Northern province. This decline has been offset by an increase in the proportion of students coming from the Southern Province to approximately the same extent as the fall in numbers from the Northern Province. This suggests that a fair percentage of the greater numbers of Sinhalese Buddhist students presently in the University are being drawn from the Southern province. At the moment nearly a fifth of the student population comes from the Southern Province.

The increased representation from the Central Province in the fifties—amounting to about one-tenth of the total University population—has remained unchanged in the sixties, whereas there has been a significant increase in the number of students drawn from the North-Western province, (approximately 5% of total), (comprising mainly the Chilaw, Puttalam and Kurunegala districts) and to a lesser extent, from the Sabaragamuwa Province. (5%).

In terms of the regional distribution of the recipients of the benefits of higher education the Uva, Eastern—(which has a large Muslim population)—and North-Central Provinces continue to be poorly represented. The 1965 data when compared with the proportions of the population in these three provinces (see Appendix Table IV) shows that they are under-represented on the average by about 75-80%—Uva by 85%, the North-Central Province by 75% and Eastern Province by 72%. In many ways these regions are still the most educationally backward in the country taken as a whole. The North-Western Province and Sabaragamuwa Provinces are under-represented to roughly the same extent—53%, and the Central Province too is under-represented by about 33%. The three provinces—the Western Province, Southern Province and Northern Province—from which approximately three fourths of the University population is drawn, are sharply over-represented—the Northern Province about 80%, the Western Province about 68%, and the Southern Province about 38%. It would, therefore, appear reasonable that any future plans for developing University education on a regional basis, especially in the matter of siting new institutions of higher learning, should take this fact into account.

## PART II

### Academic Developments

#### FACULTIES AND COURSES OF STUDY

##### *Development of Faculties*

The University of Ceylon in 1942 was built around four faculties—Arts, Oriental Studies (abbreviated hereafter to O.S.), Science, and Medicine, (including Dentistry (1943)—which together consisted of 17 independent departments of study. After over two decades the University has expanded to include six (very often the Faculties of Arts/O.S. are taken as one) faculties, the two additions being—Engineering (1950) and Agriculture and Veterinary Science (1953), made up of 43 independent departments of study. The present distribution of departments of study between Faculties as compared with the position in 1942, is given below.

	<i>Arts/O. S.</i>	<i>Science</i>	<i>Medicine</i>	<i>Engineering</i>	<i>Agriculture/ Veterinary Science</i>	<i>Total</i>
1942	7	5	5	—	—	17
1965	17	5	14	4	3	43

Whereas the increase in the departments of study—a good index of academic expansion—is only a little over two-fold in the Faculty of Arts, the Medical Faculty has expanded nearly three-fold from the point of view of new independent departments of study. This indicates, as will be confirmed by other evidence later on, the dominant position held by the Medical Faculty during the first two decades of the University. A notable feature is the absence of any new departments of study in the Faculty of Science which is still confined to the original five departments covering the basic Sciences—viz., Physics, Chemistry, Botany, Zoology and Mathematics, which existed at the time of the inauguration of the University.

The Joint Faculty of Arts and Oriental Studies in 1942 consisted of the following independent departments of study—Indo-Aryan, Tamil, English, Western Classics, History, Geography, Economics and Philosophy. Within an year of its inception in 1943, the Indo-Aryan section was split up into three separate departments viz., Sinhalese, Sanskrit, and Pali. These

departments together with Tamil<sup>6</sup> comprised the Faculty of Oriental Studies, which also had provision for courses in Arabic until the establishment of an independent department of Arabic in 1945. The Faculty of Oriental Studies has added courses in Buddhist Philosophy—constituted as an independent department of study in 1964—and Buddhist Civilization (1952) which is still a part of the department of Pali and Chinese Studies. At the inception, courses of study—even in the language subjects—in the Faculty of Oriental Studies were given through the medium of English, and this policy did not change until the sixties, except in the case of Sinhalese and Tamil which began to change in the mid-fifties.

The Faculty of Arts began with a nucleus of six departments of study and at the inception itself plans (vide: Appendix I, First Council Report, 1942) were made for expansion of courses of study. One important proposal was to develop the department of Economics in such a way as to constitute a broad based department of Social Science, comprising Economics (Banking and Currency), Economic History, Applied Economics, Statistics, Political Science, Sociology and Ethnology. (See Appendix I, p. 20 First Council Report). Since then these developments have taken place within the department of Economics (see pages 54-5) by permitting specialization within the Economics Special (Honours) degree course; Sociology, (which includes aspects of Ethnology—in particular, Social Anthropology), instituted as a special subject for the Economics Special degree, was established as a separate department in 1949, but offered an independent course of studies leading to a Special degree only as from 1956.

In 1949 a department of Education, for which provision had been made in the 1942 plan for developing University education, providing a one year course of professional and academic training for graduate teachers was established; and in 1964 it was expanded to include an undergraduate Special degree course in Education leading to the degree of Bachelor of Education (B. Ed.). It is of interest to note that the 1942 plan was for a Faculty of Education, which was also to provide professional courses for non-graduate teachers.

A similar proposal for a Faculty of Law in the 1942 plan was altered to a department of Law in the Faculty of Arts and set up in 1946. The department of Law (presently in Colombo) provides a three year

6. The First Council Report (1942), Appendix I, specially devoted to 'The Development of the University' states that the name of the Department of Tamil should be changed to "Dravidian Studies" since Dravidian languages other than Tamil should also be taught.

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course leading to the award of the LL.B. degree. Courses in European Languages were envisaged in the 1942 plan but it was not until 1949 that a separate department of Modern European Languages devoted to the study of French and German was established within the Faculty of Arts. A department of Archaeology, primarily devoted to post-graduate studies and research, was established in 1959, and more recently a sub-department of Commerce, within the department of Economics, which offers courses leading to the Bachelor of Commerce degree, was set up in 1962/3.

In view of the fact that each of the Faculties of Arts/O.S. was over-weighted with members who were attached to both faculties, a proposal was made to regroup the departments of study in the Joint Faculties of Arts and Oriental Studies. This suggestion was approved by the University Senate in 1956, although it has still not been implemented. According to this proposal, there was to be a *Faculty of Arts* comprising all nine language departments and the departments of History and Philosophy, and a *Faculty of Social Science*, consisting of the departments of Economics, Sociology, Education, Law and Mathematics, History and Philosophy—the last two being located in both faculties. This appears to be a more logical and practical grouping of subjects than that obtaining at present. It also reflects the growing importance of developments in the social sciences for Ceylonese society, and the need to diversify courses of studies. Oriental Studies, especially the study of oriental languages, no longer has the significance it had in the early years of the University of Ceylon prior to the switch over into swabhasha.

There has been little expansion within the Faculty of Science and it is still confined to the original five basic science departments of study. The 1942 plan proposed to include Geology when the University was shifted to Peradeniya, but it was only in 1963 that Geology was established as a sub-department of Geography but offering courses in the Faculty of Science. The Applied Sciences are hardly represented in the University curricula.

The Faculty of Medicine began with the five departments of Medicine, Surgery, Anatomy, Physiology (including Pharmacology and Biochemistry) and Pathology (including Parasitology, Bacteriology and Forensic Medicine), and to these was added in 1943 the departments of Dental Surgery (now expanded to include a department of Prosthetic Dental Surgery) and Gynaecology and Obstetrics. The departments of

Paediatrics, and Public Health were established in 1945 and with the inclusion of the department of Veterinary Science—which was located in the Faculty of Medicine till 1953—there were in all 10 departments of study by the end of the first decade.

Within the second decade the expansion of the Faculty of Medicine consisted in the establishment of a separate department of Forensic Medicine (1952), the separation of Biochemistry and Pharmacology from Physiology in 1955 to form separate departments, and the creation of independent departments of Parasitology (1955) and Bacteriology (1961)—both of which were included from the beginning under Pathology. Only the department of Psychological Medicine, for which financial provision was made as far back as 1945, remains to be established according to the early plans for the expansion of the Faculty of Medicine. The total number of departments of study in the Faculty of Medicine at the moment is 14 and represents a very creditable expansion, the more so since it has been effected within as short a period as two decades.

The chief degrees awarded in the Faculty of Medicine, including Dentistry, are the M.B.B.S. (the Bachelor of Medicine and of Surgery) and the B.D.S. (the Bachelor of Dental Surgery). A Licentiate in Dental Surgery (L.D.S.) is awarded after the same courses and on the same examination as for the B.D.S. to candidates who attain a lower degree of proficiency and qualifies them to register as dental practitioners. Until 1961 the M.B.B.S. degree was of 6 years duration. The first year Pre-Medical course was dispensed with at the University in 1962, and the Pre-clinical courses in Anatomy and Physiology leading to the Second M.B.B.S. examination became the first stage of the M.B.B.S. (as well as Dental and Veterinary Science) instruction within the University. This saving of one year was possible by transferring the pre-medical year to the schools, and thereby reducing the strain on the Faculty of Science which had up to then provided “service” courses in the basic sciences for the Faculty of Medicine.

The Faculty of Engineering was set up in 1949 with the facilities, equipment and a nucleus of staff transferred from the Ceylon Technical College and was composed of three independent departments of study—Civil, Mechanical and Electrical Engineering—to which a fourth, Mathematical Engineering was added in 1964. The faculty located at Peradeniya since 1964, provides courses of a professional and academic nature leading to the B.Sc. (Eng.) degree, which is of four years duration. However the Faculty of Science provides service teaching for Engineering students during their first year.

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Although courses in Agriculture and Veterinary Science leading to the B.Sc. (Agr.) degree and B.Sc. (Vet. Science) degree respectively commenced in the late forties (1947), the Faculty of Agriculture was established at Peradeniya only in 1953. The Faculty consists of the departments of Veterinary Science, Agriculture and Animal Husbandry. The Agriculture degree, presently a four year course, was till 1962 of three years duration of which the first year is still identical with the Science degree first year in the subjects Botany, Zoology, Physics and Chemistry. The Veterinary Science degree is of four years' duration, of which the first two years are given in the Medical Faculty. In these two years Veterinary Science students follow Pre-clinical courses equivalent to the First and Second M.B.B.S. examinations.

Reference should be made here to the duplication of the four original faculties of the University of Ceylon—Arts, O.S., Science and Medicine. The first faculty to be duplicated was that of Medicine consequent on the establishment of the Second Medical School at Peradeniya in the session 1961/62. All departments of medical studies have now been duplicated at Peradeniya and the first graduates of the Peradeniya Medical School are due to pass out in 1966/67.

A fully fledged Second Faculty of Science was established at Peradeniya in 1961/62, and was intended to enable the University to increase its science intake since it had been repeatedly pointed out in the 1950's that able students were being denied opportunities of a science education owing to the limited laboratory facilities and accommodation.<sup>7</sup>

In contrast to the planned provision of increased facilities for science and medical education, the establishment of the Second Faculty of Arts, Colombo in 1963, confined originally to the Sinhalese medium, was a makeshift arrangement designed to cope with the sudden increase in the number qualifying for admissions to the Arts Faculty and the demand that the level of selection should not be raised above what had previously prevailed. Only the larger Arts/O.S. departments have been duplicated in Colombo and no Special degree courses have been offered in the Colombo Faculty. This year, a Tamil medium stream was also begun in Colombo.

7. According to the 1955 Council Report, in the Faculty of Science, "admissions have always been restricted by limitation of laboratory facilities. In the Physical Sciences in particular good students seeking admission to these courses were far more than the laboratories could accommodate", (p. 11) and it adds that "until the science buildings at Peradeniya are completed it will not be possible to meet the demand for a large increase in the output of science graduates" (p. 11).

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## *Courses of Study*

Before turning to an examination of University expansion by faculties of enrolment, it would be useful to survey developments in courses of study within each faculty. One important aspect of such internal developments within the faculties relates to the proportion of Special degree (Honours) to General (Pass) degree courses in the Faculties of Arts and Science (see Table 7 below) and the fields of specialization of those who elect to follow a Special degree course (see Tables 8 and 9 below).

TABLE 7

**Percentage distribution of students following Special degree courses  
in the Faculties of Arts/O. S. and Science, 1942-1965**

Year	Faculty of Arts/O.S: B.A.	Faculty of Science B.Sc.
1942	68.7	48.9
1943	66.7	57.3
1944	71.3	53.3
1945	74.0	56.4
1946	73.1	48.1
1947	64.6	42.9
1948	67.8	45.0
1949	53.6	44.8
1950	53.7	59.8
1951	58.5	64.5
1952	54.4	58.6
1953	32.7	48.6
1954	45.5	48.2
1955	43.9	40.9
1956	44.5	40.5
1957	41.3	34.2
1958	41.5	29.3
1959	42.0	34.3
1960	45.9	33.2
1961	40.1	34.2
1962	29.0	29.0
1963	31.3	25.8
1964	26.6	27.8
1965	29.5	20.5

Source: Annual Reports of Council, University of Ceylon.

TABLE 8

**Percentage distribution of fields of specialization in the Faculty of Arts  
and Oriental studies, for the B. A. Special degree. Selected years.**

Subject	1942	1947	1952	1957	1962	1965
<i>Oriental Studies:</i>						
Languages, i.e.						
Pali, Sanskrit, Sinhalese						
and Tamil	19	35	27	22	26	18

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### Arts:

Languages, i.e.							
English and Classics	..	16	14	11	9	2	1
History	..	20	8	12	9	7	14
Economics	..	34	27	39	29	23	14
Sociology	..	—	—	—	9	5	1
Philosophy	..	—	3	4	2	1	1
Geography	..	11	13	7	20	34	28
B. Education	..	—	—	—	—	—	15
B. Commerce	..	—	—	—	—	2	8
Total (=100%)	..	(126)	(175)	(237)	(265)	(538)	(637)

Source : Annual Reports of Council, University of Ceylon.

TABLE 9

### Percentage distribution of fields of specialization in the Faculty of Science, for the B.Sc. Special degree. Selected years.

Subject	1942	1947	1952	1957	1962	1965
Mathematics	.. 23	15	17	20	13	16
Physical Sciences (Chemistry and Physics)	52	62	46	42	45	60
Biological Sciences (Botany and Zoology)	.. 25	23	37	38	42	24
Geology <sup>1</sup>	.. —	—	—	—	—	—
Total (=100%)	.. (47)	(60)	(90)	(116)	(115)	(197)

Note :

1. Commenced in 1965/66 with one student for the Special degree course.

Source: Annual Reports of Council, University of Ceylon.

Within the Faculty of Arts/O.S. the proportion of Special degree students has declined from 69% in 1942<sup>8</sup> to 30% in 1965. A similar trend is noticeable in the Faculty of Science where the proportion has fallen from approximately 49% in 1942 to 21% in 1965. In both faculties, the decline particularly as it concerns women students, may in part be due to a reluctance to remain longer at the University doing Special degree work.<sup>9</sup> It may also reflect the greater employment prospects for General degree students, for example, in the teaching profession, as compared with Special students who with their specialized knowledge find it difficult to obtain employment commensurate with their training. In the case of the Science students,

8. In the early years General degree courses were not popular among students, because of the high prestige associated with Special degree courses; and furthermore, there was no statutory difference in the duration of Special degree and General degree courses. It is also stated in the 1949 Council Report that prospective employers expressed a preference for Special degree students, and this too may have contributed to the unpopularity of General degree courses, especially in the Faculty of Arts/O.S.

9. From about 1949 onwards nearly all Special degree courses in the Faculties of Arts/O.S., and Science were lengthened by one year so that the entire course now took by statute four years to complete. According to the 1949 Report the main reason for this lengthening was "the wide variation in quality of the students reading for the First Examinations" (p. 10), thereby compelling the Universities to undertake work which normally would have been left to the schools. Even prior to this many departments encouraged Special degree students to take three years rather than two after the First Examination in Arts/Oriental Studies.

this swing away from Special degree courses was partly due to the limited laboratory and other facilities available for advanced students.

On the other hand, one must entertain the possibility of a lowering of the quality of students—especially a decrease in the proportion of high ability students at the expense of an increase in the student of average ability. This may be one consequence of the transformation of the undergraduate population from that of a highly selected intellectual *élite* into a more diffused mass society of varying ability levels. Finally, as regards Arts, the decline of Special degree students may also be a result of the natural shortcomings and imperfections of swabhasha teaching at the University in the very early phase of the switch over.

#### *Fields of Specialisation within Special degree Courses*

An analysis of the fields of specialization of Special degree students in Science (see Table 9) for selected years, shows that during the first decade roughly 50-60% pursued courses in the Physical Sciences, another 30-35% in the Biological Sciences, and the remaining 15-20% followed courses in Mathematics. These proportions changed slightly in the 1950's when there was a shift from the physical to the biological sciences. The increase in the latter was partly due to the fact that some of the able students specialising in the Physical Sciences were beginning to enter the Faculty of Engineering which commenced in the 1950's. The data for 1965, however, indicate a return to the pattern of the first decade reflecting the superior employment prospects of Physical Science graduates in the new industries—the greatest demand being for Chemistry graduates. In 1965 over 50% of the Special degree students were in Chemistry.

The information relating to fields of specialization of Arts students (see Table 8) reveals certain interesting trends. In the first place it is evident that on the average approximately four-fifths of Special degree students follow courses in the Arts rather than Oriental Studies (i.e., Pali, Sanskrit, Sinhalese, Tamil). It would seem, therefore, that the proportion following courses in the Oriental Studies is not excessive.

Another significant trend discernible from Table 8 is the decline in the numbers taking Economics<sup>10</sup> as a Special degree course in the Arts

10. A considerable degree of specialization is possible within the Special degree course in Economics. At the inception Banking and Currency was the only special subject. Later on Government, Economic History and Statistics were added. More recently Accountancy has also been introduced as a special subject. Sociology and Economic Geography, which were also special fields of interest within Eco-

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Faculty—indicating that from the students' point of view the saturation point has been reached in the output of Economics graduates relative to employment prospects. During the past few years Geography has become an important area of specialization, due primarily it would appear to the sudden increase in the demand for Geography honours graduates in the Teaching profession. The vocationally oriented courses—B.Ed. 1963/64, and the B.Com. degree course begun in 1962/63—are attracting more and more Special degree students, at the expense of the older liberal arts courses like English, Western Classics, Philosophy<sup>11</sup> and Sociology<sup>12</sup> which have declined in numbers partly because of the switchover to swabhasha. In this context the future of English, Modern Languages and Western Classics<sup>13</sup> as Special degree course subjects stands in need of careful re-examination.

The position of History is interesting because except for isolated fluctuations, it has continued to attract over the years roughly 15-20% of Special degree students each year, despite the fact that historical studies would seem to confer no special benefits or utilitarian advantage. This is, perhaps, indicative of the natural and spontaneous attraction which a subject like history has especially for students who are not inclined to the more analytical and abstract type of studies.

Brief reference should be made to two other significant academic developments. The first is the organization of diploma courses at a post-graduate level, especially in Medicine. One of the earliest post-graduate medical diplomas was the Licenciante Diploma in Medicine and Surgery (D.M. & S.) which was followed by the Diploma for Tropical Medicine and Hygiene (D.T.M. & H.) and Diploma in Tuberculous diseases. The D.T.M. & H. continues to attract many students as it is recognized by the Department of Health Services for grade promotions. In 1956/7 three additional diploma courses—Diploma in Anaesthesia (D.A.), Diploma in Obstetrics (D.O.G.) and Diploma in Child Health (D.C.H.) were introduced. Thus, in all, there are six diploma courses organized by the Faculty of

nomics, are now separated—the former as an independent Special degree course, and the latter has been attached to the Geography Special degree course. No figures are available of specialization within the Economics degree course.

11. The Special degree course in Philosophy was introduced in 1944. No Special degree students were enrolled in 1963 and enrolments have begun again only after Swabasha teaching was introduced.

12. The Special degree course in Sociology, initially a part of the Special degree in Economics (1949-56), commenced only in 1956. In 1965/66 no students enrolled in Sociology. Sociology can be offered only as a Special degree course.

13. The Department of Western Classics, now concentrates on the teaching of courses in "civilization" and culture rather than its course in language and literature.

Medicine. There are no such diploma courses in any of the other faculties except Arts, which provides a post-graduate Diploma in Education (begun in 1949) for graduate teachers<sup>14</sup> and recently a Diploma in Librarianship (1963). Until 1961, the Faculty of Oriental Studies also organized a special non-graduate diploma course for Trained Teachers known as the Diploma in Sinhalese/Tamil.<sup>15</sup> The Faculty of Arts also issued for some time a Certificate in History.

The second development relates to the introduction of External Examinations in 1962 in consequence of an amendment to the University Ordinance, following the recommendation of the Needham Commission on University Education (S.P. XXIII, 1959). External Examination candidates were permitted to enrol for the first degree in Arts, Law and Science. Most of the candidates have so far appeared for the General Arts degree examination, a fair proportion for Law and a few for Science. In 1964 an important concession was granted to persons over the age of 25 years and holding recognized professional qualifications in Accountancy, Banking, Commerce, Education, Engineering and Law permitting them to register as external candidates. A very large number of professionally qualified persons, especially Trained Teachers, have availed themselves of this facility.

#### *Faculties in relation to University expansion*

As stated earlier, in order to understand the rapid physical growth of the University one has to examine the expansion in terms of the increase in faculty numbers. For this purpose the data relating to University expansion by faculties is given in detail in Appendix Table I (see page 94), and is condensed in Table 10, given below, for selected years chosen at intervals of five years, beginning in 1942. This Table, which presents the numerical data of Appendix Table I in the form of Index numbers in order to provide a vivid picture of the relative rates of expansion in the different faculties, is also depicted graphically in Diagram IV.

14. Part-time students—an innovation for the University of Ceylon—have been allowed to enrol for the Diploma in Education from 1964 and classes for these students are held in the evening.

15. This course, begun in the University College days and known as *Vidyā Visārada* (Sinhalese) and *Vidwān* (Tamil), was instituted particularly with a view to developing school education in Sinhalese and Tamil in the pre-swabhasha era. Its usefulness declined with the rapid advances in Swabhasha education and the course was discontinued in the sixties.

# DEVELOPMENTS IN UNIVERSITY EDUCATION

TABLE 10

University Expansion expressed in terms of Index Numbers. Selected years.  
(Base = 1942/100): by Faculties.

Year	Arts/O.S.	Science	Medicine, including Dentistry	Agriculture/ Veterinary Science	Engineering	All Faculties
1942	100 (396)	100 (165)	100 (343)	—	—	100 (904)
1947	163	148	178	100 <sup>2</sup>	—	172 (1554)
1952	229	164	252	167	1950: 100 <sup>1</sup> 53	247 (2232)
1957	276	316	252	136	87	300 (2718)
1962	661	459	370	328	162	566 (5117)
1965	1846 (7311)	583 (963)	478 (1640)	575 (161)	276 (574)	1186 (10723)

Notes:

1. The Engineering Faculty began in 1950 with an enrolment of 208 in 1950=100.
2. The Agriculture/Veterinary Science Faculty began only in 1953, but courses had commenced in 1947 with an enrolment of 28.

Source: Appendix Table 1, *infra*.

It would be seen that in the first decade of the University the rates or expansions were roughly even for the Faculties of Arts/O.S. and Medicine/Dentistry. Apart from the Faculty of Agriculture/Veterinary Science (established as courses of study in 1947), the slowest rate of expansion is found in the Science Faculty whose development was retarded not for the lack of qualified students but more due to limitations of necessary teaching facilities and its heavy load of service teaching for other faculties. The rate of growth of the Faculty of Medicine would also have been much greater if adequate facilities had been available during this early period. The establishment of the Faculty of Engineering in 1950 enabled it in the early fifties to take in some of the overflow from Science. During the mid-fifties, however, the position remained much the same except for a slight improvement in the Science intake—raised to a ceiling of 140 in 1955 from 70 in 1949. The establishment of the Second Faculty of Science in 1961/62 enabled the Science Faculty to expand substantially; but now paradoxically the difficulty is in finding students of the requisite quality for admission.

In the first few years the maximum Medicine/Dentistry annual intake was restricted to 60 and by 1950 it was increased nearly two-fold to about 140-150 (Medical 120, Dental 12 and Veterinary Science 8). With the

UNIVERSITY EXPANSION BY FACULTY

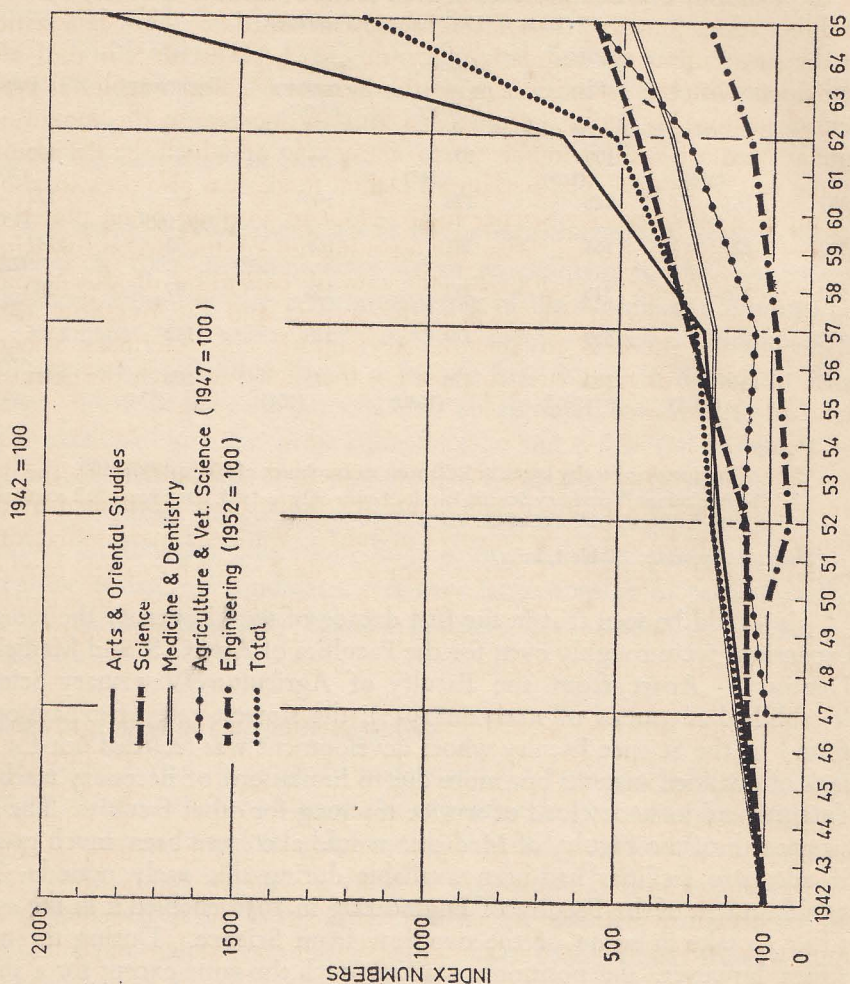


DIAGRAM IV

## DEVELOPMENTS IN UNIVERSITY EDUCATION

abolition of the First M.B.B.S. course within the University and the holding of the Combined Preliminary and First M.B.B.S. Examination the number of direct admissions to the Medical Faculty increased.<sup>16</sup> The stabilization of the new admission regulations for the Medical Faculty in 1961 also coincided with the establishment of the Second Medical Faculty at Peradeniya in 1962/63 which permitted a further increase in the maximum annual Medical Faculty intake up to about 260 of which the Peradeniya intake was to be 95. The maximum Dental intake has also risen to about 30, and that of Veterinary Science to 20. Due to a ceiling being placed on Medical admissions, even after the opening up of the Second Medical Faculty at Peradeniya in 1961/62, the rate of expansion of the Medical Faculty was somewhat curtailed in the sixties; and the overflow from Medicine was diverted to Science, Agriculture and Veterinary Science, as the majority of candidates to these faculties failed to reach the requisite standard of admission.

The Engineering Faculty has also expanded substantially in the last few years. The expansion begun in the 1960's has been accelerated by the transfer of the faculty to Peradeniya in 1964. With the increased accommodation and improved facilities a more rapid rate of growth may be expected in the next few years. The lack of quality students in science is partly due to the greater attractiveness of courses in Engineering for science students in the schools.

One must however seek the real explanation of the rapid growth of the size of the University, in the growth of Faculty of Arts during the sixties—very nearly a fourfold increase from 1960 (the year of the first Swabasha intake) to 1965. As Appendix Table I indicates the University has doubled itself in a matter of three years whereas it had taken the University ten years from 1952 to 1961 to achieve the same feat. This unprecedented growth has taxed the resources of the University to the utmost, as will be seen in the later discussion of the problem of staffing.

During the forties and up to the mid-fifties—the more stable periods of University growth—the relative proportions of students in the different faculties varied only slightly. Approximately 40-43% were enrolled in Arts—about the identical proportion found in U.K. Universities—15-20% were in Science and about 30-40% in Medicine. The proportion enrolled in Medicine began to decline from about 40% in the first decade to about

16. Even prior to this, there were Direct Admissions of those who sat the First M.B.B.S. from outside but these numbers were very small.

# UNIVERSITY OF CEYLON REVIEW

30% in the late fifties and has continued to decline further, falling to as low as 15% in 1965. Again this documents the dominant position of the Medical Faculty in the early years even before the gradual consolidation of its position as regards undergraduate teaching in the late fifties. However, as regards post-graduate studies, although it is somewhat ahead of the other faculties, its record is still poor (see page 70 for the number of specialized diplomas and post-graduate medical awards).

The fall in the proportion of students doing Medicine, partly due to a shortening of the course since 1962, is paralleled by a similar decline in the proportion enrolled in Science—a fall from 15% in 1959 to 9% in 1965—which is to some extent offset by the increased Engineering intake. The explanation of the fall in the proportion doing Science and Medicine is to be found in the unprecedented increase of the numbers in Arts/O.S. resulting in an increase of the proportion of Arts Students from 43% in 1959 to 68% in 1965. Except for slight fluctuations, the proportions enrolled in Agriculture/Veterinary Science and Engineering have remained fairly stable at about 1-2% and 5-8% respectively. At present approximately two-thirds of the University student population is to be found in the Faculty of Arts, largely because the proportionate annual intake of Arts students has increased sharply in the sixties (see Tables 12 & 13).

For comparative purposes Table 11 below gives the distribution of full-time degree level University students by faculties in Ceylon (1959, and 1965) and selected countries in Europe and the British Commonwealth of Nations.<sup>17</sup>

TABLE 11

Percentage distribution of full-time degree level students for selected countries and Ceylon (1959 and 1965): by Faculty.

Faculty	Ceylon		Great Britain 1963	Australia 1962	New Zealand 1962	France 1959/60	Switzerland 1962/63	Sweden 1959/60
	1959/60	1965/66						
I. Arts & Humanities:	..			(29)	(40)	(17)	(24)	(25)
Law.	..	43 68	43	(5) 46	62	46	(8) 47	56
Social Studies, incl. Education.	..			(12)	(22)	(29)	(15)	(31)
II. Science:	..	17 9		16	(17)			
Applied Science and Technology.	..		25	—	25	34	—	—
					(8)		—	—

17. The comparative data given in Table 11 should be interpreted with caution since the proportionate distribution of students between the faculties is likely to be influenced by variations in the type of courses offered within each faculty, and in particular, by the duration of courses.

## DEVELOPMENTS IN UNIVERSITY EDUCATION

III. Engineering and Architecture. ..	8	5	15	12	—	—	16	15
IV. Medicine, incl. Dentistry. (also Pharmacy) ..	30	15	15	10	8	20	17	14
V. Agriculture/Forestry, .. Veterinary Science. ..	1	2	2	16	5	—	2	2
VI. Others. <sup>1</sup> ..	1	1	—	—	—	—	—	—
All Faculties (=100%)								

1. Data classified as 'Others' for Ceylon refers mainly to diploma and higher degree students, excluding postgraduate education diploma students, who have been classified along with First degree Arts students.

Source: Ceylon—Appendix Table I, *infra*.

Comparative data—Appendix Five and Appendix Two (A) Robbins Report, U.K.

It is evident from Table II that, prior to 1965 (in 1959, for example), the proportion of Arts and Social Studies enrolment in Ceylon was not very different to the countries listed above, except New Zealand and Sweden. As a result of the increased Arts intake in the sixties, the proportion reading Arts and Social Studies increased in 1965, and now appears comparable only with New Zealand where, as in Ceylon, nearly two-thirds of University students are enrolled in Arts and Social Studies.

The proportion of students enrolled in Science and Engineering in Ceylon is, not surprisingly, less than nearly all the Western countries which are mostly highly industrialised countries. Yet, the proportions in Science and Engineering need to be increased to meet the requirements of a developing economy, especially the need for skilled technical personnel. Interestingly, the 1965 data relating to Medical Faculty enrolments appear to be very much the same as in the Western countries listed.

For a predominantly agricultural country like Ceylon, the proportions enrolled in Agriculture/Veterinary Science appear to be far too low when compared with other agricultural countries such as New Zealand and Australia, which have an enrolment of 16% and 5% respectively in the Faculties of Agriculture/Veterinary Science.

### ADMISSIONS AND DEGREES

#### *Admissions in relation to Faculties*

To get a clearer picture of University expansion by faculties, it is necessary to examine the data on annual admissions by Faculty. Up to 1964 the University was solely responsible for admissions and admission policy. Admission was based on the standard of performance—as laid

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down by the University—reached at a public examination, styled the the University Preliminary Examination (1946-1964), which was conducted by the University. This examination replaced the University Entrance Examination, conducted previously by the Department of Education (1942-1945). (For details relating to admissions and admission policy see the Reports of the Preliminary Examination (24), published by the University since 1950). In order to relate the University new admissions to University expansion, Table 12 (based on Appendix Table V) and Diagram V on page 63, summarises the admissions by faculty over the period 1943-64 in terms of three yearly averages.

TABLE 12

**Numerical and Percentage distribution of Annual Admissions expressed  
as three yearly averages from 1943-45 to 1961-63:  
by Faculty/Department of Study.**

<i>Years</i>	<i>Arts/O.S.</i>	<i>Law</i>	<i>Science</i>	<i>Medicine incl. Dentistry</i>	<i>Agri- culture<sup>1</sup></i>	<i>Vet. Science<sup>2</sup></i>	<i>Engineer- ing<sup>3</sup></i>	<i>Total (=100%)</i>
1943-45	115 44.9		68 27.8	68 27.3				251
1946-48	184 48.6	14 3.7	69 18.6	103 27.7	6 1.4			376
1949-51	227 50.8	12 2.8	67 14.8	118 26.6	7 1.6	2 0.5	14 2.9	447
1952-54	266 48.6	5 1.0	109 19.8	121 22.2	5 1.0	6 1.2	34 6.2	546
1955-57	336 46.1	9 1.3	160 22.3	139 19.1	7 1.0	7 1.0	67 9.2	725
1958-60 <sup>4</sup>	730 54.9	4 0.3	221 17.5	237 19.2	15 1.1	7 0.5	82 6.5	1296
1961-63	1339 63.0	11 0.5	285 14.8	269 13.2	22 1.2	14 0.6	130 6.7	2070

Notes:

1. First admission in 1947 but Table excludes 14 admitted in 1947 on Special Entrance Examination
2. First admission in 1950—number admitted 2.
3. First admission to Engineering in 1950—number admitted 19.
4. From 1959 Admissions to the Faculty of Arts/O.S. were in three media i.e. English, Sinhalese and Tamil. In 1959 approximately 50% of the Arts/O.S. intake was in the English medium and thereafter the proportion declined very sharply to less than 2% in 1964. The Tamil medium intake has been around 6—9% during this period.

Source: Appendix Table V, *infra*.

One can gather from Table 12 that the average admissions in Arts/O.S. has increased nearly twelve-fold in the space of 20 years (1943/1963) and that this rate of increase is unsurpassed in the rest of the University. It is true that the annual admissions have increased in all other faculties but not to the same extent as in Arts/O.S. Table 13 presents the same data for selected years as Index figures (Base=100/1943) so as to depict the relative increase of the annual intake in the different faculties.

PERCENTAGE DISTRIBUTION OF ANNUAL ADMISSIONS BY COURSE OF STUDY

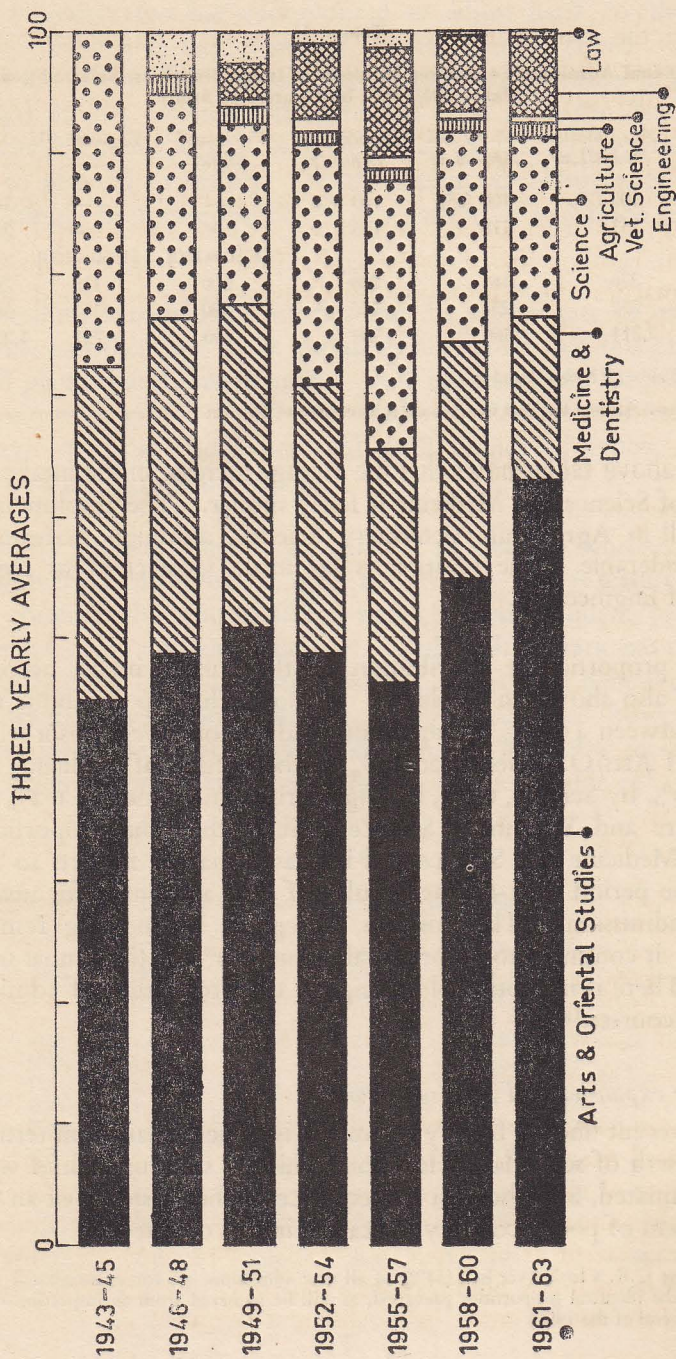


DIAGRAM V

# UNIVERSITY OF CEYLON REVIEW

TABLE 13

Annual Admissions expressed in terms of Index Numbers, Selected years  
(Base = 100/1943): by Courses of Study

Years	Arts/Oriental Studies/Law	Science and Agriculture	Medicine and Dentistry	Veterinary <sup>1</sup> Science	Engineering <sup>1</sup>	Total
1943	100 (70)	100 (65)	100 (62)	—	—	100 (197)
1947	333	118	165	—	—	209
				[1950=100]	[1950=100]	
1952	376	161	208	300	115	264
1957	557	231	246	300	353	389
1962	2,214	569	569	650	721	1,230

1. See Table 12 Notes 2 and 3.

Source: Annual Reports of Council, University of Ceylon.

The above table shows that the average increase in the intake for both faculties of Science and Medicine is fairly similar. The absolute increase is very small in Agriculture/Veterinary Science, although percentage wise it is considerable. The position is far more satisfactory as regards the Faculty of Engineering.

The proportionate distribution of the annual intake according to faculty is also shown in Table 12. It shows that up to about the mid-fifties—between 45-50% of the annual admissions were absorbed by the Faculty of Arts/O.S., about 20-25% by the Faculty of Medicine, approximately 20% by Science, 6-9% by Engineering, and a meagre 1-2% by Law, Agriculture and Veterinary Science. Since then the proportions have fallen in Medicine and Science and increased sharply in Arts so much so that in the period 1961-63 the Faculty of Arts accounted for nearly 63% of new admissions. The position as regards Engineering remains unchanged; it continues to absorb in all about 6-9% of the annual university intake. There is no noticeable change in the proportion of admissions to the other courses.<sup>18</sup>

## University expansion and Admission Policy

The recent uneven faculty expansion is to be explained in terms of the rapid growth of secondary education, which is still curriculum wise Arts/O.S. dominated, and also as a consequence of the existence of an undiversified system of post-secondary education in this country.

18. In the U.K. a little over half (54%) of all new admissions are for science based courses. In Ceylon too the identical proportions prevailed, as will be gathered from an inspection of Table 12 almost to the end of the 1950s.

## DEVELOPMENTS IN UNIVERSITY EDUCATION

The University too has endeavoured to adjust itself to the ever-increasing demand and has, however unsatisfactorily, coped with the demand up to 1965 mainly because it was a demand for places in the Arts and Oriental Studies faculties. If there had been a similar demand for places in Science-based courses it is unlikely that the University would have been able to respond so readily. To this extent, the University too has quite unwittingly been responsible for this pattern of expansion in recent years.

One should not conclude from this that the present rate of expansion is undesirable and therefore to be curtailed, but rather that this expansion has been ill planned and unsystematic. Still, unfortunately for many able students desirous of post-secondary education, the Universities remain the main avenue of tertiary education and until higher education itself is diversified this situation will continue.

University student numbers are still not satisfactory when compared with the University enrolments of other countries. This is readily evident when one considers the ratio of all full-time University students per 10,000 population in Ceylon and other countries. Although this ratio has increased very gradually from 1.5 in 1942 to 9.5 in 1965, it is still far behind many of the countries listed below in Table 14. It should be noted, however, that the reported ratios are slightly higher when the enrolments at the two new Pirivena Universities are also included. (see footnote to Table 14).

TABLE 14

### University Students per 10,000 population.

<i>Year</i>	<i>Ratio per 10,000 (Ceylon)</i>	<i>Year</i>	<i>Ratio per 10,000 (Ceylon)</i>	<i>Ratio per 10,000 1959/60<sup>1</sup></i>	
1942	1.5	1954	2.8	Great Britain	21
1943	1.4	1955	2.8	Australia	29
1944	1.6	1956	2.9	Canada	52
1945	1.6	1957	3.0	France	46
1946	1.9	1958	3.1	Germany (F.R.)	31
1947	2.2	1959	3.3	Netherlands	32
1948	2.2	1960 <sup>2</sup>	3.7	New Zealand	27
1949	2.5	1961	4.6	Sweden	43
1950	2.7	1962	4.9	Switzerland	26
1951	2.8	1963	4.9	U.S.A.	—
1952	2.8	1964	6.6	U.S.S.R.	55
1953	2.9	1965	9.5		

# UNIVERSITY OF CEYLON REVIEW

## Notes:

1. Ratios for countries other than Gt. Britain have been computed on the basis of students<sup>t</sup> in receipt of full time higher education in 'British degree level' equivalent courses (see Explanatory Note in Tables 2 & 14, Pt. I—Robbins Report, Appendix Five). Data reproduced from Robbins Report.
2. The ratio per 10,000 population for all **three** Universities is as follows for the years 1960—1965: 1960—4.6; 1961—6.1; 1962—6.4; 1963—6.8; 1964—9.0; 1965—12.7.

These ratios are based on the following annual figures of student enrolment at (a) Vidyodaya University, and (b) Vidyalkara University for the period 1960-1965:—

	<i>Vidyodaya University</i>	<i>Vidyalkara University</i>
1960	501	538
1961	897	654
1962	808	802
1963	976	1134
1964	1430	1315
1965	1492	1995

Table 14 gives the ratio of all full-time Ceylon University students (i.e. degree level as well as other students) per 10,000 for the period 1942-1965, based on mid-year estimates of population published by the Department of Census and Statistics.

For comparative purposes the international figures for selected countries as listed in the Robbins Report, Appendix Five (8) are also given in Table 14. International comparisons need to be made with caution for, as the Robbins Commissioners, who have, perhaps, made the most significant comparative survey of higher education up to date, observe "systems of education can only be compared statistically by forcing them into a common mould." (p. 6, Appendix V, 8). Despite these obvious limitations, comparisons are valuable and legitimate in so far as they highlight common problems and general lines of University development which may lead to a more systematic approach to higher education. The significance of the comparative data as far as Ceylon<sup>19</sup> is concerned lies in vindicating the continuing need for the expansion of University education.

In the first phase of the University (1942-1954)—Sir Ivor Jennings' period of tenureship as Vice-Chancellor—the approach to University expansion was essentially a highly conservative one. Thus, one detects in the early Council Reports an eagerness to freeze the size of the Residential

19. As mentioned before, the Ceylon data given in Table 14 includes a small proportion of non-degree level students enrolled in the University. But the comparisons are not seriously affected as this does not appreciably alter the computed ratios.

## DEVELOPMENTS IN UNIVERSITY EDUCATION

University at a certain number—approximately 4,000. In the 1949 Report, it is argued that: “The question (of size) is not only one of cost but also of the number of graduates required for employment”, and concludes that **“Since... education is at the expense of the state,... it would be difficult to justify the provision of University education beyond the employment needs of the country”** (p. 9). This point of view is re-echoed in the 1954 Council Report, where it is stated more directly that University admissions have been stabilised round about 500, “partly due to restricted accommodation and partly due to a desire **to relate the output of graduates to the demands for graduate employment**” (p. 20). The principle whereby one tries to relate University education to employment is itself an eminently reasonable and sensible one provided one does not try to *freeze* University admissions instead of *expanding* employment opportunities for the products of University education. This could, in part, be achieved by changing the character of University courses to meet the needs of the existing, as well as expanding, employment opportunities. The failure to achieve such a sensitivity to national needs and interests is characteristic of all plans for the development of University education during this period. What has been perpetrated instead from the inception is a system of education which abounds in the “British notion of the well rounded gentlemen scholar with a background in liberal Arts” (p. 60, 12), ideally suited to the training of the future administrative élite, but not to cater to the needs of a developing economy.

A rather different approach to University expansion is evident in the 1956 Council Report which discusses the future expansion of the University in the following terms:—**“To exclude students from a University education solely because of the lack of resources is a misfortune to the country particularly in a developing country where the proportion of graduates needed is always higher than that in a community that has reached maturity”**. (p. 14). Characteristically, in the post 1954 era—Sir Nicholas Attygalle’s period of tenureship as Vice-Chancellor—there is a greater willingness to extend the benefits of higher education to all those deserving of such an education. Thus, there are frequent references in the Council Reports of this period (see Reports of 1956, 1960 and 1964) to the need to establish additional Universities to cater to the growing demand for University education.<sup>20</sup>

20. It is of interest to note that as far back as 1956, the University Council drew attention to the fact that “The University cannot provide for all the students who will be seeking admission in and after 1959, nor can its present physical structure be expanded to meet the anticipated increase” (p. 13, Council Report 1956).

The experience of the sixties has shown that the earlier conservative approach to University expansion was neither feasible nor socially justifiable in the face of the secondary education explosion since 1945 which had obvious implications for tertiary education. The inevitable outgrowth of school leavers demanding higher education could not be artificially contained, as outlined in the 1954 Council Report, except at the peril of grave social injustice. The University of Ceylon, under pressure from the State, has at the expense of much needed qualitative expansion, with commendable efficiency catered for a vast quantitative physical expansion during the sixties—resulting in the growth of two large campuses.

The magnitude of the University's effort in recent years may be seen in that the University population has doubled itself in the space of two years, 1963-1965. Each campus is itself bigger than the limit of 4,000 originally intended by the University Planners of the first decade who had characteristically failed to foresee and take cognizance of the phenomenal growth of secondary education in the country.

The plans of this period too fail to relate this much wanted expansion to the developmental needs of the country, especially its requirements of manpower skills and talents in specified fields, by a reorganization of the content of University education. As Fischer (12) aptly comments, "only in the field of medicine has a reasonably adequate number of graduates been produced" where as he points out "the stagnant position of agricultural courses ... and the extremely small rise in engineering graduates is not encouraging in a country with large needs for technical manpower" (p. 61).

Thus, today one has to contend with the harsh realities of a University as a mass society rather than a specially selected *élite* society which was the underlying intention in fostering the development of a Residential University, located away from the metropolitan centres of the country. The task of the next decade is to re-fashion University education, and its various institutions, to meet the needs of mass higher education in a developing society, as opposed to the *élite* type of education that existed in the forties and fifties and which was oriented to the immediate needs of the then established order—a relatively stagnant society.

# DEVELOPMENTS IN UNIVERSITY EDUCATION

## *The Award of Degrees*

From 1942 to 1965, 12,271 degrees and diplomas have been awarded<sup>21</sup> by the University. Of this number 10,858, or nearly 88%, have been First degree awards. The analysis of the First degree awards is given in Table 15 below, which also contains information pertaining to the award of Classes.

TABLE 15

Numerical and Percentage distribution of First Degrees  
and Classes awarded (1942—65).

Faculty and Degree		Number of Degrees Awarded	% of Total Awards	Classes			Classes as % of Total Number of Degrees Awarded	Firsts as % of all Classes
				Firsts	Seconds	Total		
Arts./O.S.:								
B.A. (Gen.)	..	No information		5	105	110	—	—
B.A. (Hons.)	..	No information		71	667	738	—	—
Total B.A.	..	5860	54.0	76	772	848	14.5	9.0
LL.B.	..	176	1.6	4	34	38	21.6	10.5
Science:								
B.Sc. (Gen.)	..	No information		50	186	236	—	—
B.Sc. (Hon.)	..	No information		61	215	276	—	—
Total B.Sc.	..	1839	16.9	111	401	512	27.8	21.7
Agriculture/Vet. Science:								
B.Sc. (Agr.)	..	129	1.2	3	34	37	28.7	8.1
B.V.Sc.	..	66	0.6	1	17	18	27.2	5.6
Engineering:								
B.Sc. (Eng.)	..	473	4.4	58	138	196	41.4	29.6
Medicine, Incl. Dentistry:								
M.B.B.S.	..	2189	20.2	21	575	596	27.2	3.5
B.D.S.	..	14	0.1	4	1	5	35.7	80.0
L.D.S.	..	112	1.0	1	40	41	36.6	2.5
Total	..	10,858	100.0	279	2,012	2,291	—	—

Source : Annual Reports of Council, University of Ceylon.

21. "Awarded" refers to those who have successfully completed their courses and supplicated for the award at a General Convocation.

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Of the total awards approximately 10% or 1259 awards are for postgraduate first diplomas<sup>22</sup> which are distributed as follows:—

	<i>Number</i>	<i>Percentage of Total</i>
Diploma in Education	862	68.5
Postgraduate Medical Diplomas	244	19.4
Diploma in Sinhalese/Tamil	148	11.8
Diploma in Librarianship (since 1963)	5	3.0
	<hr/> 1,259	<hr/> 100.0

Professional or semi-professional University training, if one excludes the first degree courses relating to Law, Medicine and Engineering is represented mainly by the post-graduate diplomas. Professional courses for Teachers constitute well over four-fifths of these vocationally oriented courses, if one includes in addition to the Diploma in Education, the Diploma in Sinhalese/Tamil which was established in the early years of the University mainly for the benefit of non-graduate Trained Teachers.

Though in fact there are several post-graduate medical diploma courses which provide specialised training in various fields for medical graduates, very few have so far availed themselves of these facilities. A rapid expansion of these courses is to be expected in the next decade as a result of the curtailment of foreign training for doctors.

The Diploma in Librarianship instituted in 1963 is a welcome sign, if it indicates a willingness on the part of the University to embark on a programme of professional education. Perhaps the greatest need for these courses lies in the field of science and technology, and to a lesser extent in commerce and the social sciences.

From this data alone it is clear that the University of Ceylon has functioned so far primarily as an undergraduate teaching institution, emphasising the imparting of knowledge and giving of instruction—the teaching function of a University. Looking at the distribution of First degrees, as depicted in Table 15, it will be noted that just over half of them (54%) are for Arts—as compared with the U.K. where nearly 46% are for the Arts)—another fifth (or 20%) for Medicine, and just over a sixth (17%) for Science degrees. Despite the fact that there have been

<sup>22</sup> The Diploma in Sinhalese/Tamil as explained on page 56 is not strictly a postgraduate award, but is for convenience classified here.

## DEVELOPMENTS IN UNIVERSITY EDUCATION

Agricultural and Veterinary Science graduates since 1947, the total output has been very small—only 2% of the total degrees awarded by the University. The percentage of Engineering degree awards is roughly 4% and that of Dental graduates is only 1-2%.

The distribution of First degrees in the U.K. for 1961/62, (excluding Arts and Social Studies (46%), was Science 27%, Engineering and Technology 15%, Agriculture 2%, Medical subjects (including Dentistry/Vet. Science) 10%. The proportion of Medical degrees in Ceylon was much higher than in the U.K. and the proportion of Science and Engineering degrees in Ceylon is comparatively low. For an agricultural country, as pointed out, the proportion of Agriculture degrees should have been much more than what is now the case.

The proportion of Classes obtained over the years in each of the First degrees awarded shows certain interesting variations. For instance, the highest percentage of Classes (41%) is found in Engineering which has also got the highest proportion of Firsts (except the B.D.S). The explanation of this may lie in the fact that the relative supply of talent to this Faculty is exceptionally good because of the highly selective and competitive nature of entry to the Faculty. It may also be due to the nature of the subject matter, as in the case of Mathematics and the Physical Sciences where it is relatively easier to obtain high gradings. On the other hand, Medicine, which has also been able to attract students of high ability in recent years, has had nearly a fourth of its graduates passing out with Classes, of whom only about 4% are First Classes.

Comparing the Arts and Science degrees as a whole, we note that it is about twice as hard to obtain a class in Arts as in Science; and equally a First Class in Arts is more difficult to obtain than in Science.<sup>23</sup> There appears to be a sharp difference about the incidence of General degree Classes, including Firsts between the Arts and Science degrees. The incidence of General degree Classes and Firsts is far greater in Science than in Arts. This may partly reflect the fact that unlike in Arts, as mentioned before, many good potential Special degree students in the Faculty of Science are forced to take a General degree course, instead of following a Special degree course. Equally, the fact that the great majority of General degree Classes

23. In the U.K. too this same pattern prevails. There were 4.6% Firsts in Arts as against 10.1% in Science. But there was no difference in the proportion of classes as a whole between Arts and Science (See Robbins Report, Appendix Two (A), Table 21).

in Science are confined to Mathematics and Physical Science would suggest that the subject matter itself accounts in part for the superior performance of General degree students.

The proportion of Classes in Agriculture and Veterinary Science are very much the same and are roughly similar to those found in Science and Medicine, except that the incidence of First Class graduates is less than in Science and slightly more than in Medicine.<sup>24</sup> Nearly a third of the small output of Dental graduates gain Classes but the incidence of First Classes is very low. About one fifth of those graduating in Law obtain Classes and a tenth of these are Firsts—the proportion of First in Law being no different to that in the Arts degree.

Taking the University as a whole there were 2,291 Classes (i.e. Firsts and Seconds) awarded which constitutes 21% (cf. 60% in the U.K.) of the total number of First degrees awarded, and of this number approximately 1.2% (279) have obtained First Classes, whereas in the U.K. about 7% obtained Firsts; while this is ample testimony of the high standards of scholarships maintained by this University in the first two decades of its existence, it indicates that the criteria of student evaluation are far too stringent by international standards.

Unfortunately, there is no information on wastage rates (i.e. those who do not successfully complete a degree for which they enter) either for the University as a whole or for different courses. High wastage rates are, however, unlikely because of the highly selective nature of University entrance. Another question of some importance which needs to be examined is to assess the predictive value of the former University Preliminary Examination as a basis of selection for University study. More systematic inquiries should be conducted to relate the annual admissions to performance within the University.

The relative importance of the research functions as opposed to the teaching functions of the University may be seen from the fact that post-graduate awards (this excludes further study in education and medicine) for research degrees amount only to 1.3% or 154 of the total number of awards made by the University during the period 1942-1965. (In the U.K. the comparable proportion is 13.7% for 1961/62). Approximately two-fifths (63) of these

24. Until recently the Faculty of Agriculture and Veterinary Science has not in general been able to attract the best products in Science from the schools as the first preference of the good science students has been for Medicine or Engineering.

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have been in the Faculty of Medicine for the M.D. degree; another two-fifths (61) for the M.A. degree, and the remaining fifth for the Ph.D. (19), M.Sc. (7), M.O.G. (1) and M.S. (3), degrees.

No analysis exists of the research output of the University staff but this is not likely to be very much as University teachers in nearly all faculties have been overburdened with teaching and examining, especially in the Faculty of Arts/O.S. The University has never been organised for research. One serious handicap is the absence of financial provision for post-graduate students. Without the development of strong graduate schools in different areas of study, it will be impossible to correct the present weightage in favour of teaching. To restore the proper balance between the teaching and research functions of the University, is perhaps the most urgent need of the future.

## PART III

### Staff

#### *Grades of Staff*

The distribution of full-time Academic Staff on the permanent cadre analysed according to grade is shown in Table 16.

TABLE 16

**Numerical and Percentage distribution of full-time University of  
Ceylon Academic Staff: by Grade**

Year	Profes- sor	Percent of total	Reader	Percent of total	Lec- turer	Percent of total	Asst. Lecturer	Percent of total	Other	Percent of total	Total (=100%)
1942	15	27.3	—	—	20	36.4	8	14.5	12	21.8	55
1943	No information										62
1944	16	25.8	1	1.6	23	37.1	15	24.2	7	11.3	62
1945	No information										76
1946	19	22.1	—	—	27	31.4	30	34.9	10	11.6	86
1947	21	21.6	2	2.1	36	37.1	26	26.8	12	12.4	97
1948	26	21.5	2	1.6	48	39.7	34	28.1	11	9.1	121
1949	29	21.2	4	2.9	62	45.2	30	21.9	12	8.8	137
1950	31	19.7	7	4.5	70	44.6	29	18.5	20	12.7	157
1951	31	16.9	7	3.8	87	47.6	39	21.3	19	10.4	183
1952	32	17.5	5	2.7	82	44.8	41	22.4	23	12.6	183
1953	34	17.6	5	2.6	90	46.7	46	23.8	18	9.3	193
1954	32	15.9	4	2.0	108	53.7	42	20.9	15	7.5	201
1955	35	17.5	4	2.0	103	51.5	37	18.5	21	10.5	200
1956 <sup>1</sup>	34	15.5	5	2.3	116	52.7	35	15.9	30	13.6	220
1957	33	14.5	5	2.2	116	51.1	36	15.9	37	16.3	227
1958	35	15.4	5	2.2	121	53.1	35	15.3	32	14.0	228
1959	34	12.9	6	2.3	124	46.9	63	23.9	37	14.0	264
1960	37	13.8	4	1.5	121	45.1	67	25.0	39	14.6	268
1961	36	15.2	3	1.3	127	53.6	71	29.9	—	—	237
1962	35	13.5	3	1.2	148	57.1	67	25.9	6	2.3	259
1963	35	12.8	3	1.1	152	55.5	84	30.6	—	—	274
1964	36	11.0	2	0.6	160	48.8	124	37.8	6	1.8	324
1965	43	12.9	10	3.0	144	43.1	131	39.2	6	1.8	334

1961/62

U.K. Universities<sup>2</sup>.

Per Cent of Total.

11.9

Senior

Lecturers Lecturers

6.5

12.5

47.1

10.0

12.0 = 100%(12,786)

Notes:

1. See Table 17, infra for explanatory notes; the category 'Other' has been reduced from 41 to 30, as it appears to be an overestimate.
2. See Pt. I, Tables 7 & 10, Robbins Report, Appendix Threc. (6)

Source: Statistical Abstracts of Ceylon.

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The importance of this information lies in the fact that, as Butler (I) observes, "the attractiveness of the academic profession depends in part on remuneration and promotion prospects, and these in turn depend partly on the distribution of academics amongst the various grades of the profession." (p 137).

According to Table 16, it will be seen that the proportion of senior to junior staff (confining the senior grade to Professors and Readers, and the junior grade to Lecturers (Grades I & II) has declined sharply over the period 1942-1965. In the first decade the senior staff comprised approximately one fifth the total staff, and thereafter, up to about 1964, the proportion was in the region of one tenth to one eighth. The position has improved slightly in 1965 with the increase in the grade of Readers which has risen to about 3% of the total staff after being as low as 0.6% in 1964. Incidentally, in the U.K. Universities roughly 6-7% of the staff occupy the grade of Reader, and the proportion of senior staff,<sup>25</sup> as defined above, in the U.K. Universities is about 20%—more nearly like the proportion that existed in the early days of the University.

All in all, it would appear that there has been a gradual increase of staff in the Lecturer grade, except for a slight fall in the last two years. This fall is offset by an increase in the Assistant Lecturer grade which now comprises about two fifths of the total staff. According to University staffing policies movement from Assistant Lecturer grade to the Lecturer grade has been relatively easy as it has been dependent solely on the possession of approved post-graduate qualifications, usually a Ph.D., at the end of a certain fixed period of service. There has, therefore, been little or no stagnation at this level, and equally, hardly any at the different levels of the Lecturer grade. The stagnation is mainly at the point of transition between the Lecturer grade and senior staff positions, i.e. Readers and Professors.

The promotion prospects of University teachers would improve if, and when, the Second Faculty of Arts, Science and Medicine are given independent status as regards departments of study with a fixed quota of senior posts.

25. Senior staff is defined in the Robbins Report to include Readers and Senior Lecturers. According to a recommendation of the U.K. Grants Committee "in non-medical faculties, readers and senior lecturers should not exceed two ninths (i.e. 22.2%) of all non-professorial staff in a University" (pp.12-13 Appendix Three, Robbins Report). This quota it is understood applies to the University as a whole and not to individual faculties. No comparable data is available for Ceylon for purposes of comparison.

It is also necessary to create more senior posts—i.e. grades such as those of Reader. One difficulty has been that, as the Robbins Report (4) points out, “the title and status of Reader should imply distinction in research and should carry with it as a primary obligation the advancement of a subject”. Consequently, posts of Reader have been created only in so far as this was warranted by the excellence of research done. Unfortunately this view of what is implied by a Readership has not always been followed in Ceylon and very often it has been regarded as just another avenue of promotion for persons of certain seniority.

The designation of Reader should be confined to those who have achieved some degree of excellence in research. At the same time, success in teaching and other non-research functions should be equally rewarded, especially in view of the warning sounded by people like Dent (9) about the dangers inherent in the practice of granting promotions only on evidence of research publications. The Robbins Report too makes out a strong case for the need to give adequate recognition in promotions and appointments to factors other than research and publications. The following quotation from the Robbins Report (4) clarifies their views :—

“We think that in making of appointments and in promotion this diversity of gifts is not sufficiently honoured and that published work counts far too much in comparison with other kinds of excellence. The exceptionally gifted teacher and the man who has given his time to organisation and administration, to the running of laboratories and the development of libraries or to the welfare of students tend to suffer, when appointments and promotions are considered, in comparison with the man who has distinguished himself by publication” (p. 184).

The category of Associate Professor,<sup>26</sup> found in many Commonwealth countries, for example Australia, should be placed on a par with that of a Reader from the point of view of promotions and should be reserved for those of sufficient seniority who have excelled in teaching, the dissemination of knowledge outside the University, and contributed in other ways to enrich the life of the University.

Besides creating a new category of Associate Professor equivalent to a Reader, in order to improve promotion prospects and to establish a better ratio of senior to junior posts, the creation of more professorial posts, (see, Robbins Report, 4 p 178) is also desirable. The U.K. tradition that a department should have only one professor is an outmoded one, and, in fact, the University of Ceylon has deviated from this practice by esta-

26. Should not be confused with the American usage which is often synonymous with Senior Lecturer/Lecturer in the Commonwealth Universities. Here the ‘Associate Professor’ is a designation ranking next to full Professorship.

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blishing Co-Professorships in four departments of study—(Medicine, Surgery, Obstetrics and Gynaecology and Sinhalese). This trend should be extended not merely to achieve a better ratio of junior to senior posts but also with a view to improving the teaching and research in a department (see, Robbins Report, 4, Ch. 12).

### *Staff in relation to the Faculties*

The distribution of full-time permanent academic staff between the various faculties is shown in Table 17.

TABLE 17

#### Numerical and Percentage distribution of Full-time Academic Staff: by Faculty.

Year	Arts/Oriental Studies/Law		Science		Medicine, incl. Dentistry		Engineering		Agriculture Vet. Science		All Faculties (= 100 %)
		%		%		%		%		%	
1942	20	36	19	35	16	29	—	—	—	—	55
1943	24	39	21	34	17	27	—	—	—	—	62
1944	27	41	21	32	18	27	—	—	—	—	66
1945	34	45	23	30	19	25	—	—	—	—	76
1946	39	45	25	29	22	26	—	—	—	—	86
1947	46	47	27	28	24	25	—	—	—	—	97
1948	56	46	31	26	34	28	—	—	—	—	121
1949	65	47	34	25	38	28	—	—	—	—	137
1950	66	42	31	20	49	31	11	7	—	—	157
1951	72	39	35	20	63	34	13	7	—	—	183
1952	66	36	35	20	70	38	12	6	—	—	183
1953	68	35	34	18	67	34	13	7	11	6	193
1954	68	34	41	20	64	32	14	8	13	6	201
1955	66	33	39	20	64	32	15	7	16	8	200
1956 <sup>2</sup>	65	30	43	20	79	36	14	6	19	8	220
1957	80	35	38	17	79	35	14	6	16	7	227
1958	87	38	29	13	81	36	14	6	17	7	228
1959	111	42	43	16	76	28	18	7	16	7	264
1960	111	41	47	17	77	29	13	5	21	8	269
1961	102	43	49	21	51	22	15	6	20	8	237
1962	104	42	52	21	58	23	16	6	20	8	250
1963	115	42	61	22	58	21	19	7	21	8	274
1964	139	42	63	19	77	23	25	8	24	8	328
1965	136	41	70	21	81	24	24	7	23	7	334

#### *Notes:*

1. Where a teacher is assigned to two or more faculties he is classified as belonging to the Faculty in which he does more teaching.
2. The reported figure in the published statistics is 30 for the Faculty of Agriculture/Veterinary Science, and is very likely an error. The approved cadre for the Faculty is only 19 and therefore this is used instead of the reported figure.

Source: Statistical Abstracts of Ceylon.

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In the forties a little over two fifths of the total staff were attached to the Faculty of Arts/O.S., about a fourth to the Faculty of Science, and a third or a little less to the Faculty of Medicine. The greatest problem in these early days was that of recruiting full-time staff for the Medical Faculty. Despite an adjustment in 1944 of salary scales in favour of Medical Staff,<sup>27</sup> there was little improvement until very recently. To a lesser extent staffing proved to be a problem in the Science Faculty too and has remained so till now.

During the fifties the proportion of staff in the Faculties of Arts and Science fell slightly, and this was offset by a slight improvement in the staffing position of the Medical Faculty. The two new faculties set up in the fifties—Agriculture/Veterinary Science and Engineering—also share equally between themselves about one-seventh of the total University staff.

The present position of the four older faculties is fairly similar to that which existed in the forties, except for a deterioration of the staffing level of the Faculty of Science—a fall from about one third to one-fifth of the total staff. There has been no appreciable change in the proportions of staff attached to the two new faculties.

Table 18 below, which is based on Table 17, is set out in terms of Index numbers in order to show the relative position as between the faculties at different points of time, i.e. five yearly intervals, commencing 1947. The comparison base is 1942 for the three older faculties, and 1950 and 1953 for the Faculties of Engineering and Agriculture/Veterinary Science respectively.

TABLE 18

**Growth of Full-Time Staff based on Index Numbers,  
Selected years: by faculty.**

Year	Arts/O.S.	Science	Medicine, incl. Dentistry	Engineering <sup>1</sup>	Agriculture/ Vet. Science <sup>2</sup>	All Faculties
1942	100 (20)	100 (19)	100 (16)	—	—	100 (55)
1947	230	142	150	100=1950 (11)	—	176 (97)

27. According to the 1943 Council Report, it was proposed to place the Medical staff on a higher scale to compensate for the loss of earning as a result of joining the University Staff. It is of interest to note that the principle of differential salary scales was to apply "to persons with technical qualification," i.e., as the Report expressly states "to engineers as well as to physicians and surgeons" (p. 17). However, the salary scales have so far been adjusted only in favour of the Faculty of Medicine.

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1952	330	184	438	109	100=1953 (11)	332 (183)
1957	400	200	494	127	173	402 (221)
1962	520	273	362	145	182	455 (250)
1965	<b>680</b> (136)	<b>368</b> (70)	<b>506</b> (81)	<b>218</b> (24)	<b>209</b> (23)	<b>607</b> (334)

*Notes:*

1. Engineering Faculty Base = 1950.
2. Agriculture and Veterinary Science Faculty Base = 1953.

Source: Table 17, *infra*

It is clear from Table 18 that, although according to Table 17 the proportion of staff in the Faculty of Arts has remained fairly stable, the absolute increase of staff has been most marked in Arts. Next comes the Medical Faculty whose relative rate of growth of staff exceeded even that of Arts in the fifties, and even at the present time compares not unfavourably with Arts.

However, we note again that the staffing problem appears to be most acute in the Science Faculty, although there has been a slight increase from the absolute level of 1962 to that of 1965. The rates of growth of staff in the two new faculties are fairly similar but the rate of increase in Engineering is not unlike that of Science. To attract more staff to the Faculty of Engineering, a scheme of salary differentials, similar to that devised for Medical Staff, may be necessary even as an interim measure.

To determine the adequacy of these rates of growth one should strictly correlate growth of student numbers in each faculty with increase of staff. For this purpose the customary notion of the staff-student ratio has been statistically computed (see Appendix Table VI, page 99) and some of the broader implications of its absolute amount and its fluctuations for the University as a whole and each respective faculty have been briefly considered.

### *Staff/Student Ratio*

There has been no standard definition of staff/student ratios and different bases have been used in various countries. We have adopted the U.K. convention of obtaining the ratio by dividing "the number of full-time students by the number of full-time staff."<sup>28</sup> (p. xviii of U.K. Grants Com-

28. This was also the basis of computation adopted by the Robbins Report, (see Robbins Report, Appendix Three, Pt. I, Section 2.)

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mittee Report, 26, 1960/61). We have included under full-time students only undergraduates and diploma students, and excluded those enrolled as post-graduate research students and casual students. Post-graduate and/or part-time students—hardly represented in the University statistics—may be included if due allowance is made for such categories. Similarly, under full-time staff, we have included only those on the permanent staff of the University mainly because detailed information on temporary staff is not readily available. A corrected staff/student ratio has been computed (see Table 20) for the years in which information relating to temporary full-time staff is available. Strictly speaking, part-time and visiting staff—extensively employed in the Faculty of Medicine—should also have been included after appropriate statistical weightage. This has not been possible as the relevant data is not readily available. Therefore, the staff/student ratios computed are an under-estimate to the extent that they do not include temporary full-time staff and visiting, part-time staff. For this reason the Medical Faculty staff/student ratios, in particular, are greatly under-estimated.

Table 19, given below, sets out the staff/student ratios (1:?) for the University as a whole during the period 1942-1965. For comparative purposes the staff/student ratios of the University of Sydney, NSW, Australia, and the overall ratios of U.K. Universities have also been included.

TABLE 19

## Staff/Student Ratios.

Year	University of Ceylon.		Staff/Student Ratios (1:?)		
	Total Staff (full-time)	Total Student Population	University of Ceylon	University of Sydney, Australia <sup>1</sup>	U.K. Universities <sup>2</sup> .
1942	55	904	16.4	—	—
1943	62	904	16.4	—	—
1944	66	997	16.1	—	—
1945	76	1065	14.0	—	—
1946	86	1276	14.8	—	—
1947	97	1543	15.9	26.5	9.8
1948	121	1606	13.3	24.7	9.4
1949	137	1839	13.4	23.3	9.0
1950	157	2006	12.8	21.5	8.4
1951	183	2195	12.0	18.2	8.0
1952	183	2213	12.1	15.8	7.7
1953	193	2385	12.4	14.5	7.3
1954	201	2410	12.0	14.4	7.2
1955	200	2401	12.0	14.2	7.3
1956	220	2499	11.4	14.5	7.5
1957	227	2700	11.9	14.9	7.6

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1958	228	2904	12.7	14.1	7.8
1959	264	3147	11.9	14.5	7.7
1960	268	3651	13.6/9.7 <sup>3</sup>	14.5	7.6
1961	237	4614	19.5/12.5	14.3	7.6
1962	259	5081	19.6/14.0	14.5	7.5
1963	274	5686	20.8/14.7	14.2	14.2
1964	328	7140	21.7/15.8	14.2	—
1965	334	10649	31.9/20.1	13.8	—

*Notes:*

1. Data obtained from "Letter to Graduates of the University of Sydney" 1965. The ratios have been computed on a formula giving weightage to part course students (undergraduates and postgraduates) and part-time staff.
2. Data taken from Robbins Report, Appendix Three 6, Table 1 p. 4. is confined to the ratio of full-time students to full-time teachers. Full-time students include undergraduate and post-graduate students.
3. Corrected ratios for Ceylon, based on full-time permanent and temporary staff are taken from Table 20, *infra*, and are given alongside the uncorrected ratios from 1960-1965.

Source: Annual Reports of Council, University of Ceylon.

Staff/Student ratios for the University as a whole, should be interpreted cautiously as they are markedly influenced by variations in faculty structures, temporary staff etc. Yet, they provide a useful yardstick for making international comparisons.

Except for isolated fluctuations, the overall University staff/student ratio improved gradually until 1959. The University of Ceylon ratios do not compare favourably with the U.K. Universities. But the Ceylon ratios are generally better than the University of Sydney up to the end of the fifties, and compare slightly more favourably when allowance is made for temporary full-time staff in the University of Ceylon (see Table 20).

These ratios after 1960, have been corrected to include temporary full-time staff and are presented separately in Table 20, which also gives the breakdown of corrected staff/student ratios by faculties. The corrected ratios show that the level has been fairly well maintained up to about 1963. Thereafter, the University in terms of staffing has not been able to cope adequately with the phenomenal increase of student numbers in the Faculty of Arts/O.S. and in the smaller Faculty of Engineering. From about 1962 onwards the corrected Ceylon ratios began to decline and compare adversely with the contemporaneous figure at Sydney (see Table 19).

TABLE 20

**Corrected Staff/Student Ratios: by Faculty, 1960-65.**

Year	Arts/O. S.	Science	Medicine, incl. Dentistry	Agriculture/ Vet. Science	Engineering	All Faculties.
1960	13.2	7.6	12.8	1.2	3.2	9.7 (376)
1961	19.3	8.0	20.0	1.1	4.1	12.5 (368)

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1962	20.8	8.4	22.2	2.6	5.1	14.0	(363)
1963	19.6	8.3	25.9	3.9	6.5	14.7	(388)
1964	23.2	8.2	20.6	4.14	6.4	15.8	(451)
1965	38.9	8.3	20.5	3.9	11.0	20.1	(529)

Source: University of Ceylon.

For comparative purposes the following Table from the Robbins Report, (p. 41) is reproduced below. It will be seen that Ceylon fares better than every country listed except Great Britain. However, it should be remembered that even the corrected figure of 10 (1960) for Ceylon is an underestimate because it does not give due weightage to part-time staff.

TABLE 21

**University Staff/Student Ratios in selected countries, 1960.**

	<i>Ratio</i>
Great Britain	8
France	30
Germany (F.R.)	35
Netherlands	14
Sweden	12
U. S. A.	13
U. S. S. R.	12
Ceylon	10

Since the University staff/student ratios are likely to conceal wide differences as between faculties, the staff/student ratios, by faculties for the period 1942-1965 are set out in Appendix Table VI (see page 99), and a summary of this Table is reproduced below as Table 22. This Table gives the average staff/student ratios by faculty for three yearly periods, commencing 1942/1944 to 1963/65. The corrected faculty staff/student ratios for 1960-1965 will be found in Table 20.

TABLE 22

**Average Staff/Student Ratios for three yearly periods,  
1942/44 to 1963/65: by Faculty.**

<i>Years</i>	<i>Arts/O. S.</i>	<i>Science</i>	<i>Medicine incl. Dentistry</i>	<i>Engineering<sup>2</sup></i>	<i>Agriculture/ Vet. Science<sup>3</sup></i>	<i>All Faculties.</i>
<b>1942—44:</b>						
Staff/Student	24/366	20/256	17/312	—	—	61/934
Ratio <sup>1</sup>	15.3	12.8	18.4	—	—	15.4
<b>1945—47:</b>						
Staff/Student	40/513	25/347	22/435	—	—	87/1295
Ratio	12.8	13.9	19.8	—	—	14.9
<b>1948—50:</b>						
Staff/Student	62/754	32/416	40/584	4/63	—	138/1817
Ratio	12.2	13.0	14.6	—	—	13.2

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Staff/Student Ratio	69/921 13.3	35/445 12.7	67/779 11.6	13/105 8.1	2/14 —	186/ 2264 12.2
<b>1954—1956:</b>						
Staff/Student Ratio	66/1001 15.2	41/628 15.3	69/708 10.3	15/75 5.0	20/26 1.3	211/2437 12.2
<b>1957—59:</b>						
Staff/Student Ratio	93/1238 13.3	37/761 20.6	79/750 9.5	15/146 9.7	16/21 1.3	240/2916 12.2
<b>1960—62,</b>						
Staff/Student Ratio	106/2232 21.9	49/907 18.5	62/1097 17.7	15/178 11.9	20/34 1.7	254/4449 17.5
<b>1963—65:</b>						
Staff/Student Ratio	130/4752 36.6	65/1004 15.6	72/1583 22.0	23/387 16.8	23/101 4.4	312/7827 25.1

### Notes:

1. Ratios are expressed in terms of one full-time staff member to ? students. (1 : ?).
2. Engineering Faculty began in 1950 with an enrolment of 189 and staff of 11.
3. Faculty of Agriculture/Vet. Science began in 1953 with an enrolment of 41 and staff of 11.

Source: Appendix Table VI and Table 17, *infra*.

Table 22 confirms our earlier observation that the staffing position of the Faculties of Medicine and Arts/O.S. improved steadily up to the end of the fifties, and that thereafter, the decline in Arts/O.S. was more marked than in Medicine. Relatively speaking, despite the fact that staff/student ratios for Medicine are an under-estimate, the staffing position has been more favourable in Medicine than in any other faculty. Yet, even after making allowance for the limitations mentioned previously, the Medical Faculty ratio of 12.5 for 1961 (see Appendix Table VI) falls considerably short of the U.K. Universities ratio of 6.0 in 1961/62 for the Medical Faculties.

In the U.K. Universities the staff/student ratio in 1961/62 for Pure and Applied Science Faculties was 7.0 and the corrected ratio of 8.4 for Ceylon compares favourably.

The weakest staff/student ratio at the moment is found in the Faculty of Arts—the corrected ratio being 38.9 for 1965. In the U.K. Arts/Social Studies Faculties had a ratio of 8.8 in 1961/62 and the comparable ratio for Ceylon at that time was 19.3.

One should also take serious note of the consistent fall in the ratios of the Engineering Faculty, indicating that staff recruitment is not keeping pace with enrolment figures. According to the corrected figures, the ratio has fallen to 11.0 in 1965. The comparable U.K. figure is 8.8 for 1961/62.

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As against, this the ratios in the Faculty of Agriculture/Veterinary Science have been very favourable throughout, and in this respect it is not unlike many U.K. Universities, where the ratio for 1961/62 was 3.0.

Notwithstanding some of its limitations, it is evident that much importance should be attached to data pertaining to the staff/student ratio since it provides a useful and convenient means of evaluating the teaching component of a University. The Robbins Report states that, despite its many imperfections, the staff/student ratio should be regarded "as a major factor influencing the quality of University education" (p. 3, Appendix Three, 6). Both in the U.K. and U.S.A. a great deal of attention is being presently paid to the question of University teaching as this factor has suffered considerable neglect in recent years owing to an undue emphasis being placed on the research functions of a University. This danger is equally present in Ceylon.

Certainly, the proper balance between teaching and research is far too delicate a matter to be wholly satisfactorily solved in any University, but the necessity of keeping a watchful eye on the quality of teaching requires constant emphasis. As the U.K. Grants Commissioners once remarked, the quality of individual teaching given to undergraduates "is a matter of great importance if the ablest students are to obtain the fullest advantage from the undergraduate course without being held back by the slower progress of those of no more than average ability" (p. 30, 25). Looked at from the point of view of research, better staff/student ratios will enable university teachers "to devote more time to scholarship and research." (p. 30, 25).

## PART IV

### Finances

The introduction of the scheme of "Free Education from the Kindergarten to the University" in 1945 almost coincided with the establishment of the University of Ceylon as a corporate body in 1942. Consequently, unlike many other foreign Universities, the University of Ceylon began as an institution financed almost wholly by the State. Up to 1945 only about two thirds of the funds of the University came from the State. Thereafter, well over fourth fifths of its funds were from the State. These funds were given in the form of a Recurrent Parliamentary Grant, voted in the Annual Appropriation Bill, in an amount determined on the basis of Estimates of Expenditure prepared by the University and submitted to the Treasury through the Ministry of Education. It excludes special monies voted by Parliament for Capital Expenditure such as new buildings, laboratories, equipment etc.

Unlike in the U.K., it is specified by Act that the accounts of the University shall be audited by the Auditor-General whose Report is thereby automatically available to the Public Accounts Committee of Parliament. So far the Public Accounts Committee has, perhaps in deference to the well established practice of non-interference in the autonomous conduct of the University, not summoned the Vice-Chancellor to appear before it nor commented on the accounts of the University.

In the first decade and a half of the University a large investment of capital expenditure was made for the purpose of establishing a residential campus at Peradeniya. The original estimate for the complete scheme, financed from the National Development Reserve (NDR) fund, was Rs. 53 million, but was revised in 1952, to Rs. 83 million. Subsequently, a maximum limit of Rs. 57 million was placed on expenditure from the NDR fund, and this limit has been almost reached. Over two fifths of this sum (approximately Rs. 26 million) was spent during the first decade, before the transfer to Peradeniya, on acquisition of land, clearing and original buildings, in particular, the Arts Block, the Administration Building, Halls of Residence and Staff residence. Another Rs. 19—20 million—nearly a third of the estimated limit of expenditure on the NDR funds—was incurred during the fifties till about the end of 1957, when the bulk of the buildings including the Science Faculty and Library on the original plan were fully, or nearly, completed.

In addition to these, further investments have been made on such capital projects as the removal of the Engineering Faculty to Peradeniya, the duplication of the Faculty of Medicine in Peradeniya and the Faculty of Arts in Colombo, the establishment of the Faculty of Agriculture and Veterinary Science, equipment for the Faculties of Science and Engineering, the Water Supply Scheme etc. Some of these projects—in particular, the buildings and equipment for the Faculty of Engineering, equipment for the Faculty of Science, the Agriculture and Veterinary Science building—have been financed, either wholly or partially by foreign aid. The biggest investment in this respect has been on the Faculty of Engineering which has cost nearly Rs. 13 million. Inclusive of these additional capital expenditure, the total capital investment on the Peradeniya Campus so far is approximately in the region of Rs. 73 million. There has been very little capital investment on the Colombo campus other than the special expenditure of Rs. 500,000 on the establishment of the Second Faculty of Arts in Colombo in 1962/63.

#### *Recurrent Income and Expenditure*

Appendix Table VII (see page 100) shows the Annual Income from the Recurrent Parliamentary Grant and the Total Annual Expenditure. The Parliamentary Grant for a financial year commencing in October of one year overlaps two academic years since the academic year customarily began in July of one year and extended to June of the next year. It was only from 1964 onwards that the Calendar of the University was changed in such a way that the financial year coincides with an academic year since now both commence in October. In the Tables following, the year against which the grant and expenditure is listed refers to the calendar year following the year in which the Grant was voted. Thus, monies voted in 1942/43 are listed against 1943. Therefore, for example, in Appendix Table VII the enrolments for 1943 have been employed to determine the cost per annum per student to Public funds i.e., in terms of the annual recurrent grant, for the financial year 1942/43, as well as the total cost per student, i.e., in terms of the annual total University Expenditure for 1942/43.

The Recurrent Parliamentary Grant has increased nearly thirteen fold since 1943. In 1943, the Annual Grant amounted to approximately Rs. 985,000 and in 1965 it was Rs. 12,886,000. The growth of the grant over the period 1942-1965 may be seen from the Index figures given below for selected years, taken at five yearly intervals, with 1943 = 100, as the base.

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TABLE 23

Public Expenditure on the University of Ceylon, Selected years.  
(1943 = 100)

	Recurrent Parliamentary Grant (Rs. 000's)	Percent increase over previous Grant.	Index
1943	985	—	100
1948	4,473	+ 252	352
1953	5,800	+ 67	589
1958	7,289	+ 26	740
1963	9,900	+ 36	1005
1965	12,866	+ 30	1306

Source: Statistical Abstracts of Ceylon.

It will be evident from the above table that there has been a substantial increase in the first five years—approximately an increase of 252% over the 1943 figures—largely because of the introduction of the Free Education scheme. The percentage increase of the Grant for each five year period has since fallen gradually from 67% in 1948 to 1953 to 26% in the period 1953 to 1958, and risen slightly to about 36% in the period 1958-1963. This level has been maintained in 1963-65. The relatively low rate of increase of the Government Grant between 1948 and 1965 is not consistent with the rapid quantitative growth of the University, particularly when one takes into account the fall in the value of money, price changes and the rise in the standard of living over the whole period 1942-65.

## Average costs per student

This is clearly seen by examining the cost per student to Public funds, given in Appendix Table VII (see page 100). Although the cost rose to a peak of approximately Rs. 3,000/- in the late fifties from about Rs. 1,000/- in 1943, it has again fallen sharply in 1965 to almost the 1943 level.<sup>29</sup> Thus, in fact, the University is spending much less today on each student than was the case in the forties and fifties. This is in contrast with the situation in the U.K. where, as reported by Butler, (1) "in 1958/9, since there were about exactly twice as many students, expenditure per student was about four times greater." (p. 13a). From this alone it will be seen that, given the increased numbers throughout this period (1942-65), the degree of relief provided by the State in respect of University financing has not kept pace with price changes and the improvements in the standard of living during this period. Since the increase in the recurrent government grant

29. In 1962/63 the comparable cost per student per annum to Public funds in the U.K. Universities as a whole was £ 581, and, at the current rates of exchanges this is equivalent to Rs. 7,745/-. Therefore, the U.K. amount is seven-fold more than the present Ceylon figure.

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has barely kept pace with the fall in the value of money, it has contributed very little towards financing the rapid expansion. A much greater public investment on University education is required to finance the expansion of student numbers at even the level attained in the fifties.

An examination of University expenditure figures in Appendix Table VII reveals that the increase in expenditure mirrors almost exactly the increase of the government grant reflecting, of course, the heavy dependence of the University funds on State assistance. The total cost per student (based only on recurrent costs) is only slightly more than the cost per student to Public funds. Treating 1943 as a base year, when the total cost per student was approximately Rs. 1,400/-, the increase in 1965 was only 8%, although it had grown in the mid-fifties to about  $2\frac{1}{2}$  times the 1943 figure.<sup>30</sup> (see Appendix Table VII).

The total cost per student given in Appendix Table VII it should be remembered is for the University as a whole, and as Butler (i) has remarked elsewhere "Money does not go equally far in providing a University education for all students. 'Non-Arts' students are nearly twice as expensive to educate as 'Arts' students." (p. 142). No detailed accounts of expenditure are available to determine the average cost per student in the various faculties or departments. However, Butler's assessment is likely to be equally true of Ceylon. According to the Robbins Report (Appendix Four, 7, Part IV, Table 18) in 1962/63, the estimated average total cost per student (including teaching, research etc.) in Arts was £ 423, in Pure Science £ 801, and in Technology £ 657, in Medicine £ 983, and £ 1,196 in Agriculture.

### *Financing University Education*

Table 24 given below compares the Public expenditure (i.e. the recurrent Parliamentary grant) on University education with the total Public expenditure on all education (which includes certain aspects of Higher Education such as Teacher Training, Advanced Technology, etc.).

30. The comparable U.K. figure is £ 660 for 1962/63 which is equivalent to Rs. 8,798/- at current exchange rates, and A £ 510 (1965) for the University of Sydney, NSW. Australia which is approximately Rs. 5,100/- at current exchange rates.

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TABLE 24

## Public Expenditure on all Education and University Education<sup>1</sup>

Year (ending 30th September)	Total Expenditure on all Education (Rs. '000's)	Index	Recurrent Parliamentary Grant (Rs. 000's)	Index	University Grant as % of Total Expenditure on Education
1943	26,272	100	985	100	3.7
1944	31,815	121	1,016	103	3.2
1945	38,808	145	1,054	107	2.7
1946	47,709	182	1,623	165	3.4
1947	69,814	266	2,790	283	4.0
1948	83,478	318	3,473	352	4.2
1949	93,440	356	3,865	392	4.1
1950	105,950	403	4,170	423	3.9
1951	121,786	464	4,690	476	3.9
1952	137,784	524	5,500	558	4.0
1953	149,990	571	5,800	589	3.9
1954	135,247	515	5,950	604	4.4
1955	143,581	547	5,950	604	4.1
1956	158,814	604	7,325	744	4.6
1957	183,675	699	8,089	821	4.4
1958	206,308	785	7,289	740	3.5
1959	244,176	929	8,952	909	3.7
1960	284,879	1084	9,121	926	3.2
1961	267,452	1018	9,132	927	3.4
1962	285,969	1088	9,247	939	3.2
1963	299,590	1140	9,900	1005	3.3
1964	326,659	1243	12,172	1236	3.7
1965 <sup>2</sup>	324,235	1234	12,866	1306	3.9

### Note:

1. The Recurrent Grant to the Universities are not included in the Total Expenditure on Education listed in Column 1. The Table depicts only Public expenditure on the University of Ceylon.

2. See footnote 31, page 90.

Source: Statistical Abstracts of Ceylon.

One characteristic evident from the above Table is that the Total Public expenditure on Education in general and the annual investment on University education have increased since 1943 at roughly the same rate. This is partly confirmed by examining the ratio of the University Grant to the Annual Total Public Expenditure on education. Throughout the period under review the expenditure on the University of Ceylon was approximately 3-4 % of the Total Public Expenditure on education. It rose to a peak in the mid-fifties—nearly 4 %, and then declined to about 3 %, showing once again that the annual investment on the University of Ceylon in recent years has fallen short of its needs arising from the phenomenal expansion over the last few years.

One way of analysing Public expenditure on education, in particular higher education, is to examine what proportion it is of the National Income

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expressed in terms of the Gross National Product (GNP). The Table below shows the expenditure on education in relation to GNP for the period 1959-1965. GNP calculated at Constant Prices (i.e. 1959 prices) are those prepared by the Central Bank of Ceylon and published in the 1965 Annual Report of the Monetary Board. Table 25 also gives similar information in relation to selected countries. But the Ceylon data is an under-estimate to the extent that it refers only to public expenditure on the three Universities of Ceylon.<sup>31</sup>

TABLE 25

## Expenditure on Education in Ceylon and selected countries in relation to Gross National Product (G.N.P.)<sup>1</sup>.

Country	All expenditure as percentage of GNP. Higher Education	Public Expenditure as percentage of GNP		Public Expenditure on Higher education as percentage of Public Expenditure on all education
		All education	Higher education	
1960/61	(1)	(2)	(3)	(4)
Canada	0.8	3.9	0.5	12
France	0.3	3.4	0.3	8
Germany (F.R.)	.	3.0	0.4	14
Netherlands	.	4.4	.	.
New Zealand	.	3.3	0.5	15
Sweden	.	4.2	0.5	11
Switzerland	0.4	.	0.4	.
U. S. A.	1.1	.	0.8	.
U.S.S.R. (1959/60)	.	4.4	0.8	17
Gt. Britain (1962/63)	0.9	4.8	0.8	18

Ceylon:		GNP (Rs. in m.)		
1959	4.2	0.2	4	5,854
1960	4.7	0.2	4	6,066
1961	4.3	0.2	6	6,240
1962	4.5	0.2	5	6,472
1963	4.5	0.2	5	6,599
1964	4.7	0.2	5	6,888
1965	4.5	0.2	5	7,024

<sup>1</sup>Except for the data on Ceylon, this Table is a reproduction of Table 15, in Appendix Five, Robbins Report, which contains the relevant explanatory notes to the Table.

While the proportion of the GNP devoted to *all* education compares very favourably with the western countries listed in Table 25 this is not the case in relation to University education. The proportion, though only for University education, of the GNP given to higher education is surprisingly

31. For purposes of determining the Public Expenditure on Higher Education, the amount of the Annual Grant in relation to Vidyodaya and Vidyalandara Universities (see Table 25 Columns 3 & 4) were obtained from the Statistical Abstracts of Ceylon. The data on Public expenditure on all Education, except the data for 1965 which has been kindly supplied by the Director of Census and Statistics, is also from the same source.

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small compared to expenditure in the countries listed. Additional support for this conclusion comes from the fact that Ceylon spends only about 4-6% of all public expenditure on University education as against anything between 12-18% in the Western world. The general inference to be drawn from these figures is that Ceylon by international standards spends far too little on higher education, especially University education. A much greater investment is required in the future to cope with the present rate of growth, and also to finance the much needed qualitative aspects of University development such as post-graduate study and research, development of diploma courses, science and technology etc.

### *Student Finance*

One aspect of University financing which has, consequent to the rapid growth of the University and widening of the social base from which University students are drawn, become a matter of special importance relates to the question of student finance.

Although University education is free and no fees are charged, student finance is required for maintenance, books and equipment (in the case of science and medical students). Indeed, it was Sir Ivor Jennings (14), a strong critic of the Free Education Scheme, who pointed out that "since the cost of maintenance is much higher than the fees, 'free education' does not help the poor parents at all" (p. 176).

Of those in receipt of financial assistance from the University, Bursary holders amount to over 90%, while the remainder comprise Scholarship holders, Exhibitioners,<sup>32</sup> and those awarded Endowed Scholarships. Table 26 below shows the proportion of recurrent expenditure allocated for the award of bursaries which constitute the main form of financial assistance to students.

TABLE 26

#### Financial Assistance to Students.

Year	Annual Expenditure (in Rs.)	Index	% of Total University Expenditure <sup>1</sup>	Students receiving financial assistance			Col. (6) as a % of Total University Population
				Bursary Holders	Others	Total	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1943 <sup>2</sup>	No information						
1944	35,855	100	2.8	102	56	168	16.9
1945	23,260	65	1.7	92	73	165	15.5

32. A Scholarship is generally of the monthly value of Rs. 100, and an Exhibition Rs. 50. Both are awarded on grounds of academic merit, for example, performance at a University examination etc. Bursaries are awarded in terms of the economic circumstances of the students' family by a Scholarships Board which decides on the relative claims of each individual student for the award of a bursary.

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1946	63,026	176	3.7	205	82	287	22.0
1947	93,046	260	3.4	291	86	377	24.3
1948	118,744	331	3.5	342	88	342	21.2
1949	137,004	382	3.6	397	89	486	26.4
1950	154,902	432	3.9	427	109	536	26.3
1951	175,430	489	3.6	477	102	579	26.2
1952	189,760	530	3.5	559	104	663	29.7
1953	175,834	490	2.6	488	125	613	25.6
1954	194,868	543	2.7	513	100	613	25.1
1955	194,985	544	2.8	529	74	603	24.8
1956	212,510	592	2.7	555	69	624	24.6
1957	299,775	836	3.2	786	87	873	32.1
1958	363,270	1013	3.9	920	88	1008	34.2
1959	334,207	932	3.2	892	133	1025	32.2
1960	456,992	1275	4.3	1187	117	1304	35.4
1961	434,425	1211	3.8	1180	98	1278	27.5
1962	412,435	1150	3.4	1224	105	1329	26.0
1963	585,005	1631	4.4	1745	124	1869	32.8
1964	1,001,620	2794	7.5	2749	105	2854	39.7
1965 <sup>3</sup>	1,268,640	3538	7.6	3704	167	3871	36.1

## Notes:

1. For data on University Expenditure see column 5 of Appendix Table VII, *infra*.
2. The information for 1943 is not readily available.
3. Some of the data for 1965 has been obtained from University records as the published data is incomplete.

Source: Annual Reports of Council, University of Ceylon.

It is evident from Table 26 that in 1965 apparently 8 % of the recurrent expenditure was allocated for the grant of bursaries. During the last five years or more the proportion of monies allocated for bursaries has increased from 3 % (the average of the fifties) to about 8 % in 1965, indicating that the expansion of the University in the sixties has brought in, as suggested in Part I, proportionately more needy students than in the more stable years of the University's growth. In terms of numbers a large percentage of students—now nearly two-fifths (36-40 %)—are in receipt of financial assistance compared with about one fifth to one third (20-30 %) in the fifties. The proportion of students in receipt of financial assistance has gradually increased from 17 % in 1944 through 25 % in 1955 to 39 % in 1964.

This expansion of the bursary scheme was anticipated as far back as 1945. The Council Report of 1945 pointed out that that "there will be a time lag before the full effects of 'free education' become noticeable," as a result of the new Central Schools enabling "the poorer classes," especially those who cannot afford maintenance up to 19, to obtain the benefits of University education. It was therefore, argued that, in as much as the bursary system provided much needed assistance to a class of student who could not afford University fees in the pre-free education era, a different category—the new Central School student—would have to be assisted by the bursary system in the not distant future.

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It is only in the sixties that the full impact of the benefits of free education and the opening up of new secondary schools has become visible in the field of higher education. As anticipated, schemes of financial assistance need to be re-examined in the light of the changed present day requirements. There is no doubt that even more so than in 1946 (vide: Council Report): "Bursaries are becoming an expensive item.....but they are necessary to enable the University to draw students from a wider range of social classes."

Today many more students are in need of financial assistance to maintain themselves through a University course extending from 3-5 years. But the increase in the expenditure in this respect has been hardly sufficient to maintain the level of assistance given previously, for example, in the fifties. Considering the fall in the value of money and the growth in the number of students in need of financial assistance, a much greater investment on bursaries will be required if the fruits of University education are to be equalized among all sections of the community, irrespective of courses of study and fields of specialization.

The system of Bank loans to University students, originated by the People's Bank in 1964, supplemented the University bursary scheme, but with its discontinuance the position has become aggravated as the University has with its meagre budget not been able to increase any further its expenditure on bursaries. The system of financial assistance to students in the form of loans, repayable without interest after graduation, as found in some continental countries, for example, Sweden, may provide an effective answer to the present difficulties.

The New Zealand practice of 'tied bursaries' whereby financial assistance is dependent upon the student giving an undertaking to enter the service of the state for a given period after graduation also deserves to be tried out in Ceylon. Thus, recruits to the teaching profession may be taken at the second year level and given assistance which will be repayable without interest over a period of years, beginning two or three years after the commencement of employment.

The failure to implement some such scheme in the event of expenditure on financial assistance to students being frozen at the present level carries with it the inherent danger that potentially good students may be discouraged from attempting University courses.

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## APPENDIX

TABLE I

Numerical and Percentage distribution of full-time students: by Faculty of Enrolment.<sup>1</sup>

Year	Arts/Oriental Studies <sup>2</sup>		Science		Agriculture/ Vet. Science		Medicine, incl. Dentistry <sup>3</sup>		Engineering		Others <sup>4</sup>		Total (=100%)
		%		%		%		%		%		%	
1942	396	43.6	165	18.3	—	—	343	37.9	—	—	—	—	904
1943	336	37.2	171	18.9	—	—	391	43.2	—	—	6	0.7	904
1944	366	36.7	185	18.6	—	—	446	44.7	—	—	—	—	997
1945	375	35.2	189	17.8	—	—	501	47.0	—	—	—	—	1065
1946	517	39.7	225	17.3	—	—	534	41.0	—	—	26	2.0	1302
1947	647	41.6	244	15.7	28	1.8	624	40.2	—	—	11	0.7	1554
1948	686	42.6	236	14.6	27	1.7	658	40.8	—	—	5	0.3	1612
1949	794	43.1	271	14.7	62	3.4	712	38.6	—	—	5	0.2	1844
1950	783	38.5	191	9.4	31	1.5	793	39.0	208	10.1	30	1.5	2036
1951	909	41.1	223	10.1	44	2.0	863	39.0	156	7.1	15	0.7	2210
1952	907	40.6	272	12.2	47	2.1	877	39.3	110	4.9	19	0.9	2232
1953	947	39.6	342	14.3	55	2.3	907	37.9	134	5.6	7	0.3	2392
1954	994	40.8	332	13.6	56	2.3	880	36.2	148	6.1	24	1.0	2434
1955	991	40.8	397	16.3	38	1.6	859	35.3	116	4.8	30	1.2	2431
1956	1017	40.1	454	17.8	37	1.5	855	33.8	136	5.4	35	1.4	2534
1957	1096	40.3	522	19.2	38	1.4	863	31.8	181	6.7	18	0.6	2718
1958	1239	42.0	508	17.2	42	1.4	897	30.4	218	7.4	46	1.6	2950
1959	1379	43.1	527	16.5	36	1.1	963	30.2	242	7.6	49	1.5	3196
1960	1678	45.5	562	15.3	47	1.3	1115	30.2	249	6.8	33	0.9	3684
1961	2398	51.5	663	14.2	67	1.5	1182	25.4	302	6.5	43	0.9	4655
1962	2620	51.2	758	14.8	92	1.8	1275	24.9	336	6.6	36	0.7	5117
1963	2802	49.0	867	15.2	117	2.1	1490	26.1	410	7.2	21	0.4	5706
1964	4150	57.8	791	11.0	149	2.1	1568	21.8	489	6.8	42	0.5	7183
1965	7311	68.2	963	9.0	161	1.5	1640	15.3	574	5.4	74	0.6	10723

Notes:

1. Identical statistics published in the Statistical Abstracts refer to distribution by faculty of registration in a particular year. Thus, all students following "service" courses in the Faculty of Science are classified under Science even though they are permanently enrolled in a different faculty.
2. Arts/Oriental Studies data include Diploma in Education, Diploma in Sinhalese/Tamil, and Diploma in Librarianship enrolments.
3. Medical/Dentistry data include Medical diploma enrolments.
4. "Others" are mainly postgraduate research students and casual students.

Source: Annual Reports of Council, University of Ceylon.

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TABLE II

Numerical and Percentage distribution of University of Ceylon  
Students: by Ethnic Origin.

Year	Sinhalese %		Tamils %		Burghers %		Moors/Malay %		Others %		Total (=100%)
1942	519	57.4	289	32.0	54	6.0	25	2.7	17	1.9	904
1943	509	56.3	307	34.0	52	5.7	21	2.3	15	1.7	904
1944	575	57.8	325	32.6	55	5.5	29	2.9	12	1.2	996
1945	624	58.6	337	31.7	64	6.0	28	2.6	12	1.1	1065
1946	803	61.7	383	29.4	64	4.9	37	2.8	15	1.2	1302
1947	952	61.3	458	29.5	75	4.7	45	2.9	26	1.6	1554
1948	977	61.5	492	31.0	65	4.1	40	2.5	15	0.9	1589
1949	1114	60.4	592	32.1	67	3.6	40	2.2	31	1.7	1844
1950	1218	59.8	670	32.9	69	3.4	46	2.3	33	1.6	2036
1951	1346	60.9	729	33.0	63	2.9	46	2.1	26	1.2	2210
1952	1338	60.8	724	32.9	67	3.0	39	1.8	34	1.5	2202
1953	1439	60.2	807	33.7	77	3.2	41	1.7	28	1.2	2392
1954	1461	60.0	830	34.1	77	3.2	42	1.7	24	1.0	2434
1955	1453	59.8	840	34.5	67	2.8	54	2.2	17	0.7	2431
1956	1526	60.2	874	34.5	56	2.2	57	2.3	21	0.8	2534
1957	1631	60.0	944	34.7	55	2.0	54	2.0	34	1.3	2718
1958	1876	63.6	936	31.7	42	1.4	72	2.5	24	0.8	2950
1959	1983	62.4	1065	33.5	42	1.3	66	2.1	21	0.7	3177
1960	2468	67.0	1085	29.4	39	1.1	67	1.8	25	0.7	3684
1961	3323	71.4	1187	25.5	40	0.9	84	1.8	21	0.4	4655
1962	3703	72.4	1252	24.5	43	0.8	89	1.7	30	0.6	5117
1963	4290	75.2	1266	22.2	26	0.5	89	1.5	35	0.6	5706
1964	5247	73.1	1677	23.4	51	0.7	155	2.1	52	0.7	7182
1965	8371	78.1	2051	19.1	41	0.4	219	2.0	41	0.4	10723

Source: Statistical Abstracts of Ceylon.

# UNIVERSITY OF CEYLON REVIEW

TABLE III

**Numerical and Percentage distribution of University of Ceylon  
Students: by Religion.**

<i>Year</i>	<i>Buddhist</i>		<i>Hindus</i>		<i>Catholics</i>		<i>Other Christians</i>		<i>Islam</i>		<i>Other</i>		<i>Total</i>
	%		%		%		%		%		%		(=100%)
1942	345	38.2	201	22.2	116	12.8	212	23.5	27	3.0	3	0.3	904
1943	318	35.2	193	21.3	no inf.		364	40.3	25	2.8	4	0.4	904
1944	380	38.1	197	19.8	139	14.0	245	24.6	29	2.9	6	0.6	996
1945	402	37.8	202	19.0	161	15.1	259	24.3	28	2.6	13	1.2	1065
1946	552	42.4	241	18.5	172	13.2	281	21.6	36	2.8	20	1.5	1302
1947	686	44.1	287	18.5	217	14.0	297	19.1	47	3.0	20	1.3	1554
1948	686	43.2	330	20.7	264	16.6	244	15.4	44	2.8	21	1.3	1589
1949	798	43.3	406	22.0	239	13.0	334	18.1	43	2.3	24	1.3	1844
1950	884	43.4	457	22.5	273	13.4	366	18.9	50	2.5	6	0.2	2036
1951	967	43.8	504	22.8	270	12.2	391	17.7	55	2.5	23	1.0	2210
1952	977	44.4	498	22.6	no inf.		654	29.7	47	2.1	26	1.2	2202
1953	1069	44.7	574	24.0	228	9.5	438	18.3	39	1.6	44	1.8	2392
1954	1108	45.5	570	23.4	211	8.7	479	19.7	31	1.3	35	1.4	2434
1955	1150	47.3	543	22.3	205	8.5	472	19.4	36	1.5	25	1.0	2431
1956	1192	47.0	610	24.1	197	7.8	463	18.2	57	2.3	15	0.6	2534
1957	1259	46.3	652	24.0	356	13.1	357	13.2	61	2.2	33	1.2	2718
1958	1485	50.3	677	22.9	365	12.4	337	11.4	67	2.3	19	0.7	2950
1959	1732	54.5	669	21.0	372	11.7	324	10.2	70	2.2	14	0.4	3181
1960	2060	55.9	768	20.9	423	11.5	351	9.5	69	1.9	13	0.3	3684
1961	2869	61.6	910	19.6	434	9.3	348	7.5	84	1.8	10	0.2	4655
1962	3153	61.6	948	18.5	504	9.9	394	7.7	91	1.8	27	0.5	5117
1963	3678	64.4	928	16.2	551	9.6	441	7.7	89	1.6	19	0.5	5706
1964	4660	64.9	1185	16.5	671	9.3	486	6.7	163	2.3	17	0.2	7182
1965	7615	71.0	1609	15.0	783	7.3	491	4.6	219	2.0	6	0.1	10723

Source: Statistical Abstracts of Ceylon.

# DEVELOPMENTS IN UNIVERSITY EDUCATION

TABLE IV  
Numerical and Percentage distribution of University Students by "Home Residence" classified by Provinces

Years	PROVINCES										Total (=100%)									
	Western %	Central %	Northern %	North- Central %	North- Western %	Southern %	Eastern %	Sabara- gamuwa %	Uva %	Others %										
1942	503	55.6	76	8.4	152	16.9	4	0.5	13	1.4	116	12.8	12	1.3	20	2.2	8	—	—	904
1943	514	56.9	70	7.7	172	19.0	2	0.2	13	1.4	94	10.4	14	1.6	14	1.6	11	0.9	—	904
1944	548	55.0	73	7.3	186	18.7	3	0.3	22	2.2	122	12.3	14	1.4	20	2.0	8	1.2	—	996
1945	611	57.4	67	6.3	170	16.0	1	0.1	24	2.3	241	13.2	14	1.3	25	2.3	12	0.8	—	1065
1946	812	62.4	90	6.9	161	12.4	3	0.2	28	2.1	140	10.7	14	1.1	37	2.8	14	1.1	—	1302
1947	937	60.4	115	7.4	192	12.4	5	0.3	46	3.0	187	12.1	19	1.2	36	2.3	11	1.2	3	0.2
1948	966	60.8	99	6.2	226	14.2	8	0.5	47	3.0	168	10.6	19	1.2	41	2.6	11	0.7	3	0.2
1949	1081	59.5	114	6.2	296	16.3	21	1.2	63	3.4	153	8.6	20	1.1	53	2.9	12	0.7	4	0.2
1950	1168	57.4	140	6.9	334	16.4	6	0.3	70	3.4	231	11.4	22	1.1	53	2.6	10	0.7	1	0.1
1951	1295	58.6	151	6.8	376	17.0	9	0.4	72	3.3	217	9.8	22	1.0	53	2.4	13	0.5	2	0.1
1952	1227	55.7	218	9.9	399	18.1	50	2.3	33	1.5	207	9.4	23	1.0	30	1.4	10	0.6	2	0.1
1953	1350	56.4	227	9.4	419	19.5	18	0.7	63	2.6	232	9.7	28	1.2	48	2.0	12	0.5	4	0.2
1954	1350	55.5	218	9.0	450	18.5	5	0.2	66	2.7	238	9.8	28	1.2	61	2.5	17	0.5	—	2392
1955	1228	50.5	228	9.4	484	19.9	6	0.2	84	3.5	275	11.3	38	1.6	63	2.6	20	0.7	1	0.4
1956	1300	51.3	253	10.0	468	18.4	11	0.4	78	3.1	288	11.4	40	1.6	70	2.8	18	0.8	5	0.2
1957	1357	50.0	290	10.7	514	18.9	11	0.4	88	3.2	319	11.7	38	1.4	79	2.9	14	0.7	8	0.3
1958	1466	49.7	313	10.6	542	18.4	22	0.7	95	3.2	359	12.2	46	1.6	88	3.0	18	0.5	8	0.3
1959	1615	50.8	333	10.5	567	17.8	10	0.3	97	3.1	389	12.2	43	1.5	91	2.9	20	0.6	1	0.0
1960	1860	50.5	384	10.4	615	16.7	16	0.6	129	3.5	451	12.2	62	1.7	133	3.6	28	0.7	6	0.2
1961	2229	47.9	480	10.3	716	15.4	32	0.6	183	3.9	699	15.0	77	1.7	190	4.1	41	0.8	6	0.1
1962	2405	47.0	602	11.8	717	14.0	42	0.8	204	4.0	789	15.4	84	1.6	206	4.0	50	0.9	8	0.2
1963	2799	49.1	620	10.9	689	12.1	50	0.9	231	4.1	935	16.4	81	1.4	234	4.1	51	0.9	18	0.4
1964	3256	44.3	755	10.6	1018	14.2	73	1.0	374	5.2	1290	18.0	106	1.5	240	3.2	51	0.9	16	0.3
1965	4728	44.1	1170	10.9	1343	12.5	97	0.9	561	5.2	1993	18.6	172	1.6	533	5.0	109	0.7	19	0.3
																	1.0	17	0.2	10723
Census 1963 <sup>1</sup> in (000's)	2845	(26.7)	1,711	(16.1)	742	(7.0)	394	(3.7)	1,157	(10.09)	1,434	(13.5)	547	(5.2)	1,129	(10.6)	666	(6.3)	10,625	(=100%)

Notes:

1. The numerical and percentage distribution of population by provinces according to the 1963 Census (See Ferguson's Directory, 1965).

Source: Annual Reports of Council, University of Ceylon

TABLE V  
Numerical and Percentage distribution of Annual Admissions to the University of Ceylon:  
by Course of Study.

Year	Arts/Oriental Studies	Law	Science	Medicine/ Dentistry	Agriculture	Veterinary Science	Engineering	Total admitted (=100%)	Total sitting	Per Cent admitted
1943	70	35.5	65	31.5	—	—	—	197	350	48.7
1944	136	50.8	71	22.7	—	—	—	268	606	44.7
1945	140	48.4	69	23.9	—	—	—	289	744	38.9
1946	201	54.0	78	25.0	—	—	—	372	1171	31.8
1947	211	51.2	67	24.8	10	2.4	—	412	1384	29.0
1948	139	40.6	63	18.4	7	2.0	—	343	1520	22.3
1949	204	51.4	58	14.6	113	28.5	—	397	1565	25.4
1950	227	51.8	50	11.4	122	27.8	—	438	1443	30.3
1951	249	49.0	94	18.5	6	1.4	—	508	1804	28.1
1952	256	49.2	102	19.6	3	0.6	19	520	2026	25.7
1953	248	48.2	131	20.3	8	1.6	22	514	2132	24.0
1954	294	48.4	131	20.3	5	0.8	41	607	2053	29.5
1955	284	43.1	171	18.4	5	0.8	60	658	2061	32.0
1956	344	45.6	172	18.9	5	0.7	75	752	2137	35.1
1957	380	49.7	138	20.0	12	1.6	67	766	2289	33.4
1958	436	49.2	175	19.7	9	1.0	68	886	3164	28.0
1959	647	54.4	202	17.0	9	0.8	11	1189	3938	30.1
1960	1106	61.0	286	14.6	26	1.4	111	1812	5277	34.3
1961	681	55.1	244	13.7	25	2.0	104	1237	5795	21.3
1962	1534	63.3	351	14.6	19	0.7	13	2423	9657	25.1
1963	1801	70.6	260	11.2	23	0.9	20	2551	13692	18.6

Notes:

1. The year indicates the year in which the Entrance Examination was held; the Admissions are usually in the following year.
2. Admissions listed for 1960 included second intake of 692 "External" students who were permitted to follow courses with Internal Students in the Faculty of Arts/Oriental Studies, and first admissions to the Second Faculty of Science, Peradeniya.
3. Admissions listed for 1962 include first admissions to the Second Faculty of Arts, Colombo, and also in the Faculty of Medicine those admitted to the Second Medical Faculty, Peradeniya.

Source: Annual Reports of Council, University of Ceylon.

# DEVELOPMENTS IN UNIVERSITY EDUCATION

TABLE VI

Staff/Student Ratios\*: by Faculty

Year	Arts/Oriental Studies (1)	Science (2)	Medicine incl. Dentistry (3)	Agriculture/ Vet. Science (4)	Engineering (5)	All Faculties (6)
1942	20/396 19.8	19/250 13.2	16/258 16.1	—	—	55/904 16.4
1943	24/336 14.0	21/249 11.9	17/319 18.8	—	—	62/904 14.6
1944	27/366 13.6	21/270 12.9	18/361 20.0	—	—	66/997 15.1
1945	34/375 11.0	23/279 12.1	19/411 21.6	—	—	76/1065 14.0
1946	39/517 13.3	25/321 12.8	22/438 19.9	—	—	86/1276 14.8
1947	46/647 14.1	27/440 16.3	24/456 19.0	—	—	97/1543 15.9
1948	56/686 12.3	31/422 13.6	34/498 14.6	—	—	121/1606 13.3
1949	65/794 12.2	34/461 13.1	38/584 14.7	—	—	137/1839 13.4
1950	66/783 11.9	31/364 11.7	49/670 13.7	—	11/189 17.2	157/2006 12.8
1951	72/909 12.6	35/378 10.8	63/774 12.3	—	13/134 10.3	183/2195 12.0
1952	66/907 13.7	35/436 12.5	70/782 11.2	—	12/88 7.3	183/2213 12.1
1953	68/947 13.9	34/512 15.3	67/782 11.7	11/41 3.7	13/94 7.2	193/2385 12.4
1954	68/994 14.6	41/544 13.3	64/729 11.4	13/36 2.8	15/107 7.1	201/2410 12.0
1955	66/991 15.0	39/642 16.5	64/691 10.8	16/21 1.3	15/56 3.7	200/2401 12.0
1956	65/1017 15.6	43/697 16.2	79/704 8.9	19/20 1.0	14/61 4.4	220/2499 11.4
1957	80/1096 13.7	38/751 19.8	79/716 9.1	16/23 1.4	14/114 8.1	227/2700 11.9
1958	87/1239 14.2	29/745 25.7	81/749 9.2	17/21 1.2	14/150 10.7	228/2904 12.7
1959	111/1379 12.4	43/787 18.3	76/787 10.4	16/20 1.3	18/174 9.7	264/3147 11.9
1960	111/1678 15.1	47/826 17.6	77/984 12.8	21/25 1.2	13/138 10.6	268/3651 13.6
1961	102/2398 23.5	49/975 19.9	51/1019 20.0	20/24 1.2	15/198 13.2	237/4614 19.5
1962	104/2620 25.2	52/920 17.7	58/1288 22.2	20/54 2.7	16/199 12.4	259/5081 19.6
1963	115/2802 24.4	61/1036 17.0	58/1503 25.9	21/85 4.1	19/260 13.7	274/5686 20.8
1964	139/4143 29.8	63/983 15.6	77/1587 20.6	24/107 4.5	25/320 12.8	328/7140 21.7
1965	136/7311 53.8	70/993 14.2	81/1659 20.5	23/112 4.9	24/574 23.9	334/10649 31.9

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**Notes:**

\*Ratios are expressed in terms of one full-time staff member to ? students (1:?) as explained on pp. 79 ff.

- Col. 1. Arts, includes Diploma Education, Diploma Sinhalese/Tamil and Diploma in Librarianship.  
 „ 2. Science, includes Pre-Medical, First Year in Agriculture and First Year Engineering enrolment, as well as all Agriculture enrolments (1947-52).  
 „ 3. Medicine and Dental Staff/Student figures include Diploma enrolments, Second Veterinary, Science and all Science enrolments up to 1952.  
 „ 4. Engineering, is exclusive of first year enrolments.  
 „ 5. Staff figures are based only on permanent staff.  
 „ 6. Student enrolment figures based on the Annual Reports of the University Council, unlike Appendix Table I, refers to annual *Registrations* in a faculty and excludes students registered for higher degrees etc.

Source: University of Ceylon, and Statistical Abstracts of Ceylon.

TABLE VII

## Annual University Expenditure, Recurrent Parliamentary Grant and Cost Per Student.

Year	Recurrent Parliamentary Grant				University Expenditure			
	Total	% increase	Cost per Student <sup>2</sup>		Total	% increase	Cost per Student <sup>2</sup>	
	Voted <sup>1</sup> (Rs. '000s)	or decrease over previous year	Amount to Public funds Rs. cts.	Index	Expenditure (Rs. '000s)	or decrease over previous year	Amount Rs. cts.	Index
1942		No information				No information		
1943	985	—	1090.10	100	1294	—	1431.01	100
1944	1016	+ 3	1020.08	94	1288	+ 0	1293.65	90
1945	1054	+ 4	989.67	91	1371	+ 6	1287.24	90
1946	1623	+54	1246.54	114	1691	+23	1298.94	91
1947	2790	+72	1795.37	165	2749	+63	1769.26	123
1948	3473	+25	2155.62	198	3369	+23	2091.32	146
1949	3865	+11	2095.99	192	3814	+13	2068.21	144
1950	4170	+ 8	2048.13	188	4007	+ 5	1968.18	138
1951	4690	+12	2122.17	195	4865	+21	2201.32	154
1952	5500	+17	2464.16	226	5396	+11	2417.76	169
1953	5800	+ 5	2424.75	222	6729	+25	2813.13	197
1954	5950	+ 3	2444.54	124	7105	+ 6	2919.02	204
1955	5950	+ 0	2447.55	225	7051	— 1	2900.30	203
1956	7325	+23	2890.69	265	8010	+14	3161.03	221
1957	8089	+10	2976.09	273	9443	+18	3474.36	243
1958	7289	—10	2470.85	227	9218	— 2	3124.65	218
1959	8952	+23	2817.80	259	10395	+13	3272.12	229
1960	9121	+ 2	2475.71	227	10777	+ 4	2896.93	202
1961	9132	+ 0	1961.85	180	11417	+ 6	2452.64	171
1962	9297	+ 1	1807.09	165	11901	+ 5	2343.33	162
1963	9900	+ 7	2133.19	196	11945	+ 0	2093.36	146
1964	12172	+23	1791.47	164	13361	+12	1860.36	130
1965	12866	+ 6	1274.88	117	16586	+24	1546.77	108

**Notes:**

1. The Annual total listed against 1943 refers to the financial year 1942/43, 1944 to the year 1943/44 and so on.
2. Cost per student is obtained by dividing the Total Parliamentary Grant/expenditure by the number of students listed in the year following the voting/expenditure of monies. Thus, money voted in 1942/43 is expended primarily in the year 1943 and consequently the cost per student is determined by the numbers enrolled in 1943.

Source: Statistical Abstracts of Ceylon.

# DEVELOPMENTS IN UNIVERSITY EDUCATION

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# *The Concept of the Motif in German Literature-Science*

## THE CONCEPT

**A** LONG with some other concepts in literature-science which refer to the material and the form of literature, the concept of the motif is taken from the technical terms of rhetoric, in the case of motif especially from the speech in court. The causes (*causae*) of any action are classified (or identified) as motifs. In French it has been defined thus: "*motifce qui pousse une chose*," which could be translated best as "moving force" (by this we would also do justice to the Latin "*movere*"—to move). The objective and the subjective meanings of the term are not yet separated, since on the one hand the objective reason of any action is given, and on the other hand one tries to persuade somebody and to move him to action. These motifs are equally valuable in the defence at court, in the "*remotio*", the part of judicial oratory which deals especially with the reasons for defence. The charge can by this means or method be shifted (*remotivus* to another person, to the law itself or other "*irresistible forces*" as e.g. to war and plague, or in a more humorous way to wine and love (cf. Quint. 6, 3, 10; Plut. Pyrrh. 8; Ter. Eun. 5, 2,877 ss.). The guilt in these cases is not acknowledged by the acting person, but removed into the cause of the action. Here the problem on the conflict of norms also enters the argumentation. Heinrich Lausberg (*Handbuch der literarischen Rhetorik* 1960) has indicated, how out of the norm-conflict in the defence (*remotio*) the motivation in the drama rises, where every person has motives of action, and where motives are the norms in the broadest meaning. The motives in this range are defined as principles of action, as their form-elements. On these deliberations K. Burke bases his "*Grammar of Motives*" and his "*Rhetoric of Motives*", both of which works he described as being on "*techniques of moving men to action*."

Out of this range of meanings and through the medium of the medieval Latin term the use of motive in the French and German court terminology is derived, since the 16th century it has a traditional meaning in German as "*reason of action*" and is frequently so used.

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Separated from the Latin usage, we find in the French of the 18th century "motif" in the meaning of theme, subject, feature, musical theme (cf. W. Feldmann, *Fremdwörter und Verdeutschungen des 18. Jhdts.*), also in painting as a peculiarity with regard to the content, as Heinrich Wölfflin uses it in his "Principles of History of Art" and as it is employed in any kind of art criticism today. It is this meaning which has hereafter been taken over by theory of poetry with regard to material and form in literature. Wilhelm Krogmann has shown that already Goethe has worked intensively on the poetological importance of motifs. In a conversation with Eckermann (18th January 1825) he stated: "You (Eckermann) recognize in this the importance of motifs, which nobody tries to understand. Our ladies especially do not have any idea about it. This poem is beautiful, they say and think in the same moment only of the sensation, of the words, of the verses. But that the true force and effect of a poem lies in the situation, in the motifs, of that nobody is aware. And for this reason many thousands of poems are made the motif of which is absolutely nil, and which only through sensations and sounding verses produce the illusion of a kind of existence."

The combination of these meanings, of the new meanings as elements of content or as situation, and the old one as reason of action in court terminology, subsequently opened up the possibility of divergent definitions and usage in literature-science.

The first impulse was given by Lessing's comparative studies on French and English drama (which initiated the reception of Shakespeare in Germany), when he weighed the modes of action of similar motifs in similar themes against each other and evaluated them. Later A. W. Schlegel and the comparative literature criticism of the developing German philology followed this lead. But it was only through the inquiry into folk-literature during the 19th century that a useful terminology was developed and that research turned away from evaluation and intensively to the inquiry into the genetics of poetry. Jakob and Wilhelm Grimm inferred from the examination of themes and motifs the existence of a primal myth, the various expressions of which in the folk-literatures of European nations led to a theory of constant rebirth of similar ideas, based on the inner relationship and spiritual commonness of these nations (E. Frenzel). The collecting and cataloging of similar themes and motifs—in which finally motifs were considered to be only the smallest theme-units—destroyed the idea of primal myth and put in its place archetypes

which found different local and historical expressions. The infinite variants have been inquired into by the older German philology, especially by Müllenhoff, Uhland and Vogt, and by Bolte, Prilivka, Krohn and Aarne in the field of fairy tales. Important results of this research-work are the motif-indices for European and non-European literatures. The conception of the motif as the smallest unit of a literary structure is connected by Scherer and his school with comparative evaluation: philology extended (by imitating the sciences) its method of theme-and motif-research to that which is "experienced, acquired or inherited" in the poet's mind or his work. The intention is clearly expressed: to explain a piece of art casually in its genesis by means of its material and formal elements. The methodological fallacies of these attempts have been recognized clearly by W. Dilthey, who concedes to art of dimension and a method of inquiry of its own different from that of the sciences. His theory of motifs is conceived completely in connection with his historical method. The mere history of themes and motifs and the inquiry into the causal connection between life and work are devalued. Instead of this the knowledge of the poet's psyche and theory of poetry has to be acquired through the motifs. With the coordination of "experience" and "poetry" the psychological reason becomes the starting-point of all interpretations of the connections of the history of the mind and ideas in poetry, as O. Walzel and F. Gundolf have shown in their works. The motif has now to be defined as a solidification (crystallization) of a problem, which is presented. The history of literature grows into a history of problems, concerning contents as well as forms.

At the same time the foundation is laid for the method of J. Körner, who interprets the motifs in the light of S. Freud's psychoanalysis as manifestations of psychic processes.

This method was much acclaimed by Körner's contemporaries, but has met with increasing opposition in recent times. Today the inquiry into the morphology has come into prominence, the single motif in its artistic function has been given greater attention. We owe this new move particularly to an intensive conceptual clarification which together with a new general tendency in poetical theory, tries to overcome the prevailing uncertainty in the usage of concepts in literature-science.

In French and English literature-science the concept of the motif has scarcely or never been employed. Motive still means the moving cause in

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the strict juridical sense. It has, however, a place in painting and music in the meaning given earlier especially in the form of the "Leitmotiv", which has been borrowed from the German. In connection with music, N. Frye defines motifs as *verbal* elements, which stand in a meaningful connection. They are units of a *verbal* structure.—The phenomena described by German literature-science as motifs are to be found under different headings, such as "theme" etc. The "Bibliography of Comparative Literature" places them under the title "literary themes", the "Year-book of Comparative and General Literature" as "Individual and Collective Motifs"—but motif here means theme in the traditional use.

### The Method

The new methodological and poetological clarification of concepts in literature-science goes back in its definition of the motif to the original meaning as "moving cause" and tries to do justice to the material as well as to the formal aspect. On the one hand, the motif is already considered to be always fixed in its contents: e.g. the father-son-motif, the motif of the lost and found ring, of the redeeming and saving child, of the loving children of hostile families, of the realizing prophecy, the motif of the night, etc.—on the other hand we look expressly away from any actual realization to recognize the structure of the motif. The motif "father-son" in this abstract form does not exist in literature, it exists only in a wider context and an actual realization, in the old-high-German "Hildebrandslied" or in "Oedipus", where father and son have to fight each other; or in Schiller's "Don Carlos", where the motif is enlarged by the concurrence in love for the same woman, or in "Hamlet", where it is complicated by the uncle taking the position of the father. The motif of the "journey into the underworld" is in this form the abstract of a situation, which we find realized in many different ways in the "Odyssey"-theme in Homer and in a different version in J. Joyce, in the "Aeneid"-theme in the "Messias"-theme and in Dante's "Divina Comedia". The theme (Stoff) is defined as a situation in reality which also has a life beside the actual piece of art in a separate tradition, and in which the spiritual content (essence) of a piece of poetry is actualized. The theme is reported reality, fixed in its temporal and spatial actuality and bound to a fixed circle of persons. From the definition of the theme as process or action results the exceptional position of the lyrical poetry, which "in this sense has no theme" (W. Kayser). The motif, on the contrary, has its life only in the literary work. "It is the scheme (pattern) of a recurrent typical situation. It is based on this cha-

racter of the motif as situation that the motifs point at a before and after: the situation has arisen and its tension requires a solution. In this they show their moving force, which finally justifies the term "motif"—derived from the Latin 'movere' (W. Kayser). We find the scheme, the typical structure of the motif, by abstraction from all individual realizations, which we shall call "characteristic feature." In this way, theme, motif, and features belong closely together; as technical terms in literature-science, however, they have to be distinguished sharply. In the concept of the motif the "moving" element is stressed against the "material" one and made the point of reference for any interpretation. The interpretation on its own side can, nevertheless, stress more the function, the morphology, the psychology, or the history of a motif respectively.

In the analysis of the position and function of a motif different constellations in the whole of a literary work have been distinguished. R. Petsch has, according to the possibilities, suggested the terms central-motif, frame (border)-motif, and side-(filling)-motif. W. Krogmann prefers with regard to the position the distinction into motifs in middle, border, or side position. The central-motif (middle position) completely governs the situation formed in a literary work, it belongs so closely to a theme that it cannot be separated from the content of a theme without causing basic changes. We observe such a position in the case of the motif of the "unfaithful lover" in Goethe's "Clavigo."

An interesting variation of the function of the central-motif results from the opposition of two motifs. In this case several solutions are possible: the counter-motif can be pushed back, it can, perhaps, continue the given development, but both motifs may also be brought into a balance (E. Frenzel). In any case both motifs have their function in a mutual contrast and development. Here we have to conduct an inquiry into the morphology of the motif concerned. In Goethe's "Götz von Berlichingen" we meet the motif of the "unfaithful lover" again as frame-motif; from its border-position it clearly influences the whole action. Occasionally we observe the border-motif overgrowing the central-motif, and by this the course of action can be changed decisively. But whether this, e.g. in the case of the adaptation of the Antigone-theme by Racine, who brought the theme of the "Seven against Thebes" into the drama, destroys meaning and effect (E. Frenzel), we can say only, if we find that the combination of both motifs has no function in the work. In Goethe's dramas "Goschwister" and "Erwin und Elmire" the motif of the "unfaithful lover"

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appears as filling-motif in side-position. Its character can be seen in the fact that its function has no longer an effect on the main action, and cannot move the main action into a new direction. These filling-motifs are easily replaced by others; in particular, new adaptations of the same theme make use of this possibility.

Finally we have to mention the "blind" motif. By this we attempt to describe a motif, which in the scheme of situation points at a development in the action, which is not achieved later on. This kind of motif is very effectively employed in crime or mystery stories to produce the necessary tension, also to lead the reader astray or to produce an enigmatic situation. In other literary works, however, the blind motif is considered a fault. Here as in all other cases we often meet with the fallacy of observing the motifs only in their material, i.e. in their function in an action, but not their positional value in the whole composition of a literary work. So considered, even a blind motif may turn out to have its proper place. For in a composition any constellation of motifs can have a very clear reason. And it becomes clear too, that the use of motifs, and by this the whole motivation of a literary work, is far more complex than can be shown in a mere schematic and sketchy essay. Only the connection of various motifs in a motif-chain, motif-group or motif-complex gives breadth and depth. The restriction to one motif only creates the impression of narrowness and monotony, if this is possible in poetry at all. On the other hand, the accumulation of motifs—as e.g. the multiplication of unfaithfulness in Goethe's "Claudine" and the intensification of a motif as in "Faust", where unfaithfulness is followed by seduction and child-murder—has to be analyzed, in order to determine the extent to which accumulation and intensification are based on latent possibilities in the structure of the motif itself. This applies to the different possibilities of amalgamation and assimilation between motifs, too. In this connection a "motif-biology" has been spoken of.

A special case with regard to the function is the so-called "Leitmotiv." This concept includes the meaning in music as "smallest musical unit of form" and has been transplanted from Richard Wagner's theory of music to literary criticism. But there it does not mean a distinct pattern of situation, but, as in its meaning in music, the characteristic repetition of the same sequence of words, or of happenings. Its function is not "moving" but "articulating" (gliederud); leitmotifs are elements of style. Therefore they have been compared with the refrain in lyrics and have been called

refrain-motifs (Krogmann). H. Meyer has inquired into the use of quotations as leitmotifs, especially in Th. Mann's "Zauberberg" and in other places. In this use the leitmotifs come close to symbols in literature. Next to the function of the motifs in action and composition, their morphology is particularly interesting for the interpretation of a piece of literature. The analysis deals especially with questions which consider the phenomena of growth of the single motif, its kind of inner forces, which have an influence on the motif-complex, and the reasons why certain motifs come together almost necessarily and why certain features are repeated constantly. M. Lüthi and H. Stolte have done some research in this field in fairy tales and folk tales. How motifs grow full and become empty has been observed by H. Pyritz in the case of Petrarch's lyrics and the Petrarchanism of subsequent times. In addition we have to ask, whether motifs play a special role in the different genres of poetry, and whether perhaps, certain motifs appear only in lyric or only in epic, and whether they determine by their very structure the choice of the poetic genre. A distinction has been made between epic, dramatic, and lyrical motifs, and for the distinctive principle has been chosen the structure of the situation which is schematized in the motif. The father-son-motif for instance, or the motif of the stepmother's love for her step-son (the Phedra-motif) open up an antithetical action, which is essentially dramatic; all frame or filling-motifs are subjected to this antithetic situation. The rape of a woman (Helena) or the search for a new father-land (Aeneas) show essentially a tendency to development which could be called epic. In the epic situation, which according to poetological distinction shows a minimal grade of immediacy of mimesis, as well as in the dramatic situation, which shows the maximal grade, actions are motivated in objective reality. (cf. Lausberg §§1171—1241). In contrast to this, typical lyrical motifs—such as night, loneliness, sunrise, grave, fare-well, flowing of a river, love—demonstrate quite a different structure. They are schemes of situation of subjective reality. "In order to be genuine motifs, however, they have to be taken as important and meaningful situations. Their transcendence does not merely lie in an active continuation of a given situation, but in this, that they are an experience (sensation) in a human soul, in which they continue to vibrate internally." (W. Kayser). W. Kayser has made investigations into the motif of the night in four poems and has demonstrated the growth of a motif out of a poetical image and into a symbol.

In a more psychologically based theory of poetry even the concept of the motif comes under the influence of psychology. This has happened

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in E. Staiger's distinction of the structures of all three genres of poetry through the style—as remembrance in lyrics, as imagination in epics, and as tension in drama. In Staiger's "Principles of a Theory of Poetry" it is demonstrated in the following way: the independence of the parts is a generic principle of the epic; in the same way every motif in epic poetry has a characteristic independence of its own, while the motifs behave additively or develop towards each other. In drama, however, the generic principle of which is functionality, motifs are related more closely to each other in the frame-work of a system of tension. The lyric is always individual and casual; in the lyrical motif the situation of the lyrical subject in general is remembered.

Such distinctions give the opportunity for taking poetical principles constantly into consideration. With a look at the place, the concept of the motif is given in a theory of poetry, we will even be able to clarify the character of a theory of poetry as normative or phenomenological.

A historical and comparative interpretation of motifs considers more intensely the problems of a constant use of motifs, their equality or shifting, and of borrowed motifs. In this field especially topos-research has initiated further inquiries, which are based firmly in the methodological principles developed by E. R. Curtius. In general, more attention is paid and more importance is attributed today to the genesis and the tradition of motifs as the smallest poetological units. While research into fairy-tales considers especially the equality of motifs in different cultures, today the similarity of motifs in a distinct period of literature is stressed, with the result that certain periods can be characterized by the prevalence of certain motifs. We find for instance the motif of the "locus amoenus", which is of rhetorical origin, abundantly in the lyrics of the middle ages and of the baroque. The ballad of the 18th century chooses very often the motif of the meeting between the lover and the spirit of the beloved; the development of the structure of the motif takes always the same direction and course, only the cause and single features show differences. For the drama of the storm-and-strive period the following motifs have been singled out as significant: inimical brothers, murder of close relatives, incest, prophecy and realization of crime and misfortune, curse on a family, and the return of one supposed to be dead. Once the motifs are catalogued we interpret the situation schematized in the motif in order to find out, whether we can speak of characteristic motifs or not, that is, which human and spiritual situation in a certain epoch is an object of the literature and which principle structures of existence become visible.

The same questions are discussed in national literatures by means of the constant use of similar motifs. As an example may be given the motif "town—countryside" with the variation "urban life, town-dwellers—peasant life," or "palais—hut", all of which have been developed out of the topos of the "restless and inhuman town and the quiet and healing countryside." It can be followed back in its tradition to antiquity, but it becomes significant only if the changes from Virgil, Horace and the medieval lyrics to the revolutionary "peace to the huts, war to the palaces" and to the "social novels" can be shown, and if a reason for this change in the evaluation of the relationship between town and countryside since the romantic epoch will be interesting. In the same manner an attempt could be made to inquire into the love-and-death-motif in European lyrics, into the motif of the journey into the underworld from Orpheus to James Joyce, into the return-motif, or the utopia-motif in literature from Plato to A. Huxley, and to clarify the underlying structures. The poetological foundation for this field of research is given in the definition of poetry by Aristotle as "mimesis," as presented reality. In a similar way the shift of motifs or the borrowed motif may be significant. But besides the functional change the change of the meaning in a changed reality, too, has to be observed. A completely different meaning of the concepts arises from J. Körner's attempt to interpret all motifs through Freudian psychology. W. Krogmann follows him in his research almost exclusively. Körner bases his interpretations on the conception of poetry as a self-liberation of the poet from pressing experiences and gives it, like Freud, a place in the range of dream and neurosis. Poetry and neurosis are both determined by motif-complexes. In his essay "Experience—Theme—Motif" he compares the critic to the psychoanalyst. Just as the psychoanalyst "the observer of literature can single out the determining experiences round which the poet's soul circles restlessly: he does so by breaking up the whole complex, which has grown into a formal unity, into its elements, the motifs, in order to find out its material unity." The motifs are, however, not yet "objective phenomena of the life of the poet", the moving cause, but are shifted from the artistic work into the poet's psyche. The definition of the motif as the scheme of a situation is given up when Körner speaks of "virile feelings of guilt" with regard to the young Goethe. The motifs in literature are now the realization of poetical traumata. In this new connection all adherent phenomena are revalued: motif-constancy marks now the strength of moving experience, which forces the poet to ever new poetic creations. Without this "traumatic" background we would only be able to speak of motif-equality. Motif-

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shift now means that the poet has taken a motif from an alien source into his work. "Intensity and extensiveness of a motif are functions of effectiveness of an experience" (W. Krogmann). The extensiveness is indicated in the constant use of a motif or in a group of coherent motifs which serve as indicator for certain experiences and thus make it possible to bring the poet's artistic activity into symmetry with his experiences in life. The biography of the soul gains preference over the arrangement of a biography according to outer facts, as change of residence etc. Certain groups of motifs are thought of as characteristic for certain epochs in life and are taken as distinguishing units. The leit-motif, too, is revalued according to the example of the geological guide-fossils. W. Krogmann has shown this in the case of the work of the young Goethe and explained, how this method makes it possible to attribute an undated work to one epoch in the poet's life with certainty. The intensity, now, is clearly indicated by the motif's position in the work. The strongest experience takes its place in the centre of a poem, all other positions signify lesser importance. Nevertheless, this method has met with strong criticism, because here the concept of the motif is no longer used in the range of objective structures in literature, but is shifted into the psychic situation of a poet, which is quite possible but which can never be proved. Thus the analysis eludes any verification, and excludes above all the research in folk-literatures, which has occupied itself very much with the analysis of motifs. This applies to all literatures and literary epochs which employ a different theory of art than in German Classic and Romantic, where poetry is thought of as "fragments of a great confession". A concept in literature-science should be applicable to poetry of any other epoch than the classic and romantic, and also to any other (non-German) literature.

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# *Citta, Mano, Vinnana—a Psychosemantic Investigation*

**I**N this report,<sup>1</sup> an attempt will be made to clarify the psychological contents of the above Pali terms. The approach is psychological rather than linguistic.

*Citta* is most commonly translated by: thought(s), mind, heart, mood, emotion, idea, reasoning, attitude, consciousness.

*Mano*: mind, thought, inner sense.

*Vinnāṇa*: consciousness, discriminative consciousness, rebirth-consciousness, /relinking/ consciousness, cognition, intellect, intellection, intelligence.

Many of the English terms are very vague. The reason may be either that the corresponding Pali terms are equally vague or that the exact meaning of them is not known. Some of the English terms for the same Pali terms have a very different meaning (e.g. “mind” means an independent psychological agency; “thought” is probably intended to mean conscious processes of a predominantly cognitive character, “heart” an emotional, evaluative center in human personality; if we then, for instance, find the passage in S II 273: “*Ariye tuṇhībhāve cittaṃ saṇṭhāpehi, ariye tuṇhībhāve cittaṃ ekodim karohi, ariye tuṇhībhāve cittaṃ samādaha*” translated by “Establish thy *mind* in the Ariyan silence. Lift up thy *heart* therein. Plant thy thought therein” — then we may well ask ourselves whether these different meanings of *citta* were intended by the Pali-writer or if the translator is just careless.) Psychological passages in translations of Pali texts have often proved meaningless to me. Therefore, an investigation has seemed desirable.

## *Method*

Passages illustrating the use of the terms included in the investigation have been collected from the following works: *Dīgha-nikāya*, *Majjhima-*

1. This investigation was conducted at the University of Ceylon, Peradeniya. I thank the University for most generous assistance, esp. Dr. J. D. Dhirasekera. I am also greatly indebted to Professor K. N. Jayatilleke, Professor W. S. Karunaratne, and Mr. B. Cooke. My wife has helped me to collect the material.

nikāya, Aṅguttara-nikāya, Saṃyutta-nikāya, Dhammapada, Suttanipāta, Udāna and Itivuttaka (the PTS editions have been used: quotations refer to pages in these, only for Dhammapada and Suttanipāta to number of stanza). It was considered that these were homogeneous enough to permit a non-historical treatment. As this is not a statistical investigation, no completeness was aimed at, but an attempt was made to include as many different contexts as possible: I aimed at semantic completeness.

The theoretical framework of this study was provided by C. E. Osgood, G. J. Suci, and P. H. Tannenbaum, *The measurement of meaning* (Urbana 1957). Their method can of course not be used on historical material, but their insistence that meaning can be defined by relating a studied concept to a semantic space is a fruitful point of departure. Now the dimensionality of the semantic space of psychological terms is not known, but some sort of provisional "semantic differential" can still be constructed. I have tried to follow the intentions of Osgood by putting *systematic questions* to the texts and by especially studying *relations* between terms as expressed in the texts.

### Citta

1. *Superordinated concept: dhamma* (e.g. A I 10) which is a vague term used mainly as a collective term for all conscious phenomena. It is used for all psychological terms, even *nibbāna*.

#### 2. *Entity or process ?*

We usually think of a machine as an entity: it has a certain structure and functions as a unit; it is limited in space and has a certain duration over time. If we, on the other hand, were unable to see the machine itself but could study its functioning and its products, then we would speak in terms of processes: we could describe certain movements, the change from raw materials to finished products. We can make the same distinction in psychological matters, and choose our words accordingly. When we use a word like "mind", we think of something rather permanent, and the momentary perceptions, feelings, impulses and imaginations are said to be produced in it. The mind has a structure, it can produce processes, and it can be used as an instrument—so it is a typical entity.

On the other hand, the difference may not be so great on the psychological plane as on the physical. If you study your conscious experiences, perhaps you will at first find only a stream of processes. But after a while,

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you will discover recurrent themes and process-sequences and you will find regularities and habits of thoughts. The processes are then fitted into a structure which is seen to be more or less fixed, more or less like an "entity". So, although most of the continuity depends on processes or structures that are not conscious and therefore "behind the curtain", we may firmly believe in an entity like the "mind".

In order to decide whether *citta* is an entity or not, we must investigate whether it is described as independent or dependent, permanent or momentary, productive or produced, initiating or passive, actor or act.

It is possible to find passages where *citta* is clearly said to be a product: "Mā ... akusalam cittaṃ cinteyyatha" (S V 418), "Don't think unskilled *citta*".—"Samudaya-dhammānupassī vā cittaṃ viharati, vāya-dhammānupassī vā cittaṃ viharati." (D II 299). "He keeps on seeing an arising phenomenon in *citta*, or he keeps on seeing a passing phenomenon in *citta*." Here, *citta* seems to mean "thought". Usually *citta* seems much more personified to an independent agency. It has a will of its own: "Bhikkhu cittaṃ vasa vatteti, no ... cittaṃ vasa vattati" (A IV 34), "A monk makes his *citta* turn according to his wish; he does not turn by the *citta*'s wish". Further: "... cittaṃ nīyati loko" (S I 39), "the world is led by *citta*". According to D II 36, "Vipassissa ... cittaṃ nami no dhamma-desanāya," "The *citta* of Vipassī was inclined not to preach the doctrine".—*Citta* is an authority that can be pleased or displeased: "... ayaṃ me puggalo cittaṃ n'ārādheti" (M I 341), "that person does not appeal to my *citta*". And: "... mayi cittaṃ pasannam" (M II 145), "your *citta* was pleased with me."

*Citta* reacts as an emotional center according to S I 53: "Niccamastrastam idaṃ cittaṃ". "This *citta* is always terrified", — and S II 226 "na ca na uppanno lābhasakkarasiloko cittaṃ pariyādāya ṭhassatīti", "and when gains, favours, and flattery come to us, they shall not take lasting hold of our *citta*".

In the very numerous passages where the improvement and development of *citta* is described, it is often done in wordings reminding us of some instrument which is to be improved by removing obstructing particles (rāga, dosa, moha, e.g. M II 27), by cleaning (cittaṃ parisodheti, D I 71; cittaṃ virajayitvā "cleansing their *cittas*", D II 274), by giving it support (ādhāro, S V 20), by making it straight (cittaṃ attano ujukam akāṃsu,

S I 26; ujum karoti, Dh 33) like a bow, or makes it luminous (sappabhāsaṃ cittaṃ bhāveti, “creates a luminous *citta*”, D III 223; pabhassaram, A I 10; see also A IV 86, A I 256, S V 92: *Citta* is compared to gold free from defilements; it can also be done luminous by concentration on light). In this way, *citta* is made *mudu* and *kammañña*, “pliable” and “fit for work” (A IV 421; cf. S V 92 and A I 256). In other cases, the terminology used reminds rather of the taming of animals, e.g. cittaṃ ... dantaṃ guttaṃ rakkhitaṃ saṁvutaṃ, “the *citta* that is tamed, controlled, guarded and restrained” (A I 7)cittaṃ, abhininnāmeti, “he bends down his *citta*” (A II 211).

In all these and similar cases, *citta* seems to be conceived predominantly as an entity. But in perhaps the majority of the 240 passages included in this study of *citta*, the matter cannot be strictly decided. There seems to be a very gradual transition from the one extreme to the other. We may conclude that *citta* often is an entity that acts independently or as an instrumental unit but that the word on the other hand may be used for the produced processes themselves.

### 3. Is *citta* the self?

Only once is it explicitly denied that *citta* is the self (S II 94), while it is very often denied that *viññāṇa* and the other *khandhā* are the self. When H. V. Guenther in “Philosophy and psychology in the Abhidhamma” (Lucknow 1957) constructs diagrams illustrating different Abhidhamma-views on the mind, he places *citta* in the center of a number of concentric circles. This can only mean that he considers *citta* as the self around which everything is arranged. In the Nikāyas there are only indirect indications that the person identifies himself with *citta*. It happens, e.g., that the grammatical subject in coordinated sentences is first *citta*, then seemingly without any special reason becomes the person himself: “Ujugataṃ ev’ assa tasmim samaye cittaṃ hoti Tathāgataṃ ārabha, ujugatacitto kho pana ... ariya-sāvako labhati atthavedaṃ, labhati dhammavedaṃ ... ” “At such time his *citta* is firmly fixed on the Tathāgata; with upright heart the Ariyan disciple wins knowledge of the welfare, he wins knowledge of the doctrine ... ” (A V 329). See also “Kāmarāgena ḍayhāmi, cittaṃ me pariḍayhati”. “I am burning with desire, my *citta* is consumed” (S I 188). In the love-song, D II 266, it is said “Tayī gathita-citto ’smi cittaṃ viparinamitaṃ”. “I am provided with a *citta* tied to you: my *citta* is changed”. We find here the same change of grammatical subject, and in a case like this it becomes clear how closely related the *citta* sometimes is to the self. — On the other hand, it is never said that *citta* is the self. On the contrary, the texts usually

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take care to distinguish between the person and his *citta*. A few examples will illustrate this. “Ahaṃ iminā cittenā nikato vañcito paladdho”. “I have been defrauded, deceived and cheated by this mind” (M I 511). “Cittam te tatthe gamenti dūre”, “They send their *citta* far away in that (dispute)” (SN 360). See also A IV 34, quoted above.

In conclusion: *citta* is not the self but it often stands for the person and the identification is then not far away.

### 4. The monk's problem-child

As we have seen in some of the above quotations, the monk can certainly not identify himself with this *citta* — on the contrary it sometimes gives him life-long trouble. It has to be tamed, but it is *dūrakkha*, “difficult to guard” and *dunnivāraya*, “difficult to hold back” (Dh 33), *dussamādaha* “hard to compose” (S I 48), *niggahetabba*, *paggahetabba*, *sampahaṃsitabba*, *ajjhupekkhitabba*, “to be checked”, “to be exerted”, “to be gladdened”, “to be looked after” (A III 435). It is a difficult but important task to train *citta*, because “citta ... arakkhite kāyakammaṃ pi arakkhitam hoti vacīkammaṃ pi arakkhitam hoti manokammaṃ pi arakkhitam hoti” (A I 261), “when *citta* is unguarded, bodily action is also unguarded, speech and mental action are also unguarded”, and we shall see in a later section how great the difference is between the trained and the natural *citta*.

### 5. Is *citta* consciousness ?

It is said in Dh 37 that *citta* is *asarīra*, “incorporeal”. It is often contrasted with the body. In S IV 293 f, a distinction is made between *kāya saṅkhāro*, “activity of body”, *vacīsaṅkhāro*, “activity of speech”, and *cittasaṅkhāro*, and the latter is defined in the following way: “Saññā ca vedanā ca cetasikā ete dhammā cittapaṭibaddhā, tasmā saññā ca vedanā ca cittasaṅkhāre ti” which has been translated “Perception and feeling are mental processes dependent on mind. Therefore are they called ‘the activity of mind’”.

No indication has been found that *citta* could be either a physiological or a purely behavioral entity. As we shall find later, *citta* is sometimes spoken of as moving in space (e.g., *phandana*, “trembling”, Dh 33, *dūraṇ-gama*, “far-travelling” Dh 37), but it probably means non-physical movement. When describing moral and emotional traits in *citta*, terms are sometimes used which imply a certain type of behavior, but it is the attitude behind that seems to belong to *citta*.

It is more difficult to decide, to what extent sub-conscious processes in the psychological sense belong to *citta*. We can, of course, consider it self-evident that when traits like anger, pride, desire are ascribed to *citta*, it does not mean that they must be manifest all the time: the tendency, the disposition is enough. In this way, we have introduced the subconscious, but the distinction was seldom made. There is an early Pali term for latent tendencies of this type, *anusaya*, which is attributed to *ceto*, never to *citta* (they are more or less synonyms, see discussion below!) We find a typical context in S III 13: “Rūpadhātuyā ... yo chando yo rāgo yā nandī yā taṇhā ye upāyupādānā cetaso adhiṭṭhānābhinivesāṇusayā tesam khayā virāgā nirodhā cāgā paṭinissaggā cittaṃ suvimuttaṃ”. “By the destruction of, the indifference to, the cessation, the giving up, the utter surrender of that wish, that desire, that pleasure, that craving, that approach and grasping, that decision, indulgence and disposition in *ceto* directed to the form-element, the *citta* is fully freed”. We shall also find later, that several of the traits, which often are called *anusayā* (or rather the traits to which tendencies — *anusaya* — are mentioned), are attributed to *citta*. In the main, *citta* must be understood as an unanalyzed conscious entity.

#### 6. The attributes of the untrained *citta*.

*Citta* is described with a wealth of attributes. We have seen that *citta* can, and should, be trained, so we must distinguish between the natural and the trained *citta*. Generally, *citta* is found to be too independent and mobile (Dh 326 “... acāri caritaṃ yenicchakaṃ yatthakāmaṃ yathāsukhaṃ”, “... would wander formerly as it liked, as it desired, as it pleased”), too unsteady (*capala*, Dh 33) and easily distracted (*vikkhitta*, A IV 32).

(a) *Perception*. We have already quoted SIV 293 f where it is said that *saññā* (perception) and *vedanā* (feeling) are dependent on *citta*. In S IV 125 we find that *rūpa* (forms) touch (*phassati*) *citta*, and only a trained *citta* can avoid to be influenced. In the natural state, therefore, *citta* is sensitive to impression, without being a center of perception.

*Citta* can be directed and is then an instrument of attention. In A IV 422 the phrases *cittaṃ paṭivāpeti* (“he turns his *citta* away from”) and *cittaṃ upasaṃharati* (“he concentrates his *citta* on”) are used in this meaning. Cf. the opposites *saṅkhitta* — *vikkhitta* (“attentive — unattentive”) used about *citta* in D I 97.

(b) *Intellectual traits*. In A I 9 the expression *cittena* ... *ñassati*, “understand with *citta*” is used. The phrase *aññācittaṃ upaṭṭhapeti*, “he

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applies the *citta* to understanding” is often found, e.g. A III 437. In A IV 402 paññāya suparicita, “well provided with wisdom” is said about *citta*. These are all quotations from descriptions of the developed *citta*, but the potentialities of intelligence are of course there from the beginning.

(c) *Memory.* *Citta* is an instrument for the recollection of former existences which is made possible through training. See M I 22 “pubbenivāsānussatiññāya cittaṃ abhininnāmesim”, “I directed my *citta* to the knowledge and recollection of former habitations”. The higher knowledge which is called *abhiññā* is attributed to *citta* (A IV 421, A I 254). Free ideas are a function of *citta*, as in A V 107, where *citta* is said to be “provided with” (paricita) ideas (*sāññā*) of impermanence, not-self, danger, disinterestedness and so on. What is said in Dh 326, “idaṃ pure cittaṃ acāri cāritam ... yatthakāmaṃ ...”, “this *citta* would wander formerly as it liked ...” probably refers to the free imaginative function of *citta*.

All the functions quoted here are referred to the trained *citta*. The fundamental dispositions must, however, be there from the beginning, although nothing seems to be ever said about the untrained *citta* in these respects. We go on to describe the natural *citta* proper.

(d) *Intellectual qualities of the untrained citta.*

Two of the *āsava*, namely *ditthāsava* and *avijjāsava* (the obsessions of false views and lack of true knowledge) are of a more intellectual character (D I 84, D II 81). Further: *moha* (lack of correct judgment, D III 270), *vicikicchā* (doubt, D I 71), *vikkhitta* (unattentive, D I 79).

(e) *Emotional qualities.*

We must distinguish between feelings and emotions. Feeling is the evaluation from the individual point of view that normally accompanies every perception or cognitive process: we call them “pleasant” and “unpleasant”. This evaluative aspect is not so often attributed to *citta*, but we find, e.g. in M II 145, that *citta* may be “pasanna”, “pleased”, that it suffers (“pahaññati”, S IV 73), that “sāriṅkā dukkhā vedanā cittaṃ na pariyādāya tiṭṭhanti” (S V 302), “painful feelings make no impression on my *citta*”.

By emotion proper we understand a state of affectivity or lack of balance. This side of human psychology is usually attributed to *citta*

paritassanā, trembling, nervousness (S III 16),  
uddhaccakukkucca, excitement and worry (D I 71).

padosa, anger (D I 71).  
 kāmṃāsava, obsession of sensual pleasures (D I 84).  
 sapattaka, hostile (D I 228).  
 savera, full of anger (D I 247).  
 āvila, turbid (A I 9).  
 utrasta, terrified (S I 53).  
 abbhuta, astonished (S I 178).  
 uddhata, unbalanced (S V 112).  
 līna, sluggish (S V 112).  
 phandana, trembling (Dh 33).  
 capala, unsteady (Dh 33).

(f) *Dynamic qualities.*

Dynamic are the traits called which lead or motivate to actions, e.g. needs and drives. The border between these and the emotional traits is, of course, never very well defined.

*Taṇhā*, the most common word for “desire”, is not often ascribed to *citta*, but in Dh 154, *citta* is said to have “attained to the extinction of all desires” (*cittaṃ taṇhānaṃ khayam ajjhagā*). More commonly attributed to *citta* are *abhiḥhā* (covetousness) and *lobha* (greed), found together in M I 36. Very common is *rāga*, sometimes translated by the more emotional word “passion”, sometimes by the more dynamic word “desire” (S I 185). One of the *āsava* is *bhavāsava*, clinging to existence (D I 84).— Absence of dynamic qualities could be called *thinamiddha* (“lethargy and drowsiness”, D I 71) or *pamāda* (“indolence”, M I 36). — The most important dynamic traits are, therefore, more or less regularly attributed to *citta*.

(g) *Moral traits.* The moral “defilements” (*upakkilesā*) seem all to belong to *citta*: Most of them are enumerated in M I 36 together with some that are mentioned already:

byāpāda, “malevolence”  
 upanāha, “malice”  
 makkha, “hypocrisy”  
 paḷāsa, “spite”  
 issā, “envy”  
 macchariya, “stinginess”  
 māyā, “deceit”  
 sāṭheyya, “treachery”

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thambha, "selfishness"  
 māna, "arrogance"  
 atimāna, "pride"  
 mada, "conceit"

### 7. *The attributes of the trained citta.*

(a) *Cognitive and intellectual qualities.* On the highest level of the eightfold path (sammāsamādhi), the adept attains to cittassa ekaggatā, "one-pointedness" (D II 217). He is not disturbed by his sense-perceptions: "Evaṃ sammāvimuttacittassa ... bhikkhuno bhusā ce pi cakkhuviññeyyā rūpā cakkhussa āpāthaṃ āgacchanti, nev'assa cittaṃ pariyādiyanti, amisikataṃ ev'assa cittaṃ hoti, ttiṭṭhaṃ ānejjappattaṃ, vayaṇ c' assānupassati". (A III 377). "If objects cognizable by the eye come very strongly into the range of vision of a monk with wholly freed *citta*, they do not obsess his *citta*, and his *citta* is untroubled, firm, having won to composure; and he watches it go". (The last *assa* seems to refer to *citta*; if so, *citta* means "conscious processes"). Temporarily he may attain to saññāvedayitanirodha, and "Yo ca khvāyam ... bhikkhu saññāvedayitanirodhaṃ samāpanno, tassa pi kāyaṣaṅkhāro niruddho paṭipassaddho vaciṣaṅkhāro niruddho paṭipassaddho cittasaṅkhāro niruddho paṭipassaddho" (S IV 294). "In him who has attained the ceasing of perception and feeling, the activity of body has also ceased, become calmed. So also have the activities of speech and *citta*."

His *citta* has been trained to be an instrument for higher knowledge (*abhiññā*), for the attainment of *iddhi*, for hearing heavenly sounds, for understanding others' *citta*, for remembering his own former births, for seeing other beings pass from existence to existence, and so on (described, e.g. D I 77-84). His *citta* is not directed outwards (*apaṇihitaṃ bahiddhā*, S V, 159). He can direct his *citta* and he "brings it towards the deathless element" (*amatāya dhātuyā cittaṃ apasaṅkarati* (A IV 422). His *citta* is characterized by paññā (wisdom, D II 81) and aññā (knowledge, D III 53).

(b) *Emotional traits.* *Citta* becomes free from āsavā and taṇhā (D II 81, Dh 154). It does not react emotionally on sense-impressions (S V 302). It is vūpasanta (calmed D I 71), samāhita (serene, D I 76), ānejjappatta (imperturbable D I 76), avera (free from anger D I 247), danta gutta rakkhita saṃvuta (tamed, controlled, guarded, restrained A I 7), anāvila (untroubled, A I 9), sukhāvaha (bringer of happiness Dh 35). The general impression is unemotionality and stability.

(c) *Dynamic traits.* The needs and desires were characteristic of the natural *citta*. The trained *citta* is, however, also motivated to action, and motivations are still to be found, although the desires have gone. This is often expressed in a negative way: “*Yaṃ cittaṃ vītarāgaṃ vītadosaṃ vīramohaṃ — itosamuṭṭhāna kusalasilā* (M II 27). “That *citta* which is free from desire, free from hate and free from illusion—originating from this are the skilled moral habits.” This is an interesting passage showing that the motivation to good actions is to be found in *citta* and that these purely negative expressions have a very positive meaning. It is also interesting to note that they are all considered dynamic, although *dosa* is more emotional and *moha* more intellectual.

Other dynamic words, positively expressed, are found in D III 239 where *citta* is said to “incline towards ardour, devotion, perseverance and exertion” (*namati ātappāya anuyogāya sātaccāya padhānāya*).

On the dynamic side, the training therefore results in a change from impulses and desires to will and determination, from immaturity to maturity, from fickleness to character.

(d) *Moral traits.* *Citta* is made an effective (*kammaniya*, *mudu*) instrument for skillful (*kusala*) action, *Citta* has been made *asaṃkiliṭṭha* (pure, D I 247), *avyāpanna* (free from malice, D I 71), *assava* (obedient, S N 23), *anaṅga* (free from blemish, A II 211). One of its chief characteristics is *mettā* (friendliness, D III 237). At the same time it is *vivekaninna* *vivekappa* *vivekappa* *vupakaṭṭha* (tending to aloofness, leaning to aloofness, inclining to aloofness, remote, M III 111), which probably indicates a certain aversion to all social activity, good as well as bad.

#### 8. *Is citta personal ?*

*Citta* could be an inner core, e.g. some sort of life-force, very much similar in all individuals, or it could be an individually formed center. The latter is true. It is naturally open to impressions from the outside (S IV 293) and it has a great number of emotional, dynamic and intellectual characteristics that give it an individual form. It can also be understood, interpreted: “*cittaṃ me samaṇo Gotamo jānāti*” (S I 178) “the recluse Gotama knows my *citta*” (or possibly: what I am thinking). “*Idha ... bhikkhu parasatānaṃ parapuggalānaṃ cittaṃ pi ādisati ... iti pi te cittaṃ ti*” (D I 213). “Here a monk tells (reads) the *citta* of other beings, of other individuals ... saying: — ‘so is your *citta*’ ”. — “No ce ... bhikkhu paracittapariyāya-

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kusalo hoti, atha 'sacittapariyāyakusalo bhavissāmi'ti" (A V 92) "though a monk be not skilled in (knowing) other people's *citta*, he can decide: 'I will be skilled in (knowing) my own *citta*'".

The training of *citta* seems to result in a greater homogeneity. But the result depends on the type of training. One-sided training, for instance, may give wrong result. So if a monk trains only *samādhi*, then "taṃ cittaṃ kosajjāya saṃvatteyya". "his *citta* will be liable to indolence", if he trains only *paggāha* (energy), then "taṃ cittaṃ uddhaccāya saṃvatteyya", "his *citta* will be liable to distraction"; and if he trains only *upekkhā* (equanimity), then taṃ cittaṃ na sammā samādhiyeyya āsavānaṃ khayāya", "his *citta* will not be perfectly poised for the destruction of the āsavā" (A I 256). — Even a liberated *citta* can still be identified, see S I 194, "tesam ... cetasā cittaṃ samannesati vip̐pamuttaṃ nirupadhim", "he intuitively discerned the *citta* of these as being freed, desireless". Therefore, the individuality remains, even in arahants.

### 9. *Is citta an instrument ?*

We have repeatedly referred to *citta* as an instrument: for attention understanding, for attaining higher knowledge and certain supernatural powers. The instrument-aspect is no doubt there, but it is less conspicuous than its independence. Its development is an end in itself and for the *citta*'s own good. Just as the training of a child may consist in making him do things, so the *citta* is used as an instrument for its own development.

### 10. *The ultimate fate of citta.*

What happens to *citta* in death ? S V 370 provides an answer: "... tassa yo hi khvāyam kāyo rūpī ... taṃ idheva kākā va khādanti ... yañca khvassa cittaṃ dīgharattaṃ saddhāparibhāvitam sīla- suta- cāga-paribhāvitam, taṃ uddhagāmi hoti visesagāmi", "though this formed body of his be devoured by crows (or other animals), — yet his *citta*, if longtime practiced in faith, virtue, learning and renunciation, moves upward and goes to distinction". Here we are very close to an un-Buddhistic soul-theory, according to which *citta* survives death. It can be found also in other passages, where it is connected with the idea of rebirth. "Avidvā manaso vitakke hurāhuraṃ dhāvati bhanta-citto" (U 37). "Without understanding the thoughts of *mano* he runs with restless *citta* from existence to existence". — "Anāvattidhammaṃ me cittaṃ kāmabhavāyā-ti paññāya cittaṃ suparicitaṃ hoti" (A IV 402) "My *citta* is not of such nature that it will return to the plane of sense-pleasures. — (knowing this) his *citta* is well

provided with wisdom". In these passages we find an indication that *citta* in normal cases is reborn. The same is implied in D III 258 "Tassa evaṃ hoti—'Aho vatāhaṃ kāyassa bhedaṃ param maranā khattiya-mahāsālānaṃ vā brahmaṇamahāsālānaṃ vā gahapati-mahāsālānaṃ vā saḥavyataṃ uppaj-jeyyan ti". So taṃ cittaṃ dahati, taṃ cittaṃ adhiṭṭhati, taṃ cittaṃ bhāveti. Tassa taṃ cittaṃ hīne vimuttaṃ uttariṃ abhaviṃsaṃ tatr' uppattiya saṃvattati". "He thinks, 'Ah! if only I may be reborn at the dissolution of the body after death as one amongst wealthy nobles, or brahmins, or householders!' This *citta* he holds fixed, firmly established, and develops it.—His *citta* set free in a lower range, and not developed to anything higher, conduces to rebirth within that range." This passage is, however, a little doubtful, as *citta* here, at least in the middle sentence, has a clear process-meaning and therefore may be used simply for *viññāna*.

When, in other contexts, the process-meaning seems to be intended, e.g., in D II 299, it is stressed that *citta* "is something that comes to be" (samudaya-dhamma) and "something that passes away" (vaya-dhamma).

It is often said that *citta* is suvimutta, "liberated" or vimuccati "is liberated". What does it mean ?

"Paññā-paribhāviṃsaṃ cittaṃ sammā eva āsavehi vimuccati seyyathidaṃ kāmāsavā bhavāsavā diṭṭhāsavā avijjāsavā ti" (D II 81). "*Citta*, when thoroughly developed through wisdom, is set quite free from obsessions, that is to say from the obsessions of sensuality, becoming, wrong views and ignorance". Another definition is already quoted from S III 13, according to which *citta* is freed through the destruction of the desire directed towards the five *khandhā*. Still more clear is the passage S III 45: "Rūpadhātuyā (later, the whole sentence is repeated for: vedanādhātuyā, saññādhātuyā, sankhāradhātuyā, viññāṇadhātuyā) ce ... bhikkhuno cittaṃ virattaṃ vimuttaṃ hoti anupādāya āsavehi, vimuttattā ṭhāma, ṭhittattā santussitaṃ, santussitattā na paritassati aparitassam paccattaññeva parinibbāyati". "If a monk's *citta* is unattached to the form-element (feeling, perception, the activities, consciousness) and is free from it without giving it support through the *āsavā*—then it is steadfast by its freedom, content by its steadfastness, through its contentment it does not crave further: and free from craving it by itself attains to *parinibbāna*". As freedom from the *āsavā* is usually mentioned as the final attainment through which arahant-ship is won, we have ample evidence that *citta* is thought to be that which reaches the state of *nibbāna*. A characteristic of Buddhist meditation is that the meditating

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person knows through all the levels how far he has attained. When the ultimate realization has come, even then he knows that it has come and what it means. Therefore, some part of his conscious personality is left, and everything points to the fact that this function is attributed to *citta*. In addition to the already quoted evidence, let us point to a passage in A I 8, where it is said: “pañihitena cittena ... nibbānam sacchikarissati”, “with a *citta* that is well directed ... he will realize *nibbāna*.” So, when the work is done, the instrument is still there, registering the fact.

### II. Abnormal states of *citta*.

There are some references to abnormalities in *citta*. According to S III 1, *citta* may be ill (*ātura*), and a certain householder is admonished, so to train himself that his *citta* is healthy although his body is ill: the illness is to identify the *khandhā* with *attā*.

In D I 20, it is said about a group of gods called Manopadosikā: “Te aññamaññaṃhi paduṭṭha-cittā kilantakāyā kilanta-cittā”. “Wicked-minded toward each other, they are weak-bodied and weak-minded”. It is not known what is meant here: possibly the basic idea is that a certain amount of energy is required in order to stay on a certain level of development; changes in this karmic force manifests itself in certain mental and bodily changes; if the moral behaviour is not up to requirements, the karmic force weakens and the being is reborn in a lower state.

In Dh 137 and 138 it is said that a man who inflicts pain on the innocent and harmless, will be punished by suffering, loss, bodily injury, difficult illness or *cittakkhepa*: “loss of *citta*”. A similar expression is found in S I 126, where it is described how the daughters of Māra try to seduce the Buddha and afterwards comment on their lack of success with the words: “Yaṃ hi mayaṃ saṃṇaṃ vā brāhmaṇaṃ vā avītarāgaṃ iminā upakkamena upakkameyyāma hadayaṃ vāssa phaleyya, uṇhaṃ lohitaṃ vā mukhato uggaccheyya, ummādaṃ vā pāpuṇeyya cittavikkhepaṃ vā.” “For if we had approached after this fashion any recluse or brahmin who had not extirpated lust, either his heart would have cleft asunder, or hot blood had flowed from his mouth or he had become crazy or have lost his *citta*”. If a person has developed *mettā cetovimutti*, i.e., “mind-release through friendliness”, his *citta* is not *khīpitabba* (“to be upset”, S II 265). In S I 207 it is said: “If you do not reply, I will either upset your *citta* (*cittaṃ khīpissāmi*) or split your heart”. In this case *citta* is something that can be lost, thrown away. This use of the word becomes natural, if *citta* is taken to be the personal core

of purposeful consistency, some sort of superordinated organizing agency. We have already noticed (see e.g. M III 156 cited above) that in some contexts this interpretation seems probable (although it is often implied that this superordinate force takes *citta* to task and induces it to development or uses it as an instrument), and we are again very close to an identification between *citta* and the self. In strong emotional experiences it is this normal purposefulness and organized behaviour that is upset.

12. *Has citta inner organization ?*

We have seen that *citta* is conceived as individually formed and that a great number of traits, especially of an emotional, dynamic and moral character, are attributed to it. It is sometimes described as the guiding purposiveness in life. Therefore, it comes very close to the psychological concept of personality.

By personality is meant an individual organization of traits: there is a guiding purposiveness, a hierarchy of motives, a more or less consistent "style of living". Personality may change and can be "developed" and "deranged", but there is continuity and unity. It is both psychological and physical, both structural and functional.

Like personality, *citta* is an organizing factor and it has an individual structure: we have seen that a person's *citta* can be recognized and interpreted by others. We find, on the other hand, few traces of an organization of all the traits that are said to belong to it: it is often even doubtful whether the traits really are meant to form part of *citta* or whether they are conceived as external. If *citta*, for instance, gets rid of the five *upakkilesā*, is *citta* itself changed through the process? But in many cases, the formulation indicates that a real change takes place: the frequent use of *bhāveti*, "cultivate", "make grow", indicates that: A III 245 *subhāvita*, "well developed", M III 149 *cittabhāvanā*, "development of *citta*". When it is said that *citta* becomes one-pointed (D II 217), this can only refer to a concentration and unification of all forces within *citta*, a redistribution of the inner organization.

In S V 92, we find *citta* compared to gold with certain impurities; if these are removed, the gold becomes soft, pliable, luminous and workable: "Evam eva kho ... pañcime cittassa upakkilesā, yehi upakkilesehi upakkilīṭṭhaṃ cittaṃ na ceva mudu hoti, na ca kammaniyaṃ na ca pabhassaram pabhaṅgu ca na ca sammā samādhīyati āsavānaṃ khayāya." "In the same

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way, there are these five impurities of the *citta*, tainted by which *citta* is neither fine, nor pliable, nor luminous, nor frail, nor perfectly composed for the destruction of the *āsavā*". This passage may imply that *citta* is transformed through the impurities; but an implication that *citta* by itself and originally was pure as gold need not be read into it.

The development of *citta* consists in getting rid of bad traits and replacing them by good ones. In descriptions of this process we find that certain bad traits are more fundamental and difficult to get rid of than others: the last ones to disappear are the *āsavā*. The traits that are developed are, among others, *mettā* and *paññā*. Therefore we find traces of an hierarchical organization in *citta*.

So far, *citta* has turned out to be rather similar to personality. But there are differences also:

(a) We may speak about "our" personality as about something outside us, but in reality, we always identify ourselves with our personality, and the psychological ego is contained in it. *Citta* is much more frequently placed as object of activities and conceived as "outside" the speaker (it should, e.g., be "restrained"). But as we have found, identification is also frequently implied.

(b) *Citta* is a more limited concept, as it mainly covers only conscious phenomena. The individual differences are not much elaborated upon in the Nikāyas.

(c) The instrumental aspect, common in *citta*, is not frequent with regard to personality.

(d) *Citta* is often said to be independable and to change quickly. Personality may also change and it may be "unstable", but continuity is

We may conclude that *citta* rather may be called a center within personality a conscious center for activity, purposiveness, continuity and emotionality. The vague term "mind" may, after all, be the best translation, although it does not cover the emotional and moral aspects.

### A note on *ceto*

*Ceto* is a derivation of the root *cit* just as *citta*, but it is much more limited in use. It is to be found only in genitive and instrumental case, and

in compounds, and it seems to be used in a rather limited number of contexts. The following observations are based on material mostly collected from D and M.

*Ceto* is often consciously and intentionally treated as a synonym of *citta*. In S III 232, the need and desire produced through the senses is called *cittassa upakkilesa* but in the following sentence it is referred to as *cetaso upakkilesa*. In S IV 125 it is said that *rūpā* touch *citta* again and again but: *cittaṃ na pariyādāya tiṭṭhanti*, "without completely taking hold of *citta*". This is then summed up with the expression *cetaso अपरियādānā*, "by their failure to take hold of *ceto*".

In A V 207 *vigatābhijjhena cetasā* is immediately followed by *abhijjhāya citta* *parisodheti*.

The following comparisons give also an impression of the close relations between *ceto* and *citta*.

<i>Ceto</i>	<i>Citta</i>
<i>cetaso ekodibhāva</i> ,	<i>cittaṃ ekodhihoti</i> ,
D I 74	A I 254
<i>mettāsahagatena cetasā</i>	<i>mettā-cittam bhāveti</i>
D I 251	D I 167
<i>cetovimutti</i>	<i>cittam suvimuttam</i>
M III 146	S III 13
<i>parisuddhena cetasā</i>	<i>citte parisuddhe</i>
M III 94	D I 76
<i>cetasamādhim</i>	<i>cittasamādhi</i>
M III 108	S IV 350
<i>ceto-paṇidhi</i>	<i>paṇihitena cittena</i>
D III 259	A I 8
<i>cetaso upakkilese</i>	<i>cittassa upakkilesā</i>
D III 49	S V 92
<i>cetaso pariyādāna</i>	<i>cittam pariyādāya</i>
S III 16	S II 226
<i>cetasā averena, avyāpajjhena</i>	<i>avera-citto, avyāpajjhacitto</i>
D I 251	D I 247
<i>cetovimuttim paññāvimuttim</i>	<i>cittam paññaṇa bhāvayam</i>
D III 78	S I 13

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We find that *ceto* at least to some extent is just a synonym of *citta*: the upakilesa are attributed to both, and also some emotional traits. Both must be concentrated and both attain liberation. Further, both are engaged in supernatural perception, e.g., mind-reading (*cetasā ceto paricca vidito*, "by my *ceto*, of ... is known to me" M I 210, and frequently; compare A I 170, "evam pi te mano, ittham pi te mano iti pi te cittan ti", "thus is your *mano*, such and such is your *mano*, thus is your *citta*; in some contexts *citta* and *ceto* are combined, e.g. S I 194, "... cetasā cittam sammanesati vippamuttam ... "he discerned with his *ceto* the *citta* of these as being freed ..."

*Ceto* has a number of traits (cognitive, emotional, dynamic, and moral) of the same type as those attributed to *citta*. We find, for instance, the five *ceto-khila*, "the obstructions of *ceto*": doubt about the master, about the doctrine, about the order, about the training, and anger towards the fellow-monks (D III 237 f). And further, the five *cetaso vinibandhā*, "bondages": desire for sensual pleasures, for the body, for visual things; excessive eating and sleeping; living a religious life for rebirth as a god (D III 238). The group *adhiṭṭhāna*, *abhinivesa* and *anusaya* (decision, indulgence and disposition) is consistently attributed to *ceto* (e.g. M III 32). In D III 259 we find *ceto*-paṇidhi, "aspiration of *ceto*". In M III 50, we are told that *akusalā dhammā* follow if somebody lives with *abhiṭṭhāsahagatena cetasā*, *vyāpādasahagatena cetasā* and *viheṣāsahagatena cetasā* (*ceto* given over to covetousness, malevolence, harmfulness): they are all called *cittuppāda*, "creation of *citta*". All this makes *ceto* appear as a dynamic center, not very unlike *citta*.

In some special aspects, *ceto* has a profile of its own.

1. The instrumental aspect is much more pronounced, especially for knowledge, thinking and concentration, "... dhamma cetasā anuvitakketi anuvicareti ..." (D III 242), "he reflects and meditates over the doctrine in his *ceto*", "... mama cetasā cetoparivitakkaṃ aññāya" (M I 168), "... who knew with his *ceto* the reasoning in my *ceto*", "... addasaṃ Bhagavantam ... Māgadhaṃke paricārake ārabba aṭṭhikavā manasikavā sabba-cetaso samannāharitvā nisinnam: 'Gatiṃ tesaṃ jānissāmi abhisamparāyaṃ, yaṃ-gatikā te bhavanto yamabhisamparāyāti' ". (D II 207). "I saw the Lord ... sitting down to think over, to cogitate upon, to concentrate his whole *ceto* upon the deceased Magadhese adherents: "I will know their fate, their future; where these people are going, what their future will be."

2. This stress on concentration and supernatural knowledge becomes especially prominent in contexts where the ways to liberation are described. Very often we find the combination *ceto-vimutti paññā-vimutti*, usually translated "freedom of mind and freedom through intuitive wisdom". It is often (e.g. M I 73, D III 78) said to depend on the destruction of *āsavā* and is therefore the same process as described in D I 84 "*kāmāsavā pi cittaṃ vimuccati bhavāsavā pi cittaṃ vimuccati avijjāsavā pi cittaṃ vimuccati. 'Vimuttasmiṃ vimuttam' iti ñānaṃ hoti*", "*citta* is freed from the influx of sensual pleasure, from the influx of rebirth, from the influx of ignorance; he knows: 'in liberation it is freed' ". *Cetovimutti* is analyzed into five types in M I 296-298:

- (a) *adukkhamasukhā cetovimutti* which is attained in the fourth *jhāna*.
- (b) *animittā cetovimutti*: the monk does not pay any attention to any signs (conditions) and enters on *animittaṃ cetosamādhim*, the concentration that is signless.
- (c) *ākhiṇṇā cetovimutti*: the monk passes quite beyond the plane of infinite consciousness and thinks 'There is nothing at all'.
- (d) *suññatā cetovimutti*: the monk meditates "*suññamidaṃ attena vā attaniyena vā*", "this is void of self or of what pertains to self",
- (e) *appamāṇā cetovimutti*: the monk suffuses the whole world with a *ceto* that is *mettā-sahagata*, *karuṇā-sahagata*, *muditā-sahagata*, *upekkhā-sahagata*, "filled with friendliness, compassion, joy, equanimity".

We find that all these belong to different levels of meditation. The *appamāṇā cetovimutti* is an idea that returns quite often and is unique for *ceto*: the conscious processes of a meditating person are here conceived as a sort of energy that can be directed and fill the whole world "just as a mighty trumpeter makes himself heard", D I 251) and is probably thought to have beneficial influence on its objects. In the 4th *jhāna* the monk is said to suffuse his whole body "*parisuddhena cetasā pariyodātena*", "with utterly clean and pure *ceto*" (M III 94), just as somebody might wrap up his whole body with a white cloth.

*To sum up:* *Ceto* is a synonym of *citta* but is used especially for its instrumental, cognitive, meditative, and supernatural functions.

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### Mano.

Mano seems to be much easier to grasp than the other concepts discussed in this paper. Its essential function, as inner sense, is the same as is commonly met with in earlier Indian psychology.

#### 1. *Is mano consciousness ?*

In for instance D I 70 *mano* is described as an instrument for knowledge of *dhammā*: “*manasā dhammaṃ viññāya*”, “when he cognizes a phenomenon with his *mano* ...” *Mano* is generally found mentioned as one of the senses, and just as the eye has *rūpa* as object, *mano* characteristically has *dhamma*. In D III 242, it is used with *anupekkhati*: “*dhammaṃ ..... manasā anupekkhati*”, “he contemplates the doctrine in *mano*”. In SN 834 we find “*manasā diṭṭhigatāni cintayanto*”, “thinking over the theories in *mano*”. *Mano* is therefore a center for conscious processes.

#### 2. *Is mano an entity ?*

When using the word “center” above, we implied that *mano* has more character of entity than of process. Is that justified ? By center we mean a more or less permanent although changing structure used as an instrument for producing or containing processes of a certain type: a sense is a structure transforming physical energy to signals that can be interpreted by the organism. *Mano* is sensitive to and a repository of *dhammā* received from the other senses: “*Imesaṃ kho ... pañcannaṃ indriyānaṃ nānāvisayānaṃ nānāgocarānaṃ na aññamaññassa gocaravisayaṃ paccanubhontānaṃ mano paṭisaraṇaṃ, mano ca nesaṃ gocaravisayaṃ paccanubhotīti*” (M I 195). “Of these five senses, different in range, different in field (=modality), not reacting to the field and range of each other, *mano* is the refuge (center?), and *mano* reacts to their field and range”. *Mano* is, therefore, a coordinating center for the other senses, and perhaps an instrument for recollecting past events (=memory).

The same idea of an instrumental center returns, for instance, in SN 1142. “*Passāmi naṃ manasā cakkhunā va*”. “I see him with *mano* as with my eye”. Similarly in SN 1005 “*manasā pucchite pañhe vācāya vissajjessati*”, “he will answer in words the questions you have asked in *mano*”. Cf. M I 191 “*Ajjhattiko ce ... mano aparibhinno hoti ...*” “If the internal *mano* is unbroken ...” and S I 197 “*... vanaṃ pavittṭho, atha me mano niccharati bahiddhā*”, “(I have) gone into the forest, but my *mano* goes astray outside”. I have not found any passage where *mano* is used

with a clear process-meaning, but there are very many contexts, where a process-meaning *could* well be implied. *Mano* in S I 197 just quoted, seems to be personified and objectified, but a meaning "thought", "imagination" is not excluded. In all the cases where *manomaya* is used, it may mean "produced by the *mano*" or "consisting of a mental image", which in reality could be the same thing. The question may be more or less artificial but I conclude that *mano* is primarily thought of as an entity.

### 3. *Is mano an instrument ?*

We have already quoted passages proving that *mano* is an instrument of ideation. As a matter of fact, the instrumental meaning clearly dominates all other usages. It can be seen in some very frequently occurring compounds, e.g. *manosaṅkhāra* (activity of *mano*), *mano-vitakka* (thoughts of *mano*), *mano-sucarita* (good action by means of *mano*).

There are, however, also indications of a more independent meaning." *Sabbaloke ca me mano nābhīramissati, sabbalokā ca me mano vuṭṭhahissati*" (A III 443). "My *mano* shall find no delight in any world; my *mano* shall rise above every world".—"Haranti maññe mano vanāni samādhim alabhamānassa bhikkhuno" (M I 16) — "I think forests distract the *mano* of a monk who does not attain *samādhī*".—"Na brahmaṇass' etad akiñci seyyo yadā nisedho manaso piyehi" (Dh 390) "It is no slight benefit to a brahmin when he holds his *mano* back from the pleasures of life".

In sum, the word *mano* is used for some conscious agency, mainly instrumental to the purposes of other agencies, but sometimes used without instrumental implications.

### 4. *Functions of mano.*

We have stressed that *mano* is chiefly conceived as an inner center with a predominantly instrumental function. We shall now investigate the areas of function more closely.

(a) *Perception.* In M III 216, 18 applications of *mano* (*manopavicārā*) are mentioned: "Cakkhunā rūpaṃ disvā somanassaṭṭhānīyaṃ rūpaṃ upavicarati domanassaṭṭhānīyaṃ rūpaṃ upavicarati, upekhaṭṭhānīyaṃ rūpaṃ upavicarati; sotena saddaṃ sutvā—pe—; ghānena gandhaṃ ghāyitvā—pe—; jivhāya rasaṃ sāyitvā—pe—; kāyena phoṭṭhabbaṃ phusitvā—pe—; manasā dhammaṃ viññāya somanassaṭṭhānīyaṃ dhammaṃ upavicarati domanassaṭṭhānīyaṃ dhammaṃ upavicarati upekhaṭṭhānīyaṃ

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dhammam upavicarati". "Having seen a form with the eye, one experiences the form as (standing on—) connected with pleasure, distress or neutral feeling. Having heard a sound with the ear, — having smelt a smell with the nose, — having tasted a flavour with the tongue, — having felt a touch the body, — having become conscious of a *dhamma* with *mano*, one experiences a mental state connected with pleasure, distress or neutral feeling." Here, two functions of *mano* are clearly indicated: the function of knowing or cognizing mental states, ideas and so on, which are referred to above, and the function of receiving and experiencing the impressions directly from the other senses. According to Buddhist way of thinking all perception involves an immediate evaluation from the individual point of view: perception and feeling together belong therefore to the *manopav-cārā*. In M I 191 it is stated that if the internal *mano* is intact and external *dhammā* come in focus and there is an appropriate contact, then the appropriate part of *viññāṇa* will appear. ("Tato ... ajjhaticke ce *mano* aparibhinno hoti bāhirā ca *dhammā* āpātham āgacchanti tajo ca samannāhāro hoti, evam tadjassa viññāṇabhāgassa pātubhāvo hoti"). This seems to be a good description of a perceptual process: if we are to be conscious of something, a functioning sense-organ is required; this must be focussed on the object; and there must be proper contact (contact probably refers to the physical impingement of the object on the sense-organ by which the primitive sensations are produced). The *dhamma* is in this case described as external; so it may be used as a comprehensive term for all external stimuli.

(b) *Attention*. In S II 24 we find the exhortation: "suṇātha sādhu-kam manasi karotha bhāsissāmīti", "listen, give your *mano* thoroughly, and I will speak. The phrase *manasi-karoti* is used in many forms to express attention, e.g. in the frequently found formula: "ātappam anvāya padhānam anvāya anuyogam anvāya appamādam anvāya sammā-manasikāram anvāya tathārūpam ceto-samādhiṃ phusati yathā samāhite citte aneka-vihitam pubbe nīvāsam anussarati", "by means of ardour, of exertion, of application, of vigilance, of highest attention, he attains such concentration of mind that he, with concentrated *citta* remembers his various existences in the past". We may conclude that attention and concentration are connected with *mano*.

(c) *Intelligence and thinking* are also clearly functions of *mano*. See SN 834, "Atha tvam pavitakkam āgamā, manasā diṭṭhigatāni cintayanto" "Then you started to speculate, reflecting on the views in your *mano*. *Mano* is often combined with *vitakka*, "reflective thought": "ito samuṭ-

thāya manovitaṅkā ... snehajā attasambhūtā ...” “hence spring the reflective thoughts of *mano*: born of love and arisen in self” (S I 207). The already quoted passage in SN 1005 gives an instance of mental questioning, which we would call a thought-process.

(d) *Memory and ideation.* Memory is not directly attributed to *mano*, but as the “repository” of the other senses (S V 218) and the center of all kinds of ideational activity, memory must be very much involved in its activities. In D II 176 it is said about a lady: “*manasā pi no aticāri, kuto pana kāyena*”, “she was never, even with her *mano*, unfaithful, how much less with the body”, and here evidently that type of ideation that we call imagination is referred to. The same imaginative function we have already met in S I 197: “(I have) gone into the forest, but my *mano* goes astray outside”. A little more vague is an interesting passage in SN 1144: “*Jiṇṇassa me dubbalathāmakassa ten’ eva kāyo na paleti tattha, saṃkappayattāya vajāmi niccaṃ, mano hi me ... tena yutto*”. “Because I am old and feeble, my body does not go there, but in my intentions I always go there, for my *mano* is joined to him”. *Samkappa* is here used for the planning and longing thought-activity; *mano* could refer to a daydreaming function or to emotional attachment. The word *manomaya* is frequently used about images created by *mano*. “*Puna ca paraṃ ... akkhātā mayā sāvakaṇaṃ paṭipadā, yathā paṭipannā me sāvaka imañhā kāyā aññaṃ kāyaṃ abhinimminanti rūpim manomayaṃ sabbanga-paccañjīm abhinindriyam*”. (M II 17). “And again, a method has been described by me for disciples, practicing which disciples of mine from this body produce another body, with form and made by *mano*, having all its major and minor parts, not deficient in any sense. The origin of these images was probably the ability to create clear mental images: but it is evident from, for instance, A III 122 that the pictures so created were believed to have independent reality, filling space although without material body: “*kālakato aññataraṃ manomayaṃ kāyaṃ upapanno, tassa evarūpo attabhāva paṭilābho hoti, seyyathā pi nāma dve vā tīṇi vā Māgadhiṇi gāmakkhettāni*” ... “when he died he was reborn in a body made by/of *mano*, and the form that he took was such that it filled two or three Magadhan village fields”.

(e) *Feelings and emotions*

M III 216 was quoted above, where the 18 *manopavicārā* were given and which proves that the feelings also were considered as felt by *mano*. Cf. S V 74 “*Manasā dhammaṃ viññāya manāpaṃ ...*”, “with *mano* cognizing a pleasant phenomenon ...”, and “*Agati yattha Mārassa, tattha me*

nirato mano", "Out of reach of Māra my *mano* is pleased (S I 133). — "Padhānāya gamissāmi, ettha me rañjati mano" (SN 424). "I will go and exert myself, in this my *mano* delights *jhāna*". — "dandhaṃ hi karoto puññaṃ pāpasmiṃ ramati mano" (Dh 116), "If a man is slack in doing good, his *mano* delights in evil".

Even emotions are sometimes attributed to *mano*: "Ayam eva mahat-taro kali, yo sugatesu manaṃ padosaye" (SN 659) "This is a greater sin: to make *mano* angry towards the happy ones", — "manopakopaṃ rak-kheyya" (Dh 233) "let one be watchful of irritation in *mano*" — "santaṃ tassa manaṃ hoti" (Dh 96), "his *mano* is calm".

It is clear from these passages that *mano* can feel pleased or displeased, irritated or calm.

(f) *Needs, purposiveness and will.*

Dynamic traits are often attributed to *mano*. See, for instance, D II 275 "Puccha ... maṃ paṇhaṃ yaṃ kiñci manas' icchasi", "Ask me whatever question you wish in your *mano*". — D I 18: "Iti mamañ ca manopaṇidhi, ime ca sattā itthattam āgatā", "So was my *mano*'s wish, and these beings came there". — D III 103: "Yathā imassa bhoto mano-saṃkhārā paṇihitā, tathā imassa cittassa anantarā amuṃ nāma vitakkaṃ vitakkessati", "Just as this good man's *mano*-activity is directed, so will he later direct the thought of this *citta*". — SN 228: Ye suppayuttā manasā dāhena nikkāmino Gotama — sāsanamhi ... "Those who have applied themselves well with a firm *mano* to the discipline of Gotama and are freed from desire ..." — We also often find the compound *mano-saṇcetana* (e.g., D III 228) meaning "will" or "purposiveness".

*Mano* is generally conceived as an active agency, not only as a sense, content with passively receiving impressions and passing them on. We need only point to the frequent occurrence of expressions for actions performed by *mano*, kāya and vācā: "Pañcahi thānehi kula-puttena uparimā disā samaṇa- brāhmaṇā paccupaṭṭhabbā: mettena kāya-kammena, mettena vaci-kammena, mettena mano-kammena ..." (D III 191), "In five ways should a clansman minister to recluses and brahmins as the zenith: by friendly acts in behaviour, speech and *mano* ..." — "Parisuddho no mano-samācāro bhavissati ..." (M I 272). "Our conduct in *mano* shall be perfectly pure ..."

We conclude, that active attitude is one of the aspects of *mano*. This leads us naturally over to the question of the moral implications of the thoughts and acts of *mano*.

(g) *Mano as moral agency*

*Mano* can perform good and bad actions. "Manoduccaritaṃ hitvā, manasā sucaritaṃ care" (Dh 233). "Having abandoned the bad actions of *mano* he should practise good actions with *mano*". Khattiyo ... kāyena duccaritaṃ caritvā, vācāya duccaritaṃ caritvā, manasā duccaritaṃ caritvā ... (D III 96) "a khattiya who has led a bad life in deed, word and *mano* ..." In M I 373 it is said that a *mano-kammaṃ* is more blamable if it is bad, than works of body or speech. It follows that the evil purpose is felt to be the only real evil and that it is attributed to *mano*. This connection between purpose and the activity of *mano* perhaps lies behind the compound paduṭṭha-mana-saṃkappo in M III 49: "Vyāpannacitto kho pana hoti paduṭṭha-mana-saṃkappo: Ime sattā haññantu vā vajjhantu vā ucchijjantu vā vinassantu vā mā ahesuṃ vā ti, iti vā evarūpaṃ ... manosaṃcāram sevato akusalā dhammā abhivaḍḍhanti kusalā dhammā parihāyanti." "He is malevolent in his *citta*, corrupt in *mano* and intentions (or: intentions of *mano* ?), and thinks: 'May these beings be killed or slaughtered or annihilated or destroyed, or may they not exist at all'. If this kind of conduct of *mano* is followed, unskilled states of mind grow much, skilled states of mind decrease".

5. *Is mano personal ?*

The answer to this question is yes, because everything that comes in through the senses passes through *mano*: it must therefore be individually formed. There is also direct evidence. According to A I 170, both *mano* and *citta* are interpreted in thought-reading: "Katamañ ca ... ādesanāpāṭi-hāriyaṃ ? Idha ... ekacco nimittena ādisati, evaṃ pi te mano ittham pi te mano iti pi te cittaṃ ti". "And what is the marvel of thought-reading ? In this case somebody can declare by means of a sign: 'Thus is your *mano*. Such and such is your *mano*. That is your *citta*'". From this follows also that *mano* must have some interior organisation, but nothing is ever said directly about this matter.

6. *The fate of mano.*

*Mano* is described as changing and ephemeral. "Manañca paṭicca dhamme ca uppajjati manoviññāṇaṃ; mano anicco vipariṇāmi aññathābhāvī; dhammā niccā vipariṇāmino aññathābhāvino" (S IV 69). De-

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pendent upon *mano* and mental states, *mano-viññāṇa* arises. *Mano* is impermanent, changing, becoming something different. The mental states are impermanent, changing, becoming something different". — Cf. S I 116 "Tav' eva pāpima mano tava dhammā tava mano-samphassa-viññāṇāyatanam; yattha ca kho pāpima natthi mano natthi dhammā natthi mano-samphassa-viññāṇāyatanam agati tava tattha pāpima ti". "To you, O evil one belong (the senses and their objects and) *mano*, the mental states, and the field of consciousness created by contact with *mano*. But where there is no *mano*, no mental states, no field of consciousness created by contact with *mano*, there is no access for you, Evil One". — *Mano* is therefore normally subject to change and death, but there is another possibility: to calm *mano* by training (in Dh 96, it is said about the arahant: "santaṃ tassa manam hoti", "his *mano* is calm").

### 7. Can *mano* be influenced and trained ?

There are many indications in the texts that *mano* is to be trained and plays an important part in meditation. "Manasā samvuto siyā" (Dh 233). "May he practice restraint of *mano*". — "Na brāhmaṇass' etad akiñci seyyo yadā nisedho manaso piyehi" (Dh 390) "It is no slight benefit to a brahmin, when he holds his *mano* back from pleasures". — "Yad āvilattaṃ manaso-vijaññā, 'kaṇhassa pakkho' ti vinodayeyya". (SN 967) "What he recognizes to be disturbance of *mano*, may he drive that off as an associate of Māra". — We find that *mano* should be concentrated, turned from outside things and "developed" (*mano-bhāvanīyā bhikkhū*, "monks who are developing *mano*", D III 36). But it is also said, that one should not restrain *mano* from everything but only from what is evil: "Na sabbato mano nivāraye; na mano sayatattam āgatam; yato yato ca pāpakam, tato tato mano nivāraye" (S I 14) "One should not restrain *mano* from everything: not when *mano* has attained self-control. Whatever is evil, one should restrain *mano* from that". *Mano* plays in this respect a purely instrumental part: it has to do its work and then stay in the background. It is never said that *mano* attains liberation or that it survives death.

### Vinnāna

#### *General characteristics.*

*Viññāna* is a more complex concept than the two others discussed in this paper, and its unity has sometimes been denied. Here we shall first test the hypothesis that it may have been conceived as a unit. After that, we shall compare it with the other two concepts by confronting it with the same questions as we used earlier. We start by quoting some crucial passages suitable as corner-stones for a coming definition:

1. Kittāvātā nu kho viññāṇan-ti vuccatīti. — Vijānāti vijānātīti kho, tasmā viññāṇan-ti vuccati, kiñ-ca vijānāti: sukhan-ti pi vijānāti, dukkhan-ti pi vijānāti, adukkham-asukhan-ti pi vijānāti (M I 292). “In what respect it is called *viññāṇa* ?” “It is called *viññāṇa* because it notices, it notices (*vijānāti*: discriminates, becomes aware). And what does it notice ? It notices pleasure, pain and neutral feeling”.

(In a similar definition, S III 87, a number of tastes are given as examples).

*Viññāṇa* therefore definitely has something to do with consciousness.

2. This is further elaborated upon in numerous passages like D III 243 : “*Cha viññāṇa-kāyā. Cakkhu viññāṇaṃ, sotaghāna-, jivhā-, kāya-, mano viññāṇaṃ.*”

“(There are) six manifestations of *viññāṇa*: visual, auditory, olfactory, sapid, tactual and mental (belonging to the inner sense).”

*Viññāṇa* is, therefore, awareness of inner processes coming from the senses (perceptual processes) or from memory (ideational processes).

3. In S III 103 *viññāṇa* (just as the other *khandhā*) is called *anicca dukkha viparināmadhamma*, “impermanent, painful, liable to change”, and in the same context a way of escaping from *viññāṇa* (*viññāṇassa nissaraṇaṃ*) is mentioned. *Viññāṇa* is, therefore, certainly a process, not an entity.

4. Through its inclusion in the *paṭiccasamuppāda*, between *saṅkhārā* and *nāma-rūpa* (see e.g. S II 3 f), *viññāṇa* is understood to be conditioned and itself a condition.

5. “*Viññāṇāhāro āyatim punabhāvabhiniḍḍattiyā paccayo.*” (S II 13 “The type of food called *viññāṇa* is the support (cause) of renewed becoming, of birth in the future”. *Viññāṇaṃ ... mātu kucchiṇi na okkamissatha, api nu kho nāmarūpaṃ mātu kucchismiṃ samucchissathati ?*” (D II 63) “Were *viññāṇa* not to descend into the mother’s womb, would *nāma-rūpa* arise therein ?” (rhetorical question).

We can conclude that *viññāṇa* is, in some way or other, the important agency in the Buddhist conception of rebirth.

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6. In M I 256, the view is refuted that “*tad-ev’ idaṃ viññāṇaṃ sandhāvati saṃsaratī, anaññan-ti*”, “this *viññāṇa* itself runs on, fares on, nothing else”, by referring to what the Buddha had said, “*paṭiccasamuppannaṃ viññāṇaṃ*”, “*viññāṇa* arises through condition”.

Although *viññāṇa* is the agency of rebirth, it is not itself reborn: it is not some sort of permanent soul that migrates through a number of existences (the view that *viññāṇa* is *attā*, i.e. a permanent self, is frequently refuted, e.g. M III 18).

### *The background*

In order to visualize a concept like this, we must keep the following considerations in mind:

1. The universe as conceived by the Buddha is governed by ethical laws. All individual life can be compared with waves of energy running through time but without material unity, consisting of individual organisms, each working its way, and by means of its activity, which is always viewed from the aspect of its ethical effectiveness, forging its own future. Although the individuals, at any chosen moment of time, are considered as separate, and although the ethics of Buddhism is not purely social, they are much closer to each other and dependent on each other than is commonly held in Western psychology: ethics is all-important. The continuity in the material diversity of the series of rebirths must be something that can transmit ethical resultants just as a wave of energy can run through different types of matter and on its way change its form because of the momentary matter and itself cause changes in the matter. This “wave of energy” is called *viññāṇa*.

2. We would expect that the idea of an agency of rebirth would be shaped under the impression of certain introspective observations. We would expect that certain mental contents that seemed to indicate or explain the function of *kamma* in an ethical universe and, at the same time, give a foundation to the Buddhist doctrine of liberation, would have been collected to form the concept of *viññāṇa*. Observations of this type were maybe:

- (a) the continuity of the conscious processes, (e.g. the laws of association)
- (b) the inner causality, the experience of inner force (drives, needs) which are felt to be causes of actions,

- (c) the accumulating function of memory, the ability to recollect, earlier experience, our continuous change,
- (d) the moral judge in consciousness (of forgotten origin which makes it seem a universal law) making our actions seem good or bad,
- (e) the inner freedom of imagination in dreams and daydreams,
- (f) the possibility of stopping the whole mental process.

*An hypothesis*

We formulate the hypothesis that the concept of *viññāṇa* is a unitary and empirical concept formed under the influence of observations of this type. If this is true, we would expect *viññāṇa* to be:

- 1. a continually flowing process (not a static structure),
- 2. principally dynamic, experienced as force,
- 3. principally conscious, but with a subconscious component, because most of the content is not always present (former existences are rarely remembered; the act of rebirth is not conscious); it should be able to remember former existences,
- 4. transmitter of karmic effects, modifiable by experiences,
- 5. a free-moving force, not bound in time and space (e.g., connected with dreams and free imaginations),
- 6. an explanation of rebirth in terms of consciousness,
- 7. a process that can be stopped and thereby the whole karmic process.

*The hypothesis tested*

- 1. *Is viññāṇa a process?*

We have already seen that *viññāṇa* is produced through the work of the senses and that it is perishable, changeable and conditioned. It was, therefore certainly not conceived as static. This view is confirmed in M I 259, “cakkhuṇṇa paṭicca rūpe ca uppajjate viññāṇaṃ, cakkuviññāṇaṃ-t’ eva saṅkham gacchati”, “if *viññāṇa* arises dependent on eye and forms it is known as visual consciousness”. In D III 105, *viññāṇa* is compared to a stream: “purisassa ca viññāṇasotaṃ pajānāti ubhayato abbocchinnam idhaloke patitṭhitaṃ ca paraloke patitṭhitaṃ ca”, “he understands a man’s *viññāṇa*-stream as uninterrupted at both ends and supported both in this world and in the other world”. Here, *viññāṇa* is visualized as a stream flowing through a string of existences, in time. What constitutes a stream is not the water-particles, which may be endlessly rearranged and even replaced by some completely different type of particles, but the energy and the momentary form.

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There are other metaphorical descriptions of *viññāṇa* which seem to suggest a more static structure. See e.g. A I 223: “*kammaṃ khettaṃ viññāṇaṃ bijaṃ taṇhā sineho avijjānī-varaṇaṃ sattānaṃ taṇhāsamyojanānaṃ hināya dhātuyā viññāṇaṃ paṭiṭṭhitam*”. “*Kamma* is the field, *viññāṇa* the seed, *taṇhā* the moisture. Of beings that are hindered by *avijjā*, fettered by *taṇhā*, *viññāṇa* gets support in low conditions”. The seed is of course changing, but still an entity. — In a parable, S IV 195, *viññāṇa* is personified and called the lord of the city (*nagaraśāmi*). — In S I 122, *Māra* is looking for the *viññāṇa* of *Godhika* who had died. But *Godhika* was *parinibbuta*, and therefore his *viññāṇa* was *appatiṭṭhita*, i.e. “without support”, but it is taken for granted that, had it not been so, *viññāṇa* would have survived as an entity and therefore an easy prey to *Māra*. As belonging to the popular pulpit style, this should certainly not be taken too literally: usually it is emphatically stressed that *khandhā*, of which *viññāṇa* is one, are dissolved at death; here *viññāṇa* has been used as *citta* is used in many similar contexts.

### 2. Is *viññāṇa* dynamic ?

*Viññāṇa* is not described as principally dynamic, as demanded by hypothesis no. 2. This follows already from the above-mentioned definition M I 292 and from passages like D III 243, where it is given a purely cognitive and ideational function. Dynamic traits can, however, also be found. In M III 226, *viññāṇa* is given the attribute *anusārī*, “striving after”. In S III 9 f, *viññāṇa* is said to be *rāga-vinibaddha* (“tied with desire”) to *rūpadhātu*, *vedanādhātu*, *saññādhātu*, and *sankhārādhātu*, which are called the home (*oka*) of *viññāṇa*. This must mean that *rāga* is experienced through *viññāṇa*. Cf. S III 103, “*yo viññāṇasmim chandarāgavinayo chandarāgapahānaṃ*”, “the restraint of wish and desire, the removal of wish and desire which are in *viññāṇa*”, which probably refers to the confrontation of *chandarāga* with a counterforce within *viññāṇa*. — “*Tassa tam upekkham abhinandato abhivadato ajjhosāya tiṭṭhato tan nissitaṃ hoti viññāṇaṃ tad upādānaṃ*”. (M II 265) “If he rejoices in this equanimity, approves of it and clings to it, *viññāṇa* is dependent on it and grasps after it”. Here the function of clinging is attributed to *viññāṇa*. In S III 47, *viññāṇa* (and the other *khandhā*) is given the attributes “*sāsava upādāniya*”, “connected with *āsava* and *upādāna*”, which could mean that these factors, as conscious, work through *viññāṇa*. Both are at least partly dynamic qualities: *upādāna* means, (a) “attachment”, “clinging”, (b) “material”, “fuel”. Clinging naturally arises from *taṇhā* (as is said in the *paṭicca-samuppāda*-series): this conscious attachment is material for *bhava*; which means simply that if we want to live, we shall go on living. Cf. SN 1055:

“*viññāṇam bhava na tiṭṭhe*”, “do not set your *viññāṇa* on bhava!” i.e. “do not affect a new birth by consciously striving for it!” Of special interest in this context are the four *āhārā* (foods, sustenances), mentioned e.g. in MI 261: *kabalīṅkāra āhāra* (material food), *phassa* (sensory contact), *mano-saṅcetanā* (mental striving), *viññāṇa*. It is said that they all arise from *taṇhā* (īme cattāro āhārā taṇhānidānā taṇhāsamudayā taṇhājātikā taṇhā-pabbhavā) and that their purpose is to maintain creatures that have come to be, or to assist those seeking birth (“*bhūtānaṃ vā sattānaṃ ṭhitiyā sambhavesīnaṃ vā anuggahāya*”). They are, therefore, active in the process of rebirth. S II 13 is more specific and mentions only *viññāṇa* as having this function, while S II 101 treats them all as equally important: as targets of *taṇhā*, by means of which “*patiṭṭhitam tattha viññāṇam virūḷham*” (“*viññāṇa* is supported and becomes fruitful”) and then “*atthi tattha nāmarūpassa avakkanti*” (“there is descent of name-and-shape”).

The meaning is perhaps that *taṇhā* operates through *viññāṇa*, although not really belonging to *viññāṇa*. *Taṇhā* may become conscious through *viññāṇa*: in that case we would find active processes in *viññāṇa*.

On the other hand, *manosaṅcetanā*, which means “conscious striving”, is distinguished from *viññāṇa*, and therefore we must presuppose active processes outside *viññāṇa*. In S III 60, we find *saṅcetanā* identified with *saṅkhāra*, and the close contact between *saṅkhāra* and *viññāṇa* is well documented through the *paṭiccasamuppāda*-series. It can also be seen from the use of *abhi-saṅkhāra* in S III 53 f: “*Tad-apatīṭṭhitam viññāṇam avirūḷham anabhi-saṅkhāraṇa vimuttam*”, “Without that support *viññāṇa* has no growth, is without *saṅkhāra* and is freed”. According to M III 279 f, *vedanā*, *saññā*, *saṅkhāra* and *viññāṇa* arise because of *phassa* (*mano-samphassa-paccayā*): so they are all parallel and, at least partly, conscious.

*Saṅkhāra* has not been included for analysis in this study, but we can refer to a study by Jayatilleke (“Some problems of translation and interpretation”, UCR, vol. VII, 1949, p. 208-225), where it is shown that *saṅkhāra* is a dynamic concept, best described by words like “purposive activity”, “dispositions”, “vital impulse” and that it covers also subconscious processes. If we need not imply a time-sequence but could treat *viññāṇa* and *saṅkhāra* as complementary concepts (this will be discussed below), the two together would satisfy our search for a dynamic agency. Jayatilleke seems to imply this interpretation when he says that “... the probability is... that this part of the stream of Consciousness consisted of these dynamic *saṅkhāras* ...”

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### 3. *Has viññāṇa a subconscious component ?*

We have noted that *viññāṇa* in principle is consciousness and need not collect more evidence for this. But in order to explain the continuity, the influence of *kamma*, and the possibility to remember former existences, we assumed an unconscious component in *viññāṇa*. This is rarely mentioned. It can, however, be seen from D III 134, that *viññāṇa* is used in connection with recollection of former existences: “*Atītam ... addhānaṃ ārabbhā Tathāgataṃ satānusaṃvīṇāṇaṃ hoti*”, “concerning the past, the Tathāgata has *viññāṇa* reminiscent of existences”. Concerning a possible unconscious component, we have found only one passage worth discussing. In S II 65, two factors of importance for rebirth are distinguished, “*Yaṅca ... ceteti yaṅ ca pakappeti yaṅca anuseti, ārammaṇaṃ etaṃ hoti viññāṇassa thitīyā, ārammaṇe sati paṭiṭṭhā viññāṇassa hoti*”. “That which we will and that which we intend and that which lies as dormant tendencies — this becomes a basis for a state (prevalence, duration) of *viññāṇa*. If the basis is there, there will be a state of *viññāṇa*”. A few lines further down, this group of verbs is divided into two, and it turns out that *ceteti* and *pakappeti* are not necessary as basis for the state of *viññāṇa*: *anuseti* is sufficient: “*No ce ... ceteti no ce pakappeti atha ce anuseti, ārammaṇaṃ etaṃ hoti viññāṇassa thitīyā, ārammaṇe sati paṭiṭṭhā viññāṇassa hoti*”. “Even if we do not will or intend, but there still is a dormant tendency — this becomes a basis for a state of *viññāṇa*. If the basis is there, there will be a state of *viññāṇa*”. As *anuseti* probably refers to unconscious, i.e. latent, processes: tendencies and dispositions (the translation of Woodward misses the point), this could be taken as a proof of the close connection between *viññāṇa* and the unconscious.

The attempt to find an unconscious component in *viññāṇa* has not been very successful. One explanation could be the process-character and indistinctness of *viññāṇa*: the unconscious aspects may be there without being expressed. Another explanation may be found in the close association between *viññāṇa* and *saṅkhāra*: as mentioned above, *saṅkhāra* has an unconscious component.

### 4. *Is viññāṇa the transmitter of karma ?*

The karmic effects (the karmic memory) are connected to *viññāṇa*. “*Avijjā-gato yaṃ ... purisa-puggalo puññaṃ ce saṅkhāraṃ abhisāṅkharoti, puññūpagaṃ hoti viññāṇaṃ. Apuññaṃ ce saṅkhāraṃ abhisāṅkharoti, apuññūpagaṃ hoti viññāṇaṃ*”. (S II 82) “If an ignorant man performs an act of merit, *viññāṇa* becomes pure (“acquires merit”). If he performs

an act of demerit, *viññāṇa* becomes impure.” The same transmitting function is referred to when *viññāṇa* is called *anabhisankhāra*, “without *sankhāra*”, i.e. “without accumulation of *kamma*”. See further discussion under 6.

5. *Is free ideation attributed to viññāṇa ?*

Little is said in the Nikāyas about dreams, but free ideation is often connected with *viññāṇa*. We find, for instance, the expression *mano-viññāṇa*, “the *viññāṇa* of the inner sense”, see e.g. M III 32: “*mano-viññāṇa-viññātabbā dhammā*”, “conscious processes cognizable through the *viññāṇa* of the inner sense”. An example of what may be included in *mano-viññāṇa* is given in M I 293: “*Nissatṭhena ... pañcahi indriyehi parisuddhena manoviññāṇena kiṃ neyyan-ti. — Nissatṭhena ... pañcahi indriyehi parisuddhena manoviññāṇena ananto ākāso ti ākāsaṇaṇcayatamaṃ neyyaṃ, anantaṃ viññāṇan-ti viññāṇaṇcāyatanaṃ neyyaṃ, natthi kiñciti akiñcaṇṇāyatanaṃ neyyaṃ-ti*”. “What is knowable by purified *viññāṇa* of the inner sense, without use of the five sense-organs? — Thinking, ‘Space is unlimited’, the plane of unlimited space is knowable by pure (meaning “by itself” or “clear”) *viññāṇa* of the inner sense without use of the five sense-organs; thinking, ‘*Viññāṇa* is unlimited’; the plane of unlimited *viññāṇa* is knowable; thinking, ‘There is nothing at all’, the plane of emptiness is knowable”. Here we find examples of purely conscious activity without direct support from the senses. Probably all such “free” activity is a function of *viññāṇa*. This interpretation seems to be confirmed in S III 68, where different types of *viññāṇa* are enumerated (the formulation indicates that the enumeration is intended to be complete): “*Yaṃ kiñci viññāṇaṃ atītānāgatapaccuppannaṃ ajjhataṃ vā bahiddhā vā olārikaṃ vā sukhumaṃ vā hīnaṃ vā paṇītaṃ vā, yaṃ dūre santike vā ...*” “Every *viññāṇa* whatever, be it past, future or present, be it inward or outward, gross or subtle, low or high, far or near ...” This enumeration is strange if it were to mean the different types of *viññāṇa* found in different people rather than the changing conscious contents, e.g., ideas concerning the past, ideas concerning the remote, concerning low things, external things, and so on.

We conclude that free mental activity is a function of *viññāṇa* and that our hypothesis is satisfied on this point.

6. *Can viññāṇa explain rebirth ?*

Essential for rebirth are, according to A I 223, already quoted, *kamma*, *avijjā*, *taṇhā*, and *viññāṇa*. “We note the presence of the dynamic factor

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*taṇhā* here. More often, the three factors *saṅkhāra*, *viññāṇa* and *nāma-rūpa* are said to constitute the mechanism of rebirth (cf. D II 63 quoted above). *Saṅkhāra* corresponds to *kamma* in the former enumeration.

There is an affinity between *kamma* and the next existence: “*kamma dāyādā sattā ti vadāmi*” (M I 390), “I say: creatures are heirs to actions”. For instance, a person who performs aggressive acts of body, speech and thought is reborn in an aggressive world (*savyāpajjhaṃ lokam uppajjati*): there he is affected by aggressive *phassā*, and from them aggressive *vedanā* arise (A I 122, M I 389).

The conscious wish for rebirth plays an important part in the rebirth-process. One of the *āsavā* is *bhavāsava*. This wish comes to expression through *viññāṇa*, and you can “set *viññāṇa* on becoming”, with the phrasing used in SN 1055 quoted above. In other cases, *citta* is used in this context: “*Tassa evaṃ hoti: Aho vatāhaṃ, kāyassa bheda parammaraṇā khattiya-mahāsālānaṃ saṃvattantaṃ uppajjeyyan ti. So taṃ cittaṃ dahati, taṃ cittaṃ adhiṭṭhāti taṃ cittaṃ bhāveti; tassa te saṅkhārā ca viḥāro c’evaṃ bhāvitā bahulikātā tatr’ uppattiyā saṃvattanti. Ayaṃ ... maggo ayaṃ paṭipadā tatr’ uppattiyā saṃvattati*”. (M III 99 f). “It occurs to him: ‘O that at the breaking up of the body after dying I might arise in companionship with the nobles’. This *citta* he holds fixed, firmly established, and develops it. These aspirations (*saṅkhārā*) and this insisting of his, developed thus, zealously practiced, conduce to rebirth there. This is the way, this is the course that conduces to rebirth there”. Cf. the similar passage in D III 258 and D I 20, both already quoted. The actions of a person may also bear fruit in this life: *Aṅgulimāla*, for instance (M II 97-105) was a robber who became an arahant. This did not save him from being severely wounded by sticks and stones that were not aimed at him. The Buddha explained it as a fruit of his *kamma*.

Rebirth is to Buddhism not a metaphysical theory but an empirical fact. An adequately trained person can recall his former existences and even those of other persons. The general idea of mental causality was probably common at the time of the Buddha, and he had only to stress that it functions according to strict ethical rules. Its functioning can often be observed in the present life, where many happenings seem to be rewards and punishments. As the law of *kamma* is causal and moral and works through consciousness by means of affinities, it is well known and can be manipulated. Consciousness was felt to be the medium of this law, pro-

bably of the following reasons: (a) The actions (behaviour, speech, thoughts) are, or can become, conscious. (b) They are automatically judged in consciousness as good or bad (or, more scientifically, as *kusala* or *akusala*). (c) Consciousness is felt to change through the influence of dynamic factors, and of impressions from the outside. (d) Consciousness is felt to be able to influence matter and transcend matter, (e) Consciousness can be changed through training.

As *viññāṇa* is in its rebirth-aspect felt to be empirical and to consist of processes only, without much inner unity, there is no reason to distinguish between the perceptual *viññāṇa* and rebirth-*viññāṇa*. These are the following positive reasons for *not* doing so: (a) When *viññāṇa* in *paticcasamuppāda*-context is analyzed, it is done according to sense-fields (S II 3 f). This may not mean that *viññāṇa* consists of these parts, but only that any conscious process may be seen from these aspects. (b) *Saikhāra*, which in some contexts is analyzed into bodily, verbal and mental activity (S II 3 f), in other contexts according to sense-fields (S III 60), can influence *viññāṇa* through ordinary sense-channels. (c) As we have already seen, *viññāṇa* is connected with and influenced by *upādāna* and *taṇhā* which are both ordinary conscious processes, said to condition rebirth. (d) Rebirth can partly be directed through conscious wishes as described above. (e) In *nibbāna* the rebirth-*viññāṇa* has ceased. This is expressed in the following way in S I 116: “Tav’ eva pāpima mano tava dhammā tava mano-samphassa-viññāṇāyatanam. Yattha ca kho pāpima natthi mano natthi dhammā natthi mano-samphassa-viññāṇāyatanam agati tava tattha pāpima ti”. “Yours, O Evil One, is only *mano*, the mental content and the field of *viññāṇa* produced through contact with *mano* (the other sense-fields mentioned before in the same way). But where none of them exist, there is no access for you, Evil One.” — A person who has attained *nibbāna* is therefore free from perception-*viññāṇa* and free from *Māra*. So the two types of *viññāṇa* are quite clearly considered as identical.

Sometimes *viññāṇa* is found twice in the same context, and it may be difficult to decide, whether the same meaning is intended or not. See, e.g., M III 260: “Na viññāṇam upādiyissāmi, na ca me viññāṇanissitam viññāṇam bhavissati”. “I will not grasp after *viññāṇa* and so will have no *viññāṇa* dependent on *viññāṇa*”. The same is said about a large number of cognitive factors and the other *khandhā*. That is, to say, that there is a form of *viññāṇa* dependent on cognitive processes, and probably *viññāṇa* in its rebirth-aspect is intended, as the context deals with meditation. As

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the factors mentioned are mostly perceptions and ideas without much mystery about them, rebirth-*viññāṇa* probably also simply is ordinary consciousness. It would be strange to maintain, e.g., that a metaphysical *viññāṇa* could arise from the cognitive *viññāṇa*: they must both consist of similar conscious processes.

This explanation can apply also to passages as the following. “Yo viññāṇe chandarāgavinayo chandarāgapahānaṃ, idaṃ viññāṇe nissaraṇaṃ” (M III 18). “The removal and rejection of need and desire for *viññāṇa* is an escape from *viññāṇa*”. The rebirth-aspect is probably intended in the second place. But a simpler explanation is that it is possible to get rid of *viññāṇa* (in all aspects) (just as the other *khandhā*) simply by not needing it. The same idea is more elaborately expressed in S III 53: “(Rūpadhātuyā ..., Vedanāya dhātuyā ..., Saññādhātuyā ..., Saṅkhārādhātuyā ...,) Viññāṇadhātuyā ce ... bhikkhuno rāgo pahīno hoti, rāgassa pahānā vacchijjatārammaṇaṃ paṭiṭṭhā viññāṇassa na hoti”. “If desire for (body, feeling, perception, activities and *viññāṇa* be abandoned by a monk, by that abandonment of desire its foothold is cut off, and there is no support for *viññāṇa*.” This could mean that through freedom from the sense-perception-*viññāṇa* (together with the other *khandhā*), *viññāṇa* (in its rebirth-aspect) is without support and — as the text continues — becomes *anabhisaṅkhāra* (free from *kamma*-accumulations) and *parinibbāyati* (attains *parinibbāna*). This is an interesting attempt to connect the *khandha*-series with the *paṭiccasamuppāda*-series.

A way of attaining this cessation of *viññāṇa* (with reference both to the *khandha*-context and its *paṭiccasamuppāda*-context) is perhaps hinted at in D I 223, where it is asked where the elements find no footing. The answer is: “Viññāṇaṃ anidassanaṃ anantaṃ sabbato paṇaṃ. Ettha āpo ca paṭhavī tejo vayo na gādhati. Ettha dīghaṃ ca rassaṃ ca anuṃ thūlaṃ subhāsubhaṃ. Ettha nāmaṃ ca rūpaṃ ca asesam uparujjhati. Viññāṇassa nirodha etth’ etaṃ uparujjhati”. “*Viññāṇa* is without attributes, endless, drawing back from everything. Here earth, water, fire, and wind, and long and short, fine and coarse, pleasant and unpleasant find no footing. Here *nāma* and *rūpa* are destroyed without trace. By the cessation of *viññāṇa* all this also ceases to be”. According to the commentary *viññāṇassa nirodha* means *nibbāna*. In the first line a special level of meditation seems to be intended (the limitless *viññāṇa*, where no specified objects are experienced. This practice may end up in the cessation of *viññāṇa*: that is, rebirth-*viññāṇa* is made to cease by means of emptying the empirical *viññāṇa* — because they are identical).

7. *Can viññāṇa be stopped ?*

Because of its prominent part in the mechanism of rebirth, *viññāṇa* is a central concept in the process of liberation. “*Yaṃ kiñci dukkhaṃ sambhoṭi, sabbhaṃ viññāṇa-paccayā* (SN 734), “Whatever pain arises, is all in consequence of *viññāṇa*: A way to become free from suffering is to calm *viññāṇa*: “*Etam ādinavaṃ nātvā dukkhaṃ viññāṇapaccayā viññāṇupasamā bhikkhu nicchāto parinibbuto*” (SN 735). “Knowing this evil consequence that suffering is born of *viññāṇa*, the monk after calming *viññāṇa* is free from desire and attains *parinibbāna*”. — “*Bahiddhā ... viññāṇe avikkhitte avisaṭe sati ajjhataṃ asaṇṭhite, anupādāya aparitassato āyatiṃ jātijarāmarāṇa-dukkhasamudaya-sambhavo na hoti*” (M III 223). “If *viññāṇa* is undistracted and unbound externally and free internally, then for him who thus does not crave and grasp, there will be no origin or rise of the suffering connected with birth, old age and death”. The calming of *viññāṇa* is here described as freeing from craving and grasping.

In other contexts, the frequently occurring word *nirodha*, “cessation”, is used: “*Ajjhattaṃ ca bahiddhā ca vedanaṃ nābhinandato, evaṃ satassa carato viññāṇaṃ uparujjhati*” (SN 1111). “For him who both inwardly and outwardly does not delight in *vedanā* (sensation, feeling), for him who thus lives mindful, *viññāṇa* ceases”. — “*Ye ca kho keci ... samanā vā brahmaṇā vā evaṃ viññāṇaṃ abhiññāya evaṃ viññāṇasamudayaṃ abhiññāya evaṃ viññāṇanirodhaṃ abhiññāya evaṃ viññāṇa-nirodhagāminiṃ paṭipadaṃ abhiññāya viññāṇassa nibbidā virāgā nirodhā anupādā vimuttā te suvimuttā*.” (S III 61) “Moreover, whatsoever recluses or brahmins, by thus fully understanding *viññāṇa*, its arising, its ceasing and the way leading to its ceasing by the disgust, at by the fading out of, by the ceasing of *viññāṇa* are liberated without grasping, — they are truly liberated”. As pointed out in connection with D I 223, there may not be any fundamental contradiction between calming and cessation.

In, for instance, S III 61 and M I 53, the way to the cessation of *viññāṇa* is indicated: the noble eightfold way (“*Ayam eva ariyo aṭṭhaṅgiko maggo viññāṇanirodhagāmini paṭipadā*”). Most important in this connection are the exercises belonging to *samādhi*, where *viññāṇa* frequently is mentioned. See, for instance, M I 293, referred to above, where three of the higher levels of meditation are attributed to *viññāṇa*: the level of unlimited space, of unlimited *viññāṇa* and of emptiness. We find frequently a more complete description of the different levels, where however the experiences are

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said to be achieved by means of *saññā*. To sum up the sequence, we find that separate ideas first are gradually expelled from consciousness, starting with the cognitive ideas: feelings remain but give way to a general experience of equanimity; by expelling all cognitive ideas of separate objects, it is possible to visualize the empty and infinite space. (D I 183: *bhikkhu sabbaso rūpasaññānaṃ samatikkamā paṭigha-saññānaṃ atthagamā nānattasaññānaṃ amanasi-kārā 'ananto ākāso ti ākāsaññācāyatanam upasampajja viharati*", "the monk, by passing beyond the perception of form, by putting an end to sense-reaction, by paying no attention to perceptions of diversity thinks: "The space is infinite", and reaches up to and remains in the mental state of infinite space".) This experience is then made still more abstract and contentless by being directed inwards and changed to a visualization of consciousness (always: *viññāṇa*) as infinite. Here, the distinction between internal and external has gone (D I 183 f: "*bhikkhu sabbaso ākāsaññācāyatanam samatikkamma 'anantaṃ viññāṇaṃ ti viññāṇaññācāyatanam upasampajja viharati*", "the monk, by passing quite beyond the mental state of infinite space thinks: 'consciousness is infinite' and reaches up to and remains in the mental state of infinite consciousness"). Then the monk tries to get rid also of the visualization of *viññāṇa* and replaces it with the experience that neither this endless consciousness nor anything else exists: he is then above both objects and their names and visualizes endless emptiness (D I 184: "*bhikkhu sabbaso viññāṇaññācāyatanam samatikkamma 'na'atthi kiñcīti' ākiñcaññāyatanam upasampajja viharati*", "the monk, by passing quite beyond the mental state of infinite consciousness, thinks: 'nothing exists', and reaches up to and remains in the mental state of nothingness"). The normal function of consciousness, to present information in images and symbols, is now nearly thrown out of gear by letting one single image, which is so vague it is nearly no information at all ("nothing is"), fill the whole consciousness. Through its very vagueness, the image is close to abolishing itself; and with it, consciousness in the ordinary sense also goes. This is what happens in the next stage, a transitional stage of neither-perception-nor-non-perception (S IV 217: "*nevasaññānāsaññāyatanam samāpannassa ākiñcaññāyatanasaññā niruddhā hoti*", "when one has attained the mental state of neither-perception-nor-non-perception, the consciousness of nothingness has ceased"). Then the summit is reached:

"So kho ahaṃ Ānanda aparena samayena sabbaso nevasaññānāsaññāyatanam samatikkamma saññāvedayitanirodham upasampajja viharāmi, paññāya ca me disvā āsavā parikkhayam agamaṃsu." (A IV 448). "And presently, Ananda, passing wholly beyond the mental state

of neither-perception-nor-non-perception, I entered and abode in the cessation of perception and feeling and I saw by wisdom that the obsessions were completely destroyed”.

The last passage describes a state of trance where the ordinary, everyday consciousness does not function (further description follows). It is of special interest to note, that this experience here is said to be accompanied by the knowledge that *āsavā* are destroyed. This usually means that the person has attained *nibbāna*.

This passage may be compared with M III 32, a part of which has been discussed already. It is said that when the desire (*taṇhā*, among others) for all the sense data has been stopped — “then I know that my *citta* is freed”. And the whole passage is summarized in the following words: “Evaṃ kho me ... jānato evaṃ passato imesu chasu ajjhattikabāhiresu āyatanesu anupādāya āsavehi cittaṃ vimuttan ti”. “So, as I know thus and see thus in respect of these six internal and external sense-fields, I can say that my *citta* is freed from the *asavā* without grasping”. Here, the experience of liberation is put in direct connection with the facts of sense-perception and sense-*viññāṇa*: liberation is attained by stopping the need for them.

So far, it seems that *saññāvedayitanirodha* is identical with *viññāṇa-nirodha*. There is nothing impossible in that interpretation, as consciousness (in the ordinary sense) certainly is made to stop in the summit of meditation, and when consciousness goes, the desires that work through it, and the feeling of pain must also go. *Viññāṇa* is sometimes identified with *saññā* and *vedanā*: “Yā ca ... vedanā yā ca saññā yañca viññāṇaṃ ime dhammā saṃsaṭṭhā no viṣaṃsaṭṭhā, na ca labbhā imesaṃ dhammānaṃ vinibbhujitvā vinibbhujitvā nānākaraṇaṃ paññāpetum” (M I 293). “That which is feeling and that which is perception and that which is *viññāṇa* — these states are related, not unrelated, and it is not possible to lay down a difference between these states, having analyzed them again and again”.

According to D III 228 (to be discussed later), on the other hand, *viññāṇa* depends on *saññā*.

In M I 296, a dead man is compared with a man who has attained *saññāvedayitanirodha*:

- (a) The living body has:  
     āyu, vitality  
     usmā, heat  
     viññāṇa.

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- (b) In the dead body:  
 kāyasaṅkhārā niruddhā, bodily action has ceased  
 vacīsaṅkhārā niruddhā, verbal activity has ceased  
 cittasaṅkhārā niruddhā, mental activity has ceased  
 āyu parikkhiṇo, the vitality is destroyed  
 usmā vūpasantā, the heat is calmed  
 indriyāni viparibhinnāni, the sense-functions are broken asunder.
- (c) In the person who has attained saññāvedayitanirodha:  
 kāyasaṅkhārā niruddhā, bodily action has ceased  
 vacīsaṅkhārā niruddhā, verbal activity has ceased  
 cittasaṅkhārā niruddhā, mental activity has ceased  
 āyu aparikkhiṇo, the vitality is not destroyed  
 usmā avūpasantā, the heat is not calmed  
 indriyāni vippasannāni, the sense functions are purified.

We find that the question about the fate of *viññāṇa* is evaded. The expression “indriyāni vippasannāni” seems rather to imply that the chances of fine and accurate perceptions have become better. On the other hand it would, strictly speaking, follow from the cessation of the three *saṅkhārā* that *viññāṇa* also has ceased.

From this discussion, the conclusion cannot be drawn that saññāvedayitanirodha *could* be identified with *nibbāna* and *nibbāna* therefore be some sort of unconsciousness. The saññāvedayitanirodha is a state of short duration, and it does not seem to have been much cultivated. But the levels below this have been highly estimated as workable means to get rid of desires and worries (dissolve them, not “repress” them) and to deprive sense—objects of their interest. The ideal was perhaps to make consciousness permanently free from attributes and limits (D I 223). So, even conscience would stop working (Dh 267) and the monk would not be aware of any karmic consequences of his acts.

### *A systematic summary*

We shall now try to define *viññāṇa* by asking the same questions as used earlier in this paper.

#### 1. *Is viññāṇa consciousness?*

We have already quoted evidence for a positive answer (M 292, D III 243). There is small evidence for an unconscious component (S II 65).

## 2. Is *viññāṇa* an entity ?

It is possible to find passages, e.g. S IV 195 and S I 122, already quoted, which could favour an entity-theory, but in general, *viññāṇa* is described in process-terms. It arises as a product: “cakkhuñca paṭicca rūpe ca uppajjati viññāṇam, cakkhuvīññāṇan-t’eva saṅkham gacchati” (M I 259), “if *viññāṇa* arises dependent on eye and forms, it is called eye-*viññāṇa*”; and so on for the other senses. It depends on the body: “Ayaṃ kho me kāyo rūpī ..., idaṃ ca pana me viññāṇaṃ ettha sitaṃ ettha paṭibaddham” (D I 76). “This body of mine has form ...; and therein is this *viññāṇa* of mine bound up, on that does it depend”. It appears and disappears depending on conditions: “Saṅkhārasamudayā viññāṇasamudayo, saṅkhāranirodhā viññāṇanirodho, ayam-eva ariyo aṭṭhaṅgiko maggo viññāṇa-nirodha gāminī paṭipadā” (M I 53), “From the arising of activities *viññāṇa* arises; from the stopping of activities, *viññāṇa* stops; from the stopping of activities, *viññāṇa* stops; the way leading to the stopping of *viññāṇa* is this noble eightfold path”.

## 3. Is *viññāṇa* an instrument ?

When *viññāṇa* is described in process-terms, an instrumental function is usually not pointed out. However, as consciousness, it has the function of “making things known” to the person (M I 292, quoted above). This is said quite clearly in M III 242: “Athāparaṃ viññāṇaṃ yeva avasissati parisuddham pariyodātaṃ, tena viññāṇena kiñci jānāti. — Sukhaṃ ti pi vijānāti; dukkhaṃ ti pi vijānāti; adukkham-asukhaṃ ti pi vijānāti”, “There-upon *viññāṇa* alone will be left which is quite pure and clean. With that *viññāṇa* he knows something: he becomes aware of pleasure, he becomes aware of pain and he becomes aware of neutral feeling.”

## 4. Functions of *viññāṇa*

(a) *Perception*. *Viññāṇa* has a perceptive function and its processes are classified according to senses. In M I 293, quoted above, it is stated that it is not possible to lay down any difference between *vedanā*, *saññā* and *viññāṇa*. According to D II 338, the body (*kāya*) can perceive things through the senses and become aware of mental states through *mano* (*manasā* pi dhammaṃ vijānāti), only if it has life, heat and *viññāṇa*. — In M III 32 a distinction is made between (need for) “cakkhusmiṃ ..., rūpe, cakkhuvīññāṇe, cakkhuvīññāṇa-viññāṭabbesu dhammesu” and so on down to “manasmim ... dhamme manovīññāṇe manovīññāṇa-viññāṭabbesu dhammesu”. “Eye, form, visual *viññāṇa*, ideas cognizable through visual *viññāṇa*

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... *mano*, idea, *mano-viññāṇa*, ideas cognizable through *mano-viññāṇa*". What is meant here is probably:

<i>For the five senses:</i>	<i>For mano:</i>
sense-organ	the inner sense
object, stimulus	ideas, mental images
perceptual images	conscious manipulation. (Cf. M I 293)
mental images	images of memory, imagination, etc.

To every sense-field belong *dhammā*, i.e. mental images, which can be experienced and "understood" through the *viññāṇa* of that field, and, as *dhammā*, constituting the field also of *mano*. *Mano* receives the perceptual images belonging to the senses; they are interpreted and manipulated (for instance, in thinking) by *manoviññāṇa*; but *mano* has also *dhammā* of its own, namely the images produced in memory and imagination; these may be referred to here as *manoviññāṇaviññātabba dhamma*.

*Saññā* and *vedanā* could perhaps be called part-functions of *viññāṇa*, although by *viññāṇa* is understood mainly the end-product of the perceptual process: the resulting images and ideas, and has perhaps an interpreting, understanding and manipulating function. It is therefore further removed from the real objects than the two other functions. *Mano* is here described as especially concerned with the images of memory, imagination and thinking. It is doing the basic work for *viññāṇa*, just as the other senses, but is, according to modern ways of viewing these matters, on a higher level as it is working with material that has probably already been conscious in one form or another or formed in the "subconscious".

Further support for the view that *viññāṇa* is in some way based on *saññā* and *vedanā* is provided by the following two passages. In D III 228 are mentioned the four supports of *viññāṇa*, among them: "*Saññūpāyaṇ vā ... viññāṇaṃ tiṭṭhamānaṃ tiṭṭhati saññārammaṇaṃ saññāpatitṭhaṃ nandūpavesanaṃ vuddhiṃ virūlhiṃ vepullaṃ āpajjati*". "*Viññāṇa* is firmly supported by means of *saññā*, with *saññā* as object, with *saññā* as support, it attains to happiness, growth, increase and full development". In S III 9 f, *rūpadhātu*, *vedanādhātu*, *saññādhātu* and *saṅkhārādhātu* are called the "home" of *viññāṇa*. — It should on the other hand not be forgotten that *saññā* often is used for "higher" mental functions than perception.

This view about *saññā* and *viññāṇa* does not agree with a passage in E. R. Sarathchandra, "Buddhist psychology of perception" (1958), where it is said; "In the Nikāya formulas of sense-perception *saññā* is said to occur after *viññāṇa*, and ... we might infer that *saññā* meant a later stage in the process ..." (p. 16). He bases this view on M I 111 f: "cakkhuñ ca paṭicca rūpe ca uppajjati cakkhuviññāṇaṃ, tiṇṇaṃ saṅgati phasso, phassapaccayā vedanā, yaṃ vedeti taṃ sañjānāti, yaṃ sañjānāti taṃ vitakketi". "Dependent on the eye and forms arises visual perception, the concurrence of the three is contact, dependent on contact is feeling (and sensation), what one feels one recognizes and what one recognizes one thinks about". If a temporal sequence were implied here, *saññā* would come after *viññāṇa*. But as Professor Jayatilleke has pointed out ("Early Buddhist Theory of Knowledge", London, 1963, p. 435 f), *vedanā*, *saññā* and *vitakka* could be meant to occur simultaneously with *phassa*. Grammatically, "tiṇṇaṃ ... vitakketi" can be taken as an appositional expansion of "cakkhuviññāṇaṃ", explaining the whole *viññāṇa*-process.

(b) *Higher intellectual functions*

Attention is not usually attributed to *viññāṇa*, but as every conscious function it can be disturbed. "Tathā tathā ... bhikkhu upaparikkheyya, yathā yathā upaparikkhato bahiddhā cassa viññāṇaṃ avikkhittaṃ hoti avisaṭaṃ ajjhataṃ asaṅghitaṃ anupādāya aparitassato āyatiṃ jātijarā-maraṇadukkhasamudayasambhavo na hoti". (I 93 f). "A monk should investigate (things) in such a way that his *viññāṇa*, as he investigates, is not scattered and rambling externally and also not unconcentrated internally. And without grasping, as he is without craving, there shall be no arising in the future of suffering resulting from birth, old age and death". What is referred to here, is not so much attention in connection with perception but in connection with intellection. This free ideational activity is often attributed to *viññāṇa*, as already mentioned (M I 293, S III 68). As to memory, it is said that *viññāṇa* remembers former existences (D III 134), but *viññāṇa* does not operate through the ordinary memory.

(c) *Feelings and emotions*

We have already shown that feelings belong to *viññāṇa* (M III 242, M I 292). Emotions are never mentioned in connection with *viññāṇa*.

(d) *Dynamic and moral traits*

We refer to a previous discussion which shows that *viññāṇa* to some extent has a dynamic side. It is rarely mentioned in connection with the moral side of man's behaviour.

## A - PSYCHOSEMANANTIC INVESTIGATION

### 5. *Is viññāṇa personal ?*

*Viññāṇa* must be personal as so great a part of the conscious life of the person is contained in it. It is also sometimes — against the general trend — personified to some sort of personality (S IV 195, S I 122, as quoted above). Usually it is stressed that *viññāṇa* should not be identified with the self: “na viññāṇam attato samanupassati, na viññāṇavantaṃ vā attānaṃ, nāttani vā viññāṇaṃ, na viññāṇasmiṃ vā attānaṃ”. (M III 18) “He does not regard *viññāṇa* as self, nor self as having *viññāṇa*, nor *viññāṇa* as in self, nor self as in *viññāṇa*”. And S III 68 “... sabbaṃ viññāṇaṃ netam mama neso’ham’asmi na meso attāti evam etaṃ yathābhūtaṃ sammappaññāya datṭhabbam”. “All *viññāṇa* must be thus regarded, as it really is, by right insight: “this is not mine; this is not I; this is not my self”. Its inner organization is of course effectively masked through its subdivision according to sense-fields, and therefore its personal uniqueness can be denied as thoroughly as is done here. Still, the *viññāṇa* that is effective in the process of birth is entirely personal.

### 6. *Can viññāṇa be influenced or trained ?*

As *viññāṇa* has nothing to do with emotions and the moral behaviour of man, it need not be trained in the same way as *citta*. The process of meditation, however, is much concerned with *viññāṇa*. As we have already seen, the purpose of these exercises is to stop and tranquillize the conscious processes, and then empty the internal space and break its limitations. In this way, calmness and detachment can be effected. Finally, consciousness temporarily can be made to cease completely. A rich variation of methods has been devised for this purpose.

### *Comparisons*

Table 1 is a semantic differential offered as a summary of our findings. It is constructed as a quantitative rating-scale: to the left we find the variables which we have considered in this work, and the columns correspond to the degree in which the concepts are endowed with the attribute.

Column O: no trace of this attribute has been found in connection with the concept, or, a clear statement is found that this attribute is lacking.

- „ 1: doubtful references to the attribute are found in connection with the concept.
- „ 2: It is fairly certain that the attribute can be ascribed to the concept.
- „ 3: It is clearly and unequivocally stated that the concept has this attribute.

A rating-scale is meant to be exact and looks very quantitative and reliable, so it must be clearly stated that a good deal of subjective judgement is involved in it. To make it easier for the reader to form his own judgement (and perhaps make his own ratings), we append a few references which can be looked up in this paper.

In some cases, a concept has been given two ratings, namely, when clear statements for both can be found. There is then a contradiction in the concept itself.

From the chart we find that all our concepts are conscious (including or consisting of conscious processes), changing, personal and complex (in the sense that they have many functions and are not described without contradictions).

None of them corresponds to our concepts of personality and the ego, although both *citta* and *viññāṇa* are very central concepts (i.e. have central functions, essential for the person, and therefore close to identification with the ego). They are all more or less empirical concepts, although meta-physical aspects are mentioned in connection with *viññāṇa* and *citta*. *Mano* seems to be more instrumental, more like a center with defined functions than the other two: it is just given, like the other senses, and is never said to be caused or conditioned: it seems to be an organ like eyes and ears and therefore given in birth; whether it can be changed or improved by training is also doubtful.

As to the functions, the chart gives a fairly clear picture. *Mano* is the center for perception (to which also feeling belongs), attention, ideation, memory, and thinking, so far clearly a cognitive center. It has also an active and directive side, but engaged only in the higher directive processes, in which the original needs are less important than planning, consistency, will and character; it is therefore important as a moral agency.

*Citta* is sensitive to information and can be developed more than the others. It can be made an instrument for thought processes and especially super-knowledge. But originally it is afflicted with all the primitive and morally objectionable emotions and selfish needs. It can be trained to stability and purposive energy and plays then a more central part in the moral behaviour than *mano*.

*Viññāṇa* is less active than the other two. It is engaged in perception (and feeling) and ideation but plays no prominent part in the higher cognitive processes. Except for its *karma*-transmitting functions (about which very little is said and in which perhaps *saṅkhāra* plays a more important part), it would have been simply a name for perceptive and ideative processes.

# A PSYCHOSEMANANTIC INVESTIGATION

Chart 1.

## SEMANTIC DIFFERENTIAL

c =citta

m =mano

v =viññāna

	0	1	2	3
1 Entity		v		c m
2 Process		m		c v
3 Conscious				c m v
4 Subconscious	m	c v		
5 Active			v	c m
6 Independent	v		m	c
7 Surviving	m v	(v)	c	
8 Changing				c m v
9 Caused	m		c	v
10 Instrument			c v	m
11 Can be trained		m		c v
12 Attains liberation	m v	(v)		c
13 Personality	m v		c	
14 Self	m v	c		
15 Personal				c m v

### *Functions*

16 Perception			c	m v
17 Super-knowledge	m		v	c
18 Attention		v	c	m
19 Memory, ideation		c		m v
20 Intelligence, thought		v		c m
21 Feeling		c		m v
22 Emotion	v	m		c
23 Needs, drives	m		v	c
24 Will, purposiveness	v			c m
25 Activity, initiative		v		c m
26 Moral traits	v			c m

### *The concept*

27 Empirical	(v)		c	m v
28 Complex				c m v
29 Central		m		c v

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## *References to the semantic differential*

### A. *citta*

- (1) M I 341, D II 36. — (2) S V 418, M III 45. — (3) Dh 37, S IV 293 f. — (4) S III 13. — (5) D III 239, S I 39. — (6) M I 511, A IV 34, S I 39. — (7) S V 370, U 37. — (8) S II 94, D II 299, A I 10. — (9) D II 299. — (10) A III 437, A IV 422, M I 22. — (11) D I 77-84. — (12) S III 45, D II 81. — (14) A IV 34, M I 511, D II 266. — (15) S I 178, D I 213. — (16) S IV 125. — (17) D I 77-84. — (18) A IV 422. — (19) M I 22. — (20) A I 9, A IV 402. — (21) M II 145, S V 302. — (22) S III 16, D I 71. — (23) Dh 154, M I 36. — (24) D III 239, A IV 39, D II 36. — (25) S I 39, A IV 34. — (26) M I 36, D III 237.

### B. *mano*

- (1) M I 295. — (2) S III 46. — (3) D I 70, D III 242, SN 834. — (5) D III 191, M I 272. — (6) A III 443, M I 16, S I 197. — (7) S IV 69, S I 116. — (8) S IV 69. — (10) SN 1142, D II 176. — (11) D III 36. — (15) A I 170. — (16) M III 216, M I 191. — (18) S II 24. — (19) S V 218, D II 176, S I 197. — (20) S N 834. — (21) S V 74, M III 216. — (22) Dh 96, Dh 233. — (24) D I 18, D III 228. — (26) Dh 233, M I 373. — (28) M III 216. —

### C. *viññāṇa*

- (1) S IV 195, S I 122. — (2) M I 259, S III 103. — (3) M I 292, D III 243. — (4) S II 65. — (5) M III 226, M II 265. — (6) M III 279 f. — (7) SN 1111, S III 61, (S I 122), D III 105. — (8) S III 103. — (9) S II 3 f, M I 256. — (10) M III 242. — (11) M III 223, M I 293. — (12) S III 53. — (14) M III 18, S III 68. — (15) S I 122, S II 65. — (16) S III 87, M III 32. — (17) D III 134. — (18) I 93 f. — (19) S III 68, M I 293. — (20) I 93 f. — (21) M I 292. — (23) S III 103, M II 265. — (25) M III 226. — (26) S II 82. — (27) M. I 292, (D II 63).

## A PSYCHOSEMANANTIC INVESTIGATION

### Relations

1. *Viññāṇa* forms part of both the *khandha*-series: *rūpa*, *vedanā*, *saññā*, *saṅkhāra*, *viññāṇa*, and the *paṭiccasamuppāda*-series. The former is the factors constituting personality or the aspects under which it may be seen. The latter is a similar but much more elaborate series of psychological factors, arranged in a sequence of dependence. It has sometimes been called a causal nexus, but positive correlation rather than causal necessity is implied in *paṭicca*. Therefore, the series should primarily be taken as a series of correlative interdependences: a time-sequence is certainly implied in some cases but in principle all the links may well be simultaneous. The purpose of the series seems to have been to explain man's natural state of *dukkha* (*bhava*, *jāti*, *jarā-maraṇa* etc.) and show a way to overcome it. The starting point is sometimes said to be *avijjā*, sometimes *viññāṇa*, and it is usually stressed that *dukkha* can be eradicated by the cessation (*nirodha*) of these and the other factors.

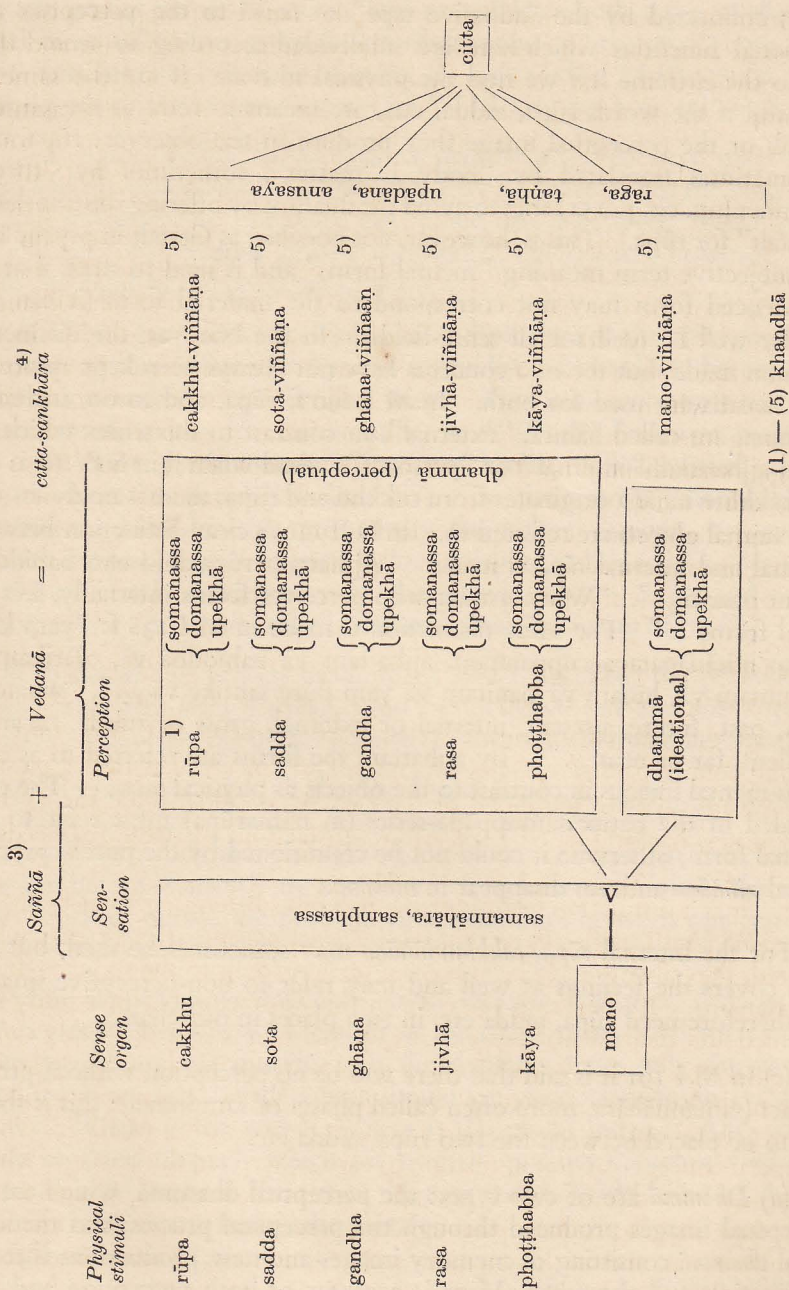
A strict time-sequence cannot have been intended, as different arrangements can be found, and an interdependence is sometimes stressed. In M I 261, for instance, it is said “*cattāro āhārā taṇhānidānā taṇhāsamudayaṇa taṇhājātikā taṇhāpabhavā*”, “the four types of provision (to which *phassa*, *manosañcetanā* and *viññāṇa* belong) have thirst as the provenance, thirst as source, thirst as birth, thirst as origin”. In the *paṭiccasamuppāda*-series, *taṇhā* comes later than *viññāṇa*. And according to S II 13 “*viññāṇāhāro āyatim punabhavābhinibbattiyaṇa paccayo*”, “the consciousness-provision is the condition of renewed becoming and birth in the future”: only after that, the six sense-fields and contact are mentioned. In D II 32 and 63 it is stated that *nāmarūpa* depends on *viññāṇa*, which itself depends on *nāmarūpa*. — In M I 261 we find the sequence *phassa—vedanā—taṇhā—viññāṇāhārā*. — In S II 3 ff, *saṅkhāra* is analyzed into *kāya-*, *vacī-* and *citta-saṅkhāra* (of which the last-mentioned in S IV 293 is analyzed into *saññā* and *vedanā*). — *Nāma* is divided into *vedanā*, *saññā*, *cetanā*, *phassa* and *manasikāra*. The result is, that *vedanā* comes to be contained three times in the series, *saññā* twice and *phassa* twice. The interpretation of *avijjā* and *saṅkhāra* as belonging to a previous existence is impossible, as it would make *nibbāna* unattainable in this life: *nibbāna* is the cessation of *dukkha* which is effected through the cessation of *avijjā*. But it is impossible to eradicate the *avijjā* of a former existence. It must be maintained that the present *dukkha* depends on a present *avijjā*: that is the condition for making them both cease. We conclude that interdependence rather than a strict time-sequence was intended.

Both the *khandha*-enumeration and the paṭiccasamuppāda-series can be seen as an analysis of personality. The emphasis is different, and they are constructed for different purposes, but the contents are the same in principle. All the *khandhā* can be found at least once in the paṭiccasamuppāda-series as explained in S II 3 ff. The correlational aspect can be found also in the *khandhā* as *viññāṇa* is said to depend on the other *khandhā* (S III 55). In the following formulations the common ground of the two series is stressed: “n’ atthi khandhādisā dukkhā” (Dh 202), “there is no pain like *khandhā*”; “paṭiccasamuppānā ... pañc’-upādānakhandhā” (M I 191) “the origin of the five *khandhā* is conditioned”, “ime ... upādānakhandhā chandamūlakā” (M III 16), “these *khandhā* have desire as root”. In the last quotation *chanda* is used for “desire”, but its meaning is not far removed from *taṇhā* which we find in the paṭiccasamuppāda-series. *Citta* is freed by loosing interest in the *khandhā* (M III 30), that are dissolved only in death (M I 49, “khandhānam bhedo ... idaṃ vuccati maraṇam”). In S III 59-61, on the other hand, the cessation of the *khandhā* is aimed at: “Ayaṃ eva ariyo atthaṅgiko maggo rūpa-(vedanā-, saññā-, saikhārā-, viññāṇa-) nirodhagāmini paṭipadā”, “this noble eightfold path is the way to the cessation of form (feeling, perception, purposive activity, *viññāṇa*).”

It is interesting to note that *viññāṇa* in some cases is said to depend on *taṇhā*, in other cases on *saikhārā*, as these are the two active, dynamic factors in the paṭiccasamuppāda-series, partly because we here find the dynamic counterpart to *viññāṇa* which itself is conceived as rather passive, partly because we are reminded of the current psychoanalytic theory that consciousness has originated as vicarious satisfactions of frustrated needs.

2. It is a distinctive feature of the processes belonging to *mano* (M III 216), *saññā* (A III 413), *phassa*, *vedanā*, *viññāṇa*, *taṇhā* (S II 3 f), that when analyzed, they always have been broken up according to the six sense-fields (*saḷāyatanam*). By breaking them up in this abstract way, their unity can be denied and their identification with the self be prevented. Only *citta* is never analyzed in this way. Table 2 is an attempt to show the relations between the concepts treated in this paper. A few explanations follow. (a) The general outline of the chart has been derived from M III 32, where the crucial concepts are put in relation to each other. In this passage, which has already been discussed, it is said that *citta* through *taṇhā* is bound to the senses, their objects, the perceptions and the perceptual images (also included in the *dhamma*), and further to *mano* and its functions. *Citta* is freed from the *āsava* through the ending of *taṇhā*. Therefore *citta* is placed to the

## A PSYCHOSEMANANTIC INVESTIGATION



right; connected by the "adhesive tape" of *taṇhā* to the perceptual and ideational functions which here are subdivided according to sense fields. (b) To the extreme left we find the physical stimuli. It sometimes seems doubtful if the words *rūpa*, *sadda*, etc., are meant to refer to the physical stimuli or the perceptual image they produce in the observer: *rūpa*, e.g., is sometimes translated by "body", "matter", sometimes by "form". Guenther (op. cit. p. 151) tries to avoid the dualism by offering the translation "Gestalt" for *rūpa*. This is, however, not possible, as Gestalt in psychology is a subjective term meaning "mental form," and is used to stress that the experienced form may not correspond to the material form (it can also equally well be used for all sense-fields). In the Nikāyas, the distinction has been made, but the two concepts have not always been kept apart: the same words are used for both. In M I 190 f, *rūpa*, and so on, including *dhamma*, are called *bāhirā*, "external", in contrast to the senses which are called *ajjhātika*, "internal" or "personal". And when it in S IV 68 is said that *cakkhuvīññāṇa* originates from *cakkhu* and *rūpa*, there is no doubt that the external objects are referred to. In D II 110, a clear distinction between external and internal *rūpa* is made: "Ajjhattaṃ rūpaṇāṇi eko bahiddhā-rūpāṇi passati...". "When a man who perceives forms internally, sees external forms ...". The same distinction is made in M I 138 f: "yaṃ kiñci rūpaṃ atītānāgatapaccuppannaṃ, ajjhattaṃ vā bahiddhā vā, olārikaṃ vā sukhumaṃ vā, hīnaṃ vā paṇītaṃ vā yaṃ dūre santike vā ...", "whatever form, past, future, present, internal or external, gross or subtle, mean or excellent, far or near ...". By *ajjhattaṃ* the forms are referred to as conscious mental images in contrast to the objects as physical facts. — The *rūpa* included in the *paṭiccasamuppāda*-series (in *nāmarūpa*) must refer to the internal form, otherwise it could not be conditioned by the purely psychological *viññāṇa* and not disappear in *nibbāna*.

For the internal *rūpa*, *cakkhuvīññāṇa* may sometimes be used, but this term covers the feelings as well and may refer to non-perceptive images. We therefore need *rūpa*, *sadda* etc. in two places in our chart.

(c) In M I 191 it is said that there will be no perception without proper contact (*samannāhāra*, more often called *phassa* or *samphassa*): this is therefore to be placed between the two *rūpa*, *sadda* etc.

(d) *Dhammā* are of two types: the perceptual *dhammā*, which are the perceptual images produced through the perceptual process, and the ideational *dhammā* consisting of memory images and new productions through imagination and thought. *Mano* is a center of both perception and free

## A PSYCHOSEMANTIC INVESTIGATION

ideation, and it perceives, stores, and manipulates both types of *dhammā*. Here, the sensations are given their feeling-tones, and therefore, both *saññā* and *vedanā* may be functions of *mano*, (as indicated in M III 279 f). The enumeration of the 18 *mano-upavicārā* (M III 216) has been followed here.

(e) It is not possible to lay down a definite order between *mano-upavicārā* and the processes of *viññāṇa*: they may be more or less the same, and it is also stated that no difference can be laid down between *vedanā*, *saññā*, and *viññāṇa*. For reasons already mentioned, *viññāṇa* has, however, been put to the right of the processes of *mano*.

(f) *Citta* is here not conceived as an end-product of the other processes but as an agency influenced by and normally interested in the activities sometimes described as performing them. This is in agreement with the general trend, expressed, for instance, in S III 46: "thāmase parāmase asati rūpasmiṃ (vedanāya, saññāya, saṅkhāresu, viññāṇasmiṃ) cittaṃ virajjati vimuccati anupādāya āsavehi". "As there is no more stubborn perversity in him, his *citta* turns away from form (feeling, perception, activities, *viññāṇa*) and is released by not grasping at the *āsavā*". Here the *khandhā* are clearly conceived as factors outside *citta*. — *Saññā* and *vedanā* sometimes (e.g., S IV 293) called *citta-saṅkhāra*, "activities of *citta*".

In as far as the process-meaning of *citta* is implied, the processes of *viññāṇa*, especially *mano-viññāṇa*, must be included, but also some special activities, particularly the higher cognitive processes and dynamic processes.

(g) We may note that all the five *khandhā* are mentioned in the chart; only *kāya-saṅkhāra*, "bodily behaviour", and *vacī-saṅkhāra*, "verbal behaviour", to which also thought-processes are counted (an extreme behaviorism before Watson!) are not there. It is, however, outside the scope of this work to pursue the problem of relationships between our concepts and the *khandhā* any further.

While all perceptive functions, most ideative functions, feelings and most dynamic processes are included in the chart, many vital parts of the human psyche are left outside. Of the dynamic traits only the natural inborn needs are mentioned: where should we place motivations for good actions? Where is the will? Where is the moral judge? And where are the channels through which the normal qualities influence *viññāṇa*? And how could we fit in the rest of the *pañcāsamuppāda*-factors? Only further research can complete the picture.

RUNE E. A. JOHANSSON

## *The Language of a Tamil Plakkaat of the Eighteenth Century*

**D**URING the Dutch rule of Ceylon (1658—1796), the central and local governments issued proclamations, publications and orders which had to be obeyed and observed by the general public. Dutch publications of this type were called “plakkaats”. These plakkaats were issued in Dutch, Sinhalese and Tamil. They were not only read and proclaimed at public places but also displayed at important places for the information of the public and were liable to be torn off or destroyed. This is the reason why few plakkaats have survived today. Some of the plakkaats issued by the Dutch government in Tamil are preserved in the Ceylon Government Archives. The earliest of the printed plakkaats preserved in the Government Archives is dated 6th August 1742.<sup>1</sup>

The Dutch were the first to employ the Tamil language in legal documents and therefore these plakkaats are of exceptional importance to the study of the history of the Tamil language. A phonological and morphological analysis of an early plakkaat issued in the time of Jacob Christiaan Pielat<sup>2</sup> who was sent as Special Commissioner to investigate into the state of affairs in Ceylon in December 1732, is made in this paper.

### **Writing**

The orthographical peculiarities of the plakkaat under consideration are :—

1. The consonants are not dotted.
2. The short vowel *e* and the long vowel *ē* are written alike. The dot which characterised the short vowel *e* as written in this period is absent. Similarly the dot which characterised the combination of consonants with the short vowels *e* and *o* is also absent.

1. Jurriaanse, M. W. *Catalogue of the Archives of the Dutch Central Government of Ceylon, 1640—1796*, Ceylon Government Press, Colombo, 1943, page 127.

2. *Memoir of Jacob Christiaan Pielat*: Translated by Sophia Pieters, G. J. A. Skeen, Government Printer, Colombo, 1905, page 16.

## THE LANGUAGE OF A TAMIL PLAKKAAT

There are some numerals written in Tamil characters in the following way. க = one, உ = two, ந = three, ரு = five, ஏ = seven. Ten is written as 'ஐ' and twenty is written with the sign for ten 'ஐ' preceded by 'உ'. Hundred is written as 'ஈ'. Seven hundred is written by prefixing 'ஏ' to 'ஈ' which is the sign for hundred. Thousand is written as 'கூ'. In two instances, the numbers are followed by "āṇṭu", the word for year.

கூளாயுடு :m: āṇṭu "the year 1715"

கூளநயடு :m: āṇṭu "the year 1733"

The Tamil word for day or date is "tikati". It is also found preceded by numerals. ஐக :m: tikati "eleventh day", உயரு :m: tikati "twentyfifth day". In the following instance, the numeral precedes the word for a certain coin. ருஐ: iraiyāl "fifty reals".

There are some stylistic peculiarities of the scribe. 'தி' is written as 'தி', 'யா' is written 'யா'. 'ட்ட,' is written as 'ட்ட'. The word for month in Tamil is 'மாதம்' and this is written as 'மி'.

The following is the text of the plakkaat which is dated 25th Paṅkuni, 1733. The place of issue is the Colombo fort.

ஈந்தியவில ஆலொசனைக்கு எகஸததெர ஒடுதனூரியவும கீததி-  
பொன இலங்கைத்தீவிற காரியங்களை விசாரிக்கிறதுக்கு கொமெசாயிரு  
மாகிய யாக்கொப்புக கிரீஸத்தியாம அவாகளும் அவருடைய ஆலொச-  
னைத தலைவமாகளும் இதைக காணகிற அல்லது வாசிக்கிறதைக  
கெடகிற சகலமான பொகளுக்கும் நனமைப பகுதியுண்டாவதாக  
அறியப்பண்ணுகிறதாவது.

இந்த இலங்கைத்தீவிலெ ரெமானுசமையப படிப்பிணையின விகட-  
மான பாதிரிமாருடையவும அந்த வெதததைப படிப்பிக்கிறதுக்கும்  
உணடுபண்ணுகிறதுக்கும் உபதெசம்பண்ணப்பட்ட மற்றும் பெருடை-  
யவும உச்சாயததைப பலபல கட்டளைப பத்திரங்களைக்கொண்டு முன-  
னூலெ நாங்கள ஆயக்கினை அவதாரங்களினூலெ தடைபண்ணி விலக்கி-  
யிருக்கையிலேயும் இப்படிப்பட்ட பாழாப்புப பண்ணுகிற மனுஷா-  
சற்றும் அச்சம் இல்லாமல அங்குமிங்குந திரிந்து சொல்லப்பட்ட  
ரெமானுவெதத்தின சடங்குகளைச் செய்கிறதுகொண்டும் எங்கள் குடி-  
யானவாளுடைய பலபல பிள்ளைகளையுங் கடுக்கெனறவார்களையும்  
ஞானஸ்தானஞ் சூட்டி அனெகம் உபாயங்களினூலெ அவர்களை ரெமா-  
னுவெதத்துக்குச் சொத்துக்கொள்கிறது கொண்டும் நாள்தொறும்  
இன்னந துணீகரமாக அசட்டைபண்ணிக்கொண்டு வருகிறதை நாளுக்கு

நாள நாள்கள் அவசந்தொஷமாகக் கண்டு மட்டுக்கட்டியிருக்கிறபடியால் அதற்கெதிரிடையாக ஏறகனவெ மறுபடியும் புதுக்கக்கட்டளை பண்ணிப் பெலப்படுத்துகிறது நாங்கள் நல்லதென்று கண்டொம் ஆகையால் இந்தக் கட்ட ப்பத்திரங்கொண்டு உறுதியாகக் கட்டளை பண்ணுகிறதாவது இந்த இலங்கைத்தீவிலே எங்கள் அரசாட்சியுக்குள்ளே அடங்கின ரெமானுசமையத்தாரு மல்லாதவர்களும் எப்படிப்பட்ட எத்தனமையானவர்களென்றாலும் இனிமேல் தங்களுடைய பிள்ளைகளை வளப்புக்களை வெள்ளாட்டிப்பயல்களை அல்லது வெறெ யாதொருதரையென்றாலும் ரெமானு வெத்ததின பாதிரிமா ஞானிகள் உபதெசிகள அல்லது அதற்குக் கற்பிக்கப்பட்டிருக்கிற மற்றும் பொக்களைக்கொண்டு வெளியரங்கமாகவென்கிலும் ரகசியமாகவென்கிலும் ஞானஸ்தானஞ் சூட்டுவிக்கப்பட்டது சொல்லப்பட்ட ரெமானுவெதமாயிருக்கிற இதை கடுக்கென்றவர்களாகிய ஆடவர்களும் ஸத்திறிசெனங்களுமானவர்கள் அந்தச் சபையிலே சொந்து ஒன்றித்துக்கொள்ளும்படிக்கு அவர்களாலே ஞானஸ்தானம் பெறுகிறதுக்குத் தாங்களாகத்தானெ வந்தாலும் அவர்களுக்கு அதைப்பொதுவிக்ஷமப்பட்டது ஆகையினாலே இந்த இலங்கைத்தீவிலே எங்கள் கட்டளைக்குக் கீளான தமிழ் சிங்களப் பள்ளிக் கூடங்களிலே உவாததிமாருக்குத் திட்டமாகக் கட்டளை பண்ணுகிறதாவது இதற்குமேல் இந்தப் பிறகாரமாக ஞானஸ்தானம் பெற்ற பிள்ளைகளை வயதிற பெரியவர்களை வளப்புக்களை வெள்ளாட்டி பயல்களையாக்குதல் தொம்புகளிலே கிரீஸத்தவர்களாக எழுதவும்படாது ஆலை அதற்கு மாறாக எங்கள் கட்டளைகளை மறுத்து ஞானஸ்தானம் சூட்டுவிக்கிற சகலருடையவும் அப்படிப்பட்ட பொகளுக்கும் பிள்ளைகளுக்குஞ் சாட்சியாகவும் பதிரீஞ் மதிரீஞுவாகவும் நின்றவர்களுடையவும் நாமங்களை அந்த உவாததிமாகள் உடனெதானெ சங்கைப்பொந்த எங்கள் பாதிரிமாருக்கு எழுதிக்கொடுக்கவெணும் இதல்லாமல் யாதொருதன இந்தக் கட்டளைக்கெதிரிடையாக விரோதம் பண்ணப்பட்டவனைப் பொதுவான இளைப்பாறுதலைச் சிதைவுபண்ணுகிறவனாக எண்ணிக்கொள்ளுகிறதும்ல்லாமல் முந்தினமுறைக்கு ஆறுவருஷத்தைக்கும் இரண்டாமுறைக்குப் பன்னிரண்டு வருஷத்தைக்கு மூன்றாமுறைக்கு இருபத்தஞ்சு வருஷத்தைக்கும் விலங்குபொட்டுத் தன்னுடைய தீனுக்குமாதிரம் வெலை செய்கிறதுக்குக் காப்பைக்கு ஏற்றுப்படும் இது முகாந்திரமாக அவரவரெ சொல்லப்பட்ட ரெமானுவெத்ததின பாதிரிமா குருக்களமா ஞானிகள் உபதெசிகள அல்லது அதற்குக் கற்பிக்கப்பட்டிருக்கிற மற்றும் பொக்களையும் வெளியரங்கமாகி அப்படித்தானெ எங்கள் கையிலே அகப்படுமபடிக்குத் தலைவமாருக்கும் அல்லது அந்தந்தவூரிலே யிருக்கிற முதலாளிமாருக்கும் உளவு சொல்லப்பட்ட அவரவரெ சகலருக்கும்: 50 இறையால் நன்கொடையாகக் கொடுத்து அவர்களுடைய நாமங்களும் பிறசித்தம் பண்ணுமல் ரகசியமாகவிருக்குமென்றும் வாரததைப்பாடு பண்ணுகிறெம் இது தவிர 1715: ம: ஆண்டு: தை: மி: ம: 11: ம

## THE LANGUAGE OF A TAMIL PLAKKAAT

திகதி எழுதிப் பிறசித்தம் பண்ணின பலகாததிலெ சொல்லப்பட்ட  
 ரொமானுவெத்ததின சடங்குகளை நடப்பிக்கிறதுக்குச் சபை கூடாதபடி-  
 க்கும் எப்படிக்கொத்தவனென்றாலும் தன்னுடைய வீடுகளைத் தொட்ட-  
 ங்களை அல்லது மற்றும் இடங்களை ஒருதனிகிலும் அதற்குக் கொடுக்க-  
 ப்படாதபடிக்குத் தடைபண்ணியிருக்கிறதை இதைக் கொண்டு  
 புதுப்பித்து இது சகலமும் நன்றாக நீட்சித்து நிலைகொண்டிருக்கும்படிக்கு  
 இந்தக் கொட்டையிலெ இருக்கப்பட்ட பெஸ்க்காலவாகளுக்குந் திசை-  
 யவாகளுக்கும் புறத்தியிலெ கொட்டைத் தலங்களிலெயிருக்கிற மற்றும்  
 தலைவமாகளுக்கும் பல தன்மையினாலுங் கூாமையாக விசாரிக்கிற-  
 துக்குக் கடுரமாகக் கட்டளை பண்ணுகிறொரு அந்தப்படிக்குச் சொல்ல-  
 ப்பட்ட பெஸ்க்கால அவர்கள் எங்கள் தெவையான மெலான கட்ட-  
 னைக்கெதிரிடையாக மீறுதல் செய்யப்பட்டவனுக்கெதிரியாக ஞாயத்து  
 டனெ வழக்காட் வெண்டியது ஆகையால் இது சகலமும் எங்கள்  
 குடியானவாளுடைய நன்மைப் பகுதிக்கு நல்லதென்று நாங்கள்  
 கண்டொம் இப்படி முகித்ததுப் பிறசித்தமாககினது நாங்கள் 1733:  
 ம: ஆண்டு பங்குனி மி: 25: ம: திகதி: கொழும்பிற கொட்டையிலெ

சிஞ்ஞொ கொமெசாயிருவாகிய யாக்கொப்புக கிரீஸத்தியாம்  
 பீலாத அவர்களாலெ கையெழுத்தும் வைபட்டு அதின் பக்கத்திலெ  
 சிவத்த அரக்கினாலெ கொம்பஞ்ஞீயவில முத்திரையும் வைத்து அதின்-  
 ருகெ மெலாலெ சொல்லப்பட்ட கொமெசாயிரு அவாளுடையவும்  
 ஆலொசனைத் தலைவமாளுடையவும் கட்டளைப்படிக்கு றூலநகாவு  
 செக்கடத்தாரி அவர்களாலெயுங் கையெழுத்து வைபட்ட பலகா-  
 ததுடனெ.

சரிபாத்தது

### Translation

Be it known in the good interests of all concerned who either see or hear this being read out that this is a proclamation of Jacob Christiaan Pielat, Extraordinary Councillor of India and Commissioner appointed to investigate into the state of affairs in the famous Island of Ceylon and of His Chief Councillors.

We have noted with displeasure the roaming without any fear all over the territory of persons who work destruction in this way, performing ceremonies of the said Roman Catholic faith, admitting many children and grown ups of our subjects after baptizing them to the Roman Catholic faith through many cunning devices, though we had previously through many proclamations, forbidden with severe punishments and fines the

efforts of the monstrous priests of the Roman Catholic faith and others who preach and propagate that religion in this island of Ceylon, and now we consider it best to issue a fresh proclamation to counteract effectively such offences. Therefore by this proclamation, we firmly order that those of the Roman Catholic religion or other faiths whoever and in whatever position they may be in this island of Ceylon, not to have their children, adopted children, offsprings of their maid-servants, or any others, baptized publicly or secretly hereafter by Roman Catholic priests, monks and catechists or others who are trained to propagate the faith. Even if men and women not belonging to the said Roman Catholic faith volunteer themselves to be baptized by them, with a view to embracing that faith and becoming one among them, they should not preach that faith to them. Hence, we sternly order the teachers in the Tamil and Sinhalese schools of this island of Ceylon, who are under our authority, not to register as Christians in the Tombos, the children, the grown ups, the adopted children and the offsprings of their maid-servants who hereafter get themselves baptized in this fashion. Those teachers must immediately hand over in writing to our most venerated priests, the names of all those who in defiance of our orders get themselves baptized and of those who bore witness to such persons and children and of others who act as Godfather and Godmother. Besides, anyone who commits an offence in violation of this order will not only be considered as having been a disturber of the public peace but also will be manacled in chains for six years on the first conviction, for twelve years on the second conviction and for twentyfive years and deported to the Cape to work only for his meals on the third conviction. In pursuance of this, everyone should make known (to the government) the priests, monks and catechists of the said Roman Catholic faith or others who are trained in it. If by such means, information which will lead to their arrest by us is given to the Dessave or the Chief Resident of the respective village, all such informants will be entitled to a reward of fifty reals and their names being kept secret will also be guaranteed. In addition to this, the summoning of people for purposes of conducting the said Roman Catholic ceremonies, allowing the use of his house for such purpose, whoever he may be, were all forbidden by the proclamation that was issued on the 15th day of the month of Tai in the year 1715. These orders are being re-enacted in this proclamation. We sternly order the Fiscal and the Dessave of this fort and other Dessaves of forts in the outstations to see to the exact observance of all these rules so that they may be well informed permanently. The said Fiscal should justly prosecute him who has violated the respectful laws as laid down by us. Therefore we considered all this as contributing to the good interests of our subjects.

## THE LANGUAGE OF A TAMIL PLAKKAAT

Thus it was resolved and proclaimed on the twentyfifth day of the month of Paṅkuṇi in the year 1733 from the fort of Colombo.

This proclamation was certified correct and signed by His Excellency, Jacob Christiaan Pielat, the Commissioner by the side of whose signature is stamped the seal of the Company in red wax and also signed closely by Roland Cau, the Secretary on the instructions of the abovesaid Commissioner and His Chief Councillors.

### Phonology

#### *Distribution of Sounds in the Initial Position*

The variations from the rules of Nannūl which belongs to the thirteenth century are starred. They are the developments after the Nannūl period.

<i>Vowels</i>	<i>Examples</i>	<i>Vowels</i>	<i>Examples</i>
a	aṭaṅkiṇa	ū	ūrilē
ā	āru	e	eṅkaḷ
i	inta	ē	ērkaṇavē
ī	īntiyavil	o	orutaṇ

#### *Consonants*

<i>k</i> with a, ā, i, ī, u, ū, ē, ai, o and ō	<i>c</i> with a, ā, i, ī, u, ē, ai and ō
kaṭṭaḷai	capai
kāriyaṅkaḷ	cāṭciyākavum
kiristtavarkaḷ	citaivu
kirtti	cūṭṭuvikkira
kurukkaḷmār	ceykiratu
kūrmai	cērtu
kēṭkira	collappaṭṭa
kaiyilē	<i>t</i> with a, ā, i, ī, u, ē, ai and ō
koḷumpil	taṇṇuṭaiya
kōṭṭaiyilē	tāṅkaḷ
ñ with ā	tikati
ñāyattutaṇē	tiṇukku
<i>n</i> with a, ā, i and ī	tunīkaram
naṇmai	tēvai
nāṅkaḷ	tai
ninṇavarkaḷuṭaiyavum	tōṭṭaṅkaḷ

nītcittu

*p with a, ā, i, u, e, ō, o and ō*

paṇṇiraṇṭu

pātirimār

piḷḷaikaḷai

putukka

perukiraṭukku

pērkaḷukkum

potu

pōnta

*γ with ā*

yākkoppu

*v with a, ā, i, ī, ai, e and ē*

vantālum

vācikkiratai

virōtam

viṭukaḷai

vaittu

veḷḷāṭṭi

vēṇṭiyatu

*m with a, ā, i, u, ū, and ē*

marrum

māttiram

mīṇṭal

muntina

mūṇru

mēlālē

*r with ū and ō*

\*rūlankāvu

\*rōmāṇu

*Initial Cluster of Three Consonants*

\*stt—sttiri

*Medial Cluster of Two Consonants*

kk—vācikkiratai

ñk—nāñkaḷ

ñc—irupattañcu

ññ—kompaññiyavil

ṭk—kēṭkīra

ṭc—nītcittu

ṭṭ—kaṭṭaḷai

ṇk—kāṇkīra

ṇṭ—kaṇṭōm

ṇṇ—paṇṇukīra

tt—vētattai

\* nk—rūlankāvu

nt—muntina

pp—paṭippikkirāṭukku

mp—koḷumpil

yk—ceykiratu

yy—ceyyappattavaṇukku

rk—pērkaḷukkum

rm—kūrmai

lk—payalkaḷai

ll—nallatu

\*lm—kurukkaḷmār

ll—piḷḷaikaḷai

rk—ērkaṇavē

rp—kaṇṭikka

rr—carrum

ṇk—eṇkilum

ṇm—naṇmai

ṇr—eṇrālum

ṇṇ—paṇṇiraṇṭu

\* st—ñāṇastāṇam

# THE LANGUAGE OF A TAMIL PLAKKAAT

## Medial Cluster of Three Consonants

rnt—cērntu	rtt—vārttaippāṭu
* skk—peskkāl	ykk—āykkīnai
* stt—kirīsttavarkaḷ	

## Medial Cluster of Four Consonants

\* kstt—eksttera

## Distribution of Sounds in the Final Position

### Consonants

ñ—matirīñ	r—ciññōr	l—ākaiyāl	l—tamiḷ
* t—pilāt	m—kaṇṭōm	l—nāl	ñ—orutaṇ

Though Naṇṇūl speaks of —ñ ending, it was in one word “uriñ” and that was lost. Here is a case of a foreign word.

### Vowel-Consonants

—a	—i
k—koṭukka	c—cāṭci
ṭ—collappaṭṭa	ṭ—cūṭṭi
t—anta	ṇ—paṇṇi
y—avarkaḷuṭaiya	t—eḷuti
r—tavira	r—cekkaṭattāri
l—pala	r—sttiṇi
r—cūṭṭuvikkira	ṇ—paṇṇikuṇi
ñ—muntina	—ē
—u	k—arukē
k—ālōcaṇaikka	r—avarē
c—irupattañcu	l—mēlālē
ṭ—paṇṇiraṇṭu	v—ērkaṇavē
t—maṇuttu	l—aracāṭciyukkuḷlē
p—pālāppu	r—vērē
r—kōmēcāyiru	ñ—palakkāttuṭaṇē
v—citaivu	
r—māru	
ñ—rōmāṇu	

## Sound Change

a > e	/b/ palappaṭuttukiraṭu > pelappaṭuttukiraṭu
	/j/ caṇaṇkaḷ > ceṇaṇkaḷ

'a' following a Sanskrit voiced plosive in the initial syllable becomes 'e' in Tamil.

ai[nt > ñc irupattaintu > irupattañcu

This is a case of palatalisation on account of the palatal 'ai'. The cluster of dental nasal and dental plosive becomes the palatal nasal and palatal plosive respectively. 'ai' is shortened to 'a' after palatalisation.

i > ī tuṇikaram > tuṇīkaram

This may be taken as a slip of the hand.

tt > t oruttaṇ > orutaṇ

One of the geminated dental plosive is lost in the colloquial

r > ṛ pirakāram > piṛakāram  
piracittam > piṛacittam

When 'r' and 'ṛ' fall together, we get this confusion. The confusion occurs in foreign words. Perhaps 'r' was pronounced as a continuant so much so that the foreign 'r' has to be represented by the trill 'ṛ'.

r > ϕ talaivarmār > talaivamār  
vaḷarppukkaḷ > vaḷappukkaḷ  
pārttatu > pāttatu

In the colloquial dialect, 'r' is lost when followed by a consonant, more often after geminated plosives.

l > l̥ kīl > kīl̥

This is a characteristic feature of the Ceylon dialect and some of the Southern dialects of Tamil land.

*r and t change place*  
aparātam > avatāram

### Rules of Tamilisation

When foreign words are borrowed, they are adapted to the phonemic system of the Tamil language. The sounds in other languages are rendered by the nearest phonemic shape in the Tamil language. Most of the changes are necessitated by the fact that there are no corresponding sounds in Tamil. But there are cases where even though one may feel that there are corresponding sounds, we find other sounds are substituted probably being nearer

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to the foreign sounds. For instance, the trilled *ṛ* is preferred to the ordinary *r* for representing foreign *r* sounds. The swarabhakti comes in the clusters which are usual in the Tamil language. But there is an instance of a cluster occurring in the initial syllable itself, perhaps representing a widespread bilingualism. There are prothetic vowels introduced because certain sounds do not occur as initial sounds in the Tamil language. But in this plakkaat, *r* and *ṛ* are found to occur initially showing that the language has changed to that extent, to tolerate them as initial sounds.

*Rules of Tamilisation as laid down by Pavananti with reference to Sanskrit words which are found extended to other foreign words as being applicable to them*

*Initially and Medially Sanskrit g > k in Tamil*

guru > kuru                      raṅga > araṅkam

*Initially and Medially Sanskrit d > t in Tamil*

diśā > ticai                      dvīpa > tīvu                      mudrā > muttirai

upa-dēśa > upatēcam                      pra-siddha > piṛacittam

vēda > vētam

*Other Foreign Words*

padrinho > patirīṇu                      padre > pātiri

*Initially and Medially Sanskrit h > k in Tamil*

hari > cari                      rahasya > rakaciyam                      siṃhala > ciṅkalam

*Initially and Medially Sanskrit s > c in Tamil*

samaya > camaiyam                      sākṣin > cāṭci                      san-tōṣa > cantōṣam

siṃhala > ciṅkaḷam                      sa-kala > sakalam

pra-siddha > piṛacittam

*Other Foreign Words*

senhor > ciññōr                      secretaris > cekkaṭattāri

*Initially Sanskrit ph > p in Tamil*

Prakrit phagguṇi > phalguṇi > paṅkuṇi

*Prothetic Vowels*

raṅga > araṅkam                      laṅkā > ilaṅkai                      rākṣā > arakku

*Other Foreign Words*

real > iraiyāl

*Absence of Prothetic Vowels*

rahasya > rakaciyam

*Other Foreign Words*

romano > rōmāṇu

Roland Cau > rūlankāvu

## UNIVERSITY OF CEYLON REVIEW

### *Vowels a, i and ī to break Initial Clusters*

dv > tīv      dvīpa > tīvu      pr > pīr      prakāra > pīrakāram

### *Other Foreign Words*

pl > pal      plakkaat > palakkāttu  
cr > kir      cristo > kirīstavar

### *Medially Sanskrit kh > k in Tamil*

mukha + antara > mukāntiram      saṅkhyā > caṅkai

### *Medially Sanskrit dh > t in Tamil*

pra-siddha > pīracittam, virōdha > virōtam, apa-rādha > avatāram

### *Medially Sanskrit ḍ > ṭ in Tamil*

ṣaḍ-aṅga > caṭaṅku

### *Medially Sanskrit ṣ > c in Tamil*

a-śraddhā > acaṭṭai      upa-dēśa > upatēcam      diśā > ticai

### *Medially Sanskrit bh > p in Tamil*

sabhā > capai

### *Medially Sanskrit kṣ > kk in Tamil*

rākṣā > arakku      pakṣa > pakkam

### *Vowels i and u to break Medial Clusters*

dr > ttir      mudrā > muttirai  
tr > ttir      patra > pattiram  
ry > riy      kārya > kāriyam  
rṣ > ruṣ      varṣa > varuṣam  
sy > ciy      rahasya > rakaciyam

### *Other Foreign Words*

dr > tir      padre > pātiri      madrinha > matirīñ

### *Finally Sanskrit —ā > ai in Tamil*

saṅkhyā > caṅka      laṅkā > ilaṅkai      sabhā > capai  
ā-jñā > āykkiṇai      mudrā > muttirai      a-śraddhā > acaṭṭai  
vārttā > vārttai      diśā > ticai

In accordance with the rule laid down by Pavananti that Sanskrit j > y in Tamil, the j of Dutch becomes y in Tamil.  
jacob > yākkōppu

## MORPHOLOGY

### Cases

In this plakkaat, there are nouns which before taking the case signs undergo certain variations. These are considered to be oblique forms. The noun takes the following empty morphemes which the grammarians call cāriyai.

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Empty Morpheme	Example	Empty Morpheme	Example
/-a <u>ṇ</u> /-	ata <u>ṇ</u> ku	/-attu/	vētattai
/-u/	tī <u>ṇ</u> ukku	/-i <u>ṇ</u> /	avatāraṅkaḷi <u>ṇ</u> ālē
/-attu/+/-ai/	varuṣattaikkum		

Most of the nouns taking an empty morpheme belong to *akṛiṇai*. But the following instances are some exceptions. *Uyartiṇai* words, when taking the case sign /-ku/ take the euphonic /-u/ which the traditional grammarians call *carīyai*.

pērkaḷukku	pātirimārukku	talaivamārukku
avarkaḷukku	pillai <u>ka</u> ḷukku	ceyyappaṭṭavan <u>u</u> kku

Pursuing still further the structure of the nouns taking the case signs, we have the following structures.

1. Nouns [itself denoting the oblique case]. It is considered to be *vēṇṇumai-t-tokai* or declensional compound where a case sign can be supplied and expanded, though the compound occurs as a more frequent idiom. As a matter of fact, by the very juxtaposition of two nouns, the first becomes a kind of qualifier forming the attribute of the second which is the head.

kaṭṭaḷaip pattiram

2. Noun+empty morpheme showing the genitive  
rōmāṇu vētatiṇ pātirimār
3. Noun+empty morpheme+case sign  
vētattai
4. Noun+empty morpheme+case sign+ē  
upāyaṅkaḷiṇālē
5. Noun+empty morpheme+case sign+um  
taṇmaiyiṇālum
6. Noun+empty morpheme+ē+um  
avarkaḷālēyum

### *The Accusative Case /-ai/*

There are certain phrases in the plakkaat which are not idiomatic. It is a Tamil idiom to use the *akṛiṇai* words without any accusative case sign as the object except where there is ambiguity. But since the original document was in Dutch this translation follows the original idiom and translates the accusative case, make all cases by using the Tamil accusative case sign /-ai/ as otherwise ambiguity may arise because of the new con-

structions. As a result, the idiom of this translation looks foreign. In instances where there may not be any ambiguity also, the accusative case sign is used very much against the Tamil idiom.

tannuṭaiya viṭukaḷait tōṭṭaṅkaḷai allatu marrum iṭaṅkaḷai  
orutaṇākilum ataṅkuk koṭukkappaṭāṭapaṭikku  
for taṇ viṭukaḷ tōṭṭaṅkaḷ allatu marrum iṭaṅkaḷ oruvarum koṭuk-  
kāṭapaṭi.

Here one gets a list of verbs which form from a syntactical point of view, a separate class taking an object adverb or transitive verb. Morphologically, there are only a few verbs which can be so distinguished—the so called *piṛaviṇai* and the causal

avarkaḷukku attaiṭ pōtuvikkavumpaṭātu  
anta vētattaiṭ paṭippikkirattukku  
vaḷappukkaḷai vellāṭṭipayalkaḷai allatu vēṛē yātorutaraiyenṛālum  
.....ñāṇastāṇam cūṭṭuvikkappaṭātu.

Semantically we get certain idioms where a verb and its appropriate object alone come together.

In the following instances 'koṇṭu' may be substituted by /-āl/ after removing the /-ai/.

kaṭṭalaippattiraṅkaḷaikkoṇṭu munṇālē nāṅkaḷ  
āykkiṇai avatāraṅkaḷiṇālē taṭaiṭpaṇṇi vilakkiyirukkaiyilēyum.  
pērkaḷaikkoṇṭu ñāṇastāṇam cūṭṭuvikkappaṭātu.  
itaikkoṇṭu putuppittu.  
for kaṭṭalaippattiraṅkaḷiṇāl munṇāl nāṅkaḷ āykkiṇai avarātaṅkaḷi-  
ṇālē taṭaiṭpaṇṇi vilakkiyirukkaiyilēyum.  
pērkaḷiṇāl ñāṇastāṇam cūṭṭappaṭātu.  
itaṇār putuppittu.

If the object denotes a rational being, it is always put in the accusative case.

ñāṇastāṇam perṛa piḷlaikaḷai vayatiṛ periyavarkaḷai  
vaḷappukkaḷai vellāṭṭipayalkaḷaiyākutal tōmpukaḷilē kiristtavarkaḷāka  
eḷutavumpaṭātu.

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### *The Instrumental Case*

The instrumental case signs are /-āl/, /-uṭaṇ/ and /-koṇṭu/ in this plakkaat. /-oṭu/ is recognised as the social case sign. But instead of /-oṭu/, /-uṭaṇ/ the so called collurupu alone appears.

/-āl/ may be taken up for consideration. It occurs in the instrumental ablative.

marrum pēruṭaiyavum uccāyattai.....nāṅkaḷ āykkiṇai avatāraṅkaḷiṇālē  
tataipaṇṇi.

talaivamārkaḷukkum pala taṇmaiṇiṇālum kūrmaiṇyāka vicārik-  
kirātukku civatta arakkiṇālē kompaṇṇiyavil muttiraiyum  
vaittu  
cekkatattāri avarkaḷālēyūṇ kaiyeḷuttu va paṭṭa palakkāttuṭaṇē.

The colluruppu /-koṇṭu/ is used in place of /-āl/ in the instrumental ablative.

intak kaṭṭalaippattiraṅkoṇṭu urutiṇyākak kaṭṭalaipaṇṇukirātāvatu  
/-āl/ also occurs as ablative of reason meaning "because of".  
avarkaḷai rōmāṇuvētattukkuc cērttukkoḷḷukirātukoṇṭum nāl-  
tōrum iṇṇan tuṇikaramāka acaṭṭaipaṇṇikkoṇṭu varukirātai nālukkunāl  
nāṅkaḷ avacantōṣamākak kaṇṭu maṭṭukkattiyirukkiraṇṇaiyāl atarketiṇṇai-  
yāka marupaṇṇiyum puttukkak kaṭṭalai paṇṇi.

There are certain special forms like "ākaiyāl" and "āṇāl" in which /-āl/ occurs where those units have become particles losing their original significance of their different morphemes. Therefore one ought not to confuse the /-āl/ in "ākaiyāl" and "āṇāl" with the constructions studied under the instrumental case.

There are foreign idioms which have crept into the translations. Tamil prefers using participles rather than declined nouns.

avatāraṅkaḷiṇālē tataipaṇṇi  
for avarātampōṭṭut tataipaṇṇi.

Lastly, one must consider this /-āl/ coming as signifying an agent in a passive construction as in 'avaṇāl ceyyappaṭṭatu', "it was done by him". But this is not a popular or fashionable construction. It sounds foreign. Therefore the Tamil idiom prefers using the noun in the nominative case and the verb in the active form leaving to the context to show whether it is a passive construction or an active construction. Instead of 'avaṇāl ceyyappaṭṭa' Tamil always prefers to say 'avaṇ ceyta'.

for yākkōppuk kirīsttiyām pīlāt avarkaḷālē kaiyeḷuttum vaippaṭṭu.  
yākkōppuk kirīsttiyām pīlāttu avarkaḷālē kaiyeḷuttum vaittu.  
/-utaṇ/ occurs in the following instances.  
kaṭṭaḷaikketiṛiyaḷāka mīṛutaḷ ceyyappaṭṭavaṇukku etiriyaḷā  
ñāyattutaṇē vaḷakkāṭa vēṇṭiyatu.  
cekkaṭattāri avarkaḷālēyum kaiyeḷuttu vaipaṭṭa palakkāttutaṇē.

*The Dative Case /-ku/*

The dative case is frequently used in the plakkaat. The governmental orders are addressed to certain classes of people. Therefore the dative occurs in these cases. When proclamations are issued, the persons to whom it is made is put in the dative.

intak kōṭṭaiyilē irukkappaṭṭa peskkālavarkaḷukkum ticaiyavarkaḷuk-  
kum puṛattiylē kōṭṭaittaḷaṅkaḷilēyirukkīra maṛṛum talaivamārkaḷukkum  
pala taṇmaiyaṇāḷum kūṛmaiyaḷā vicārikkīṛatukkuk kaṭṭuraṁākak kaṭṭaḷai  
paṇṇukirōm.

“Deported to the Cape” is expressed by putting the word for Cape in the dative.

taṇṇutaḷaiya tiṇukku māttiram vēlai ceykiṛatukkuk kāppaikkuk  
ēṛruppaṭṭum.

Here is the legal jargon for expressing punishment for the first time, second time, etc. First time, etc., are placed in the dative. The duration of the punishment is also put in the dative.

kaṭṭaḷaikketiṛiyaḷā virōtampaṇṇappaṭṭavaṇai.....muntina mura-  
ikku oru varuṣattaikkum iraṇṭāmuraikkup paṇṇiraṇṭu varuṣat-  
taikkum mūṇṛā mūraikkuk irupattaṇcu varuṣattaikkum vilaṇ-  
kupōṭṭu.

When an action is executed in somebody’s favour, the noun denoting that somebody is put in the dative.

uvāttimārkaḷ utaṇētāṇē caṅkaipōṇta eṅkaḷ pāṭirimārukku eḷu-  
tikkoṭukka vēṇṭum.

The idea of “good for anyone” is expressed by putting the thing in the dative.

itu cakalamum eṅkaḷ kuṭiyāṇavarkaḷuṭaiya naṇmaippakutikkuk  
nallateṇṇu kaṇṭōm.

“etiṛiyaḷā”—this verb is preceded by the noun in the dative, the noun denoting the person opposed.

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kaṭṭalaikketiṟiṭaiyāka mīṟutal ceyyappattavaṇukketiṟiyāka ṇāyat-tuṭaṇē vaḷakkāṭa vēṇṭiyatu.

The phrase “within” is expressed by putting the noun in the dative and suffixing thereafter “uḷḷē”. One may say otherwise, the compound case sign “kuḷḷē” is added.

eṇkaḷ araccāṭciyukkuḷḷē aṭaṇkiṇa rōmāṇu camaiyattārum.

“What is within jurisdiction” is expressed by the phrase “kaṭṭalaikkuk kiḷāṇa” and the word for order or jurisdiction being placed in the dative.

The ceya forms “koḷḷa, irukka and akappaṭa” are idiomatic. But for the purpose of clarity in the legal document, they are expanded by putting the verbs in the ceyyum and adding “paṭi” to which the dative is added.

āṭavarkaḷum sttiṟiceṇaṇkaḷumāṇavarkaḷ antac capaiyilē cērntu  
oṇṟittukkoḷḷumpaṭikku.....attaip pōtuvikkappaṭātu.  
itu cakalamum naṇṟāka niṭcittu nilaikōṇṟirukkumpaṭikku.....  
peskkālavarkaḷukkum.....kaṭṭalaḷ paṇṇukirōm.  
eṇkaḷ kaiyilē akappaṭumpaṭikku.....naṇkoṭai koṭuttu.

### *The Genitive Case*

The use of the genitive is to express possession. The Tamil idiom is to avoid the use of the genitive case sign. The genitive case is the only case which is followed by another noun. Therefore the Tamil idiom prefers forming a compound of these two nouns and then the first by its very fact of being placed first becomes an attribute. The colluruppu /-uṭaiya/ alone appears in the plakkaat. The old genitive case sign is /-atu/. The analytic tendency replaced this particle by a word “uṭaiya”. This has really become the case sign.

avarkaḷuṭaiya ālōcaṇait talaivamārum, taṇṇuṭaiya viṭukaḷai,  
pāṭirimāruṭaiyavum marrum pēruṭaiyavum uccāyattai,  
kuṭiyāṇavarkaḷuṭaiya piḷḷaikaḷai, cakalaruṭaiyavum nāmaṇ-  
kaḷai, avarkaḷuṭaiya nāmaṇkaḷum, cakalaruṭaiyavum piḷḷai-  
kaḷukkum, taṇṇuṭaiya tiṇukku, taṇkaḷuṭaiya piḷḷaikaḷai.

If “avarkaḷuṭaiya” is used in the plural, the usual form will be “avarka-  
liṇ”. So also the oblique form of pronouns themselves are idiomatically used in the genitive without adding the case sign. But in this plakkaat, the case sign is added and this makes the style stiff and unnatural, clearly showing that the plakkaat is a translation from a foreign language. In all the instances in which /-uṭaiya/ has been used in the plakkaat, /-iṇ/ can be used.

There are also instances of the more ancient usage of the oblique form of the noun with the inflexion /-in/. This is according to Dr. Caldwell,<sup>3</sup> an old genitive case sign.

rōmāṇuvētattin caṭaṇkukaḷai, rōmāṇuvētattin, pātirimār, rōmā-nucamaiyappaṭippinaiyin vikaṭamāṇa pātirimār, atin arukē.

*The Locative Case /-il/*

What is expressed by the English preposition "in" is translated by suffixing /-il/, the case sign of the locative or the seventh case as is called in Tamil to the noun governed by "in" in English.

intiyavil	kōṭṭaiyil	palakkāttil	paḷikkūṭaṇkaḷil
ūril	capaiyil	talaṇkaḷil	vilakkiyirukkaiyil
kaiyil	tivil	vayatil	kompaṇṇiyavil
koḷumpil	tōmpukaḷil	puṇattiyil	pakkattil

**GENDER**

In the plakkaat, all the forms taking the neuter singular suffix /-atu/ are finite verbs. The present tense forms seem to predominate.

vācikkira-tu	varukira-tu	paṇṇukira-tu
ceykira-tu	paṭippikkira-tu	uṇṭupaṇṇukira-tu
irukkira-tu	perukira-tu	pelappaṭtutukira-tu
vicārikkira-tu	uṇṭāva-tu	cērttukkoḷlukira-tu
vēṇṭiya-tu		

Apart from these are real neuter nouns which except as shown here as taking the /plural suffix occur as pālpakā akrinaḷ, i.e., as showing no difference between the singular and plural for neuter in their morphological forms.

kaṭṭalai	kai	vaḷakku	capai
upatēcam	vilaṇku	camaiyam	uḷavu
uccāyam	muṇai	ālōcaṇai	pakkam
cāṭci	kōṭṭai	ṇāṇastāṇam	āṇṭu
varuṣam	vētam	palakkāttu	tikati
arakku	pattiram	iraiyāl	ūr
muttirai	vēlai	nāl	tīn
rakaciyam	tēvai	tīvu	tīṭam

3. Caldwell, Robert, Rt. Rev. D.D. LL.D.

Comparative Grammar of the Dravidian Languages (Third Edition Reprint), University of Madras, Madras, 1956, p. 261.

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### *Neuter Plural /-kaḷ/*

The singular form of neuter nouns are pluralised by the addition of the plural suffix /-kaḷ/. The ancient literary way of pluralising is to substitute the plural suffix for the singular. The final -m before /-kaḷ/ becomes ñ in *kāriyaṅkaḷ*, *pattiraṅkaḷ*, *paḷikkūṭaṅkaḷ*, etc.,

<i>kāriyaṅkaḷ</i>	<i>pattiraṅkaḷ</i>	<i>paḷikkūṭaṅkaḷ</i>	<i>avatāraṅkaḷ</i>
<i>upāyaṅkaḷ</i>	<i>nāmaṅkaḷ</i>	<i>tōṭṭaṅkaḷ</i>	<i>caṭaṅkukaḷ</i>
<i>vīṭukaḷ</i>	<i>talaṅkaḷ</i>	<i>iṭaṅkaḷ</i>	<i>tōmpukaḷ</i>
<i>kattaḷaikaḷ</i>			

### *The Masculine Singular Rational /-aṇ/*

In this legal document, to denote any person, the epicene plural came to be used not as honorific plural but as a term which will be colourless and common to all gender. That is how the plural forms are overwhelming in number. Still the language, after the social stratification had taken deep root and does not get easily reconciled to using the plural form in this legalist sense to criminals. Therefore in a few instances, the masculine singular is used. Most of them are participial nouns. There is also a real noun ending in the masculine suffix.

*orutaṇ* > *oru* + [a]tt[u] + aṇ

*ceyyappaṭṭavaṇ*, *citaivupaṇṇukiraṇaṇ*, *eppaṭikottavaṇ*.

### *Feminine Singular /-i/* *vellāṭṭi*, *sttīri*

### *Epicene Plural /-ar/*

The *uyartiṇai* words are dealt with similarly as those of the *akṛiṇai* category. In the epicene, the plural suffix -ar is substituted for -aṇ in the ancient way. *avaṇ* > *avar*, etc.

*avar*, *maṇuṣar*, *cakalar*.

In the following instance, the epicene plural /-ar/ is used honorifically.  
*yākkōppuk kiristtiyām avarkaḷum avaruṭaiya ālōcaṇait talai-*  
*vamārkaḷum*

### *Epicene Plural /-kaḷ/*

The *uyartiṇai* words here found pluralised with the suffix /-kaḷ/ are of various kinds. There are words ending in -i, -u and -ai. If the word preceding /-kaḷ/ ends in what the grammarians call *kurriyalukaram* the k doubles as in “*vaḷappukkaḷ*”.

payalkaḷ      ñāṇikaḷ      upatēcikaḷ      piḷḷaikaḷ      pērkaḷ  
vaḷappukkaḷ      ceṇaṇkaḷ.

*Epicene Plural* /-mār/  
mutalālimār, pātirimār.

*Epicene Plural* /-ār/  
The suffix /-ār/ is considered to be an allomorph of /-ar/.  
camaiyattār.

### *Double and Treble Plurals*

These are forms in which there are two plural suffixes. That is because the form without the second or third plural suffix is felt to be singular. "Kuru" had the honorific singular "kurukkaḷ" and therefore the real plural came to be "kurukkaḷmār". The following lists with /-ar/+/ -kaḷ/, /-kaḷ/+/ -mār/, /-mār/+/ -kaḷ/ and /-ar/+/ -mār/+/ -kaḷ/ are to be similarly explained.

/-ar/+/ -kaḷ/  
kuṭiyāṇavarkaḷ, kaṭukkenṇavarkaḷ, avarkaḷ, allātavarkaḷ, ettaṇ-  
maiyaṇavarkaḷ, āṭavarkaḷ, periyavarkaḷ, niṇṇavarkaḷ, āṇa-  
varkaḷ, kiristtavarkāḷ.

In the following instances, /-ar/+/ -kaḷ/ are used honorifically.  
peskkālavarkaḷ, ticaiyavarkaḷ, kōmēcāyiru avarkaḷ,  
yākkōppuk kiristtiyām pilāt avarkaḷ.

/-kaḷ/+/ -mār/  
kurukkaḷmār  
/-mār/+/ -kaḷ/  
uvāttimārkaḷ  
/-ar/+/ -mār/+/ -kaḷ/  
talaivamārkaḷ.

### **Pronouns**

The derived pronouns can be classified into three main categories namely demonstratives, interrogatives and those which had become more or less indeclinable now used as what may be called adverbs of place, time and manner. The demonstrative pronouns can be further subdivided into remote, proximate and mediate. The superior class (uyartiṇai) falls into three sections, Masculine, Feminine and Epicene and the inferior class (akriṇai) falls into two sections, singular and plural.

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In the plakkaat, there are no mediate pronouns. Coming to the demonstrative pronouns, we have only the epicene section in the superior category.

### *Remote*

av~a is the base here. The remote 'a' comes with the plural suffixes /-ar/ and /-kaḷ/. The case signs /-ai/, /-āl/, /-ku/ and /-uṭaiya/ are affixed to these double plural suffixes.

avarkaḷ, avarkaḷai, avarkaḷāl, avarkaḷukku, avarkaḷuṭaiya.

The form "avar" is found to appear in the nominative and in the genitive. avar, avaruṭaiya.

Coming to akriṇai, we have the form "attu" taking the case sign /-ai/ in "attai". We have also the form "atu". The suffixing of /-ku/ which is the dative case sign makes the base "atu" lose the final vowel and at the same time take the empty morpheme /-aṇ/. atu+aṇ+ku atarku. The free form "anta" occurs as what may be called an adjective. The orthodox grammarians describe this form as an expansion of the demonstrative base.

As for the proximate pronouns, there are no forms in the superior class. The akriṇai singular form is "itu". The form "itarku" consists of the pronominal base "itu", the empty morpheme /-aṇ/ and the dative case sign /-ku/. The adjectival form "inta" is also found.

### *Interrogative Pronouns*

We have only the form "yātu" which is formed by adding the neuter singular suffix -tu to the interrogative base yā.

### *Primary Pronouns*

With the primary pronouns which occur in the plakkaat, one can classify them in the following manner. 1. Free forms. 2. Bound forms which can be subdivided into two divisions. One can occur as first part of the compound and the other as occurring as forms taking case signs. 3. There are three persons which are classified as singular and plural.

### *First Person*

There is no singular form in the plakkaat because the plakkaat issued by the Governor and his Council as proclamation makes use of the first person plural for referring to those who issue them. The plural section

has “nāṅkaḷ” in the free form. Here the plural suffix /-kaḷ/ is added to “nām” which itself at one time denoted the first person plural personal pronoun. In the bound form “eikaḷ” occurs as first part of the compound. Here is another case of suffixing /-kaḷ/ to “em” which was once a plural form. eikaḷ araccāṭci, eikaḷ kuṭiyāṇavarkaḷuṭaiya, eikaḷ kaṭṭalaikkū, eikaḷ kaiyilē. These plural forms exclude the persons addressed.

### *Second Person*

It is very significant to note that there is no form in the second person in the plakkaat. As official orders, they are addressed to citizens in the third person.

### *Third Person*

The bound form of the third person singular is “taṇ”. It takes the case sign /-uṭaiya/ in “taṇṇuṭaiya”. Ordinarily “tām” is the free form. But in the plakkaat, “tāṅkaḷ” is the free form in the plural, where the plural suffix /-kaḷ/ has been added. The bound form is “taṅkaḷ”. It occurs in the genitive in “taṅkaḷuṭaiya”. In modern times, this pronoun occurs more often as a reflexive which when translated means “by themselves”.

## *Pronouns Denoting Place*

### *Remote*

The base form in the remote is “a”. The only form found is “aṅku”. It occurs with the particle -um which acts as a conjunctive meaning “and”. aṅkum iṅkum tirintu.

### *Proximate*

Correspondingly, we have “iṅkum” in the proximate category.

## **Numerals**

### *Cardinals*

The numerals fall into two major categories, called Cardinals and Ordinals. The cardinal numbers have two forms, namely the free form and the bound form. The bound form occurs in compounds and in derived nouns. Compound numbers can be classified into those based on multiplication and those on addition. Nouns derived from number are formed by adding personal endings to the bound forms of the cardinal numbers.

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The bound form of the numeral one is “oru”. It occurs with the masculine singular suffix and the third person plural suffix in “orutaṇ” and “orutar”.

The free form “iraṇṭu” occurs once. The free form “āru” precedes the substantive “varuṣattaikkum” in one instance. The free form “mūṇru” is also found.

We have compound numbers of addition in “paṇṇiraṇṭu” and “irupattaṇcu”. The form “paṇ” in “paṇṇiraṇṭu” is an alternant of “patiṇ” which is the bound form of “pattu”. In “irupattaṇcu”, “patu” doubles when followed by “aṇcu”. Both “paṇṇiraṇṭu” and “irupattaṇcu” precede the substantive “varuṣattaikkum”.

### Ordinals

Ordinals are formed by adding /-ām/ to the cardinals in the plakkaat. These are always prefixed to the substantives which they qualify. The suffix /-ām/ occurs with the numerals “iraṇṭu” and “mūṇru”. iraṇṭā muṇaikkū, mūṇrā muṇaikkū.

Thus we see a striking feature of the plakkaat in the substantives not preceding the numerals.

### Verbal Nouns

The plakkaat affords instances of the following types of verbal nouns.

1. Lengthening of the vowel of the initial syllable of the verbal roots in the single words. tiṇ > tīṇ
2. Lengthening of the vowel of the initial syllable of the verbal roots in compound words. vārtaippaṭu > vārtaippāṭu
3. Doubling of the plosive and the loss of the preceding nasal. Otherwise it may be described as the conversion of the nasal into a homorganic plosive. vaḷaṇku > vaḷakku
4. Doubling of the plosive when not preceded by a nasal plus /-am/. tōṭu > tōṭṭu + am > tōṭṭam
5. Doubling of the plosive when the preceding nasal is lost thereby and /-am/ is added. aṇcu > accu + am > accam

6. Without doubling, etc., and adding /-am/. iṭu + am > iṭam.
7. Addition of suffixes of verbal nouns :—

Suffix	Noun	Root	Suffix	Noun	Root
i	etiri	etir	tal	iḷaippār <sub>u</sub> tal	iḷaippār <sub>u</sub>
ai	koṭai	koṭu		miṛ <sub>u</sub> tal	miṛ <sub>u</sub>
	taṭai	taṭu	ti	pakuti	paku
āḷi	mutalāḷi	muḷalāl		ur <sub>u</sub> ti	ur <sub>u</sub>
kai	irukkai	iru	mai		
ci	aracāci	aracāl	pu	pālāppu	pālā
karam	tuṇikaram	tuṇi		vaḷappu	vaḷar
			vu	citaivu	citai
				uḷavu	uḷ

The suffix /-karam/ is borrowed from Sanskrit “kara”.

### Past-Tense—Conjunctive Participle

The conjunctive past verbal participle called the absolutive by Jules Bloch<sup>4</sup> is formed in the following manner.

1. Reduplication of the final consonant of verbal themes which end in -tu.

pōtu > pōṭtu, vaipaṭu > vaipaṭṭu  
 karpikkappaṭu > karpikkappaṭṭu.

2. Suffixing of some participle or sign of past time.

i paṇṇ-u-i > paṇṇi, maṭṭukkatt<sub>u</sub>-i > maṭṭukkatt<sub>i</sub>.  
 cūṭṭ-u-i > cūṭṭi, vilakk-u-i > vilakki, eḷut-u-i > eḷuti.

u vai-tt-u > vaittu, koṭu-tt-u > koṭuttu, maṛu-tt-u > maṛuttu  
 muki-tt-u > mukittu, niṭci-tt-u > niṭcittu  
 tiri-nt-u > tirintu, cēr-nt-u > cērntu

putuppi-tt-u > putuppittu, paṇṇikkoḷ + t + u > paṇṇikkoṇṭu.

Here the final ḷ > ṇ and the past tense morph t > ṭ. eṇ + t + u > eṇṛu. The root is eṇ and the past tense sign is ṛ. kāṇ > kaṇ + t + u > kaṇṭu. In this instance, t becomes ṭ after ṇ according to Sandhi rules.

4. Jules Bloch, *The Grammatical Structure of Dravidian Languages*, Deccan College, Poona, 1954. p. 87.

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The negative verbal participles are formed by the addition of -āmal to the root. al+āmal>allāmal, il+āmal>illāmal, paṇ+āmal>paṇṇāmal. There are two forms consisting of a negative relative participle and the noun "paṭi" in the dative. They have the force of a negative verbal participle. capaikūṭātaṭaṭikkū, koṭukkakkūṭātaṭikkū.

### Past Tense-Relative Participle

The past tense relative participle suffix "a" is added to the verbal participle in all instances and the resulting forms are the past tense relative participles.

paṇṇappaṭṭu+a>paṇṇappaṭṭa, collappaṭṭu+a>collappaṭṭa  
perru+a>perra, pōrntu+a>pōrnta, irukkappaṭṭu+a>iruk-  
kappaṭṭa, eppaṭippaṭṭu+a>eppaṭippaṭṭa, appaṭippaṭṭu+a>  
appaṭippaṭṭa paṇṇi/n/+a>paṇṇiṇa, aṭaṅki/n/+a>aṭaṅkiṇa,  
munt/n/+a>muntiṇa.

### Present Tense-Relative Participle

The present tense relative participle is formed by adding-kira to the root. kāṇ—kiru—a>kāṅkira, paṇṇu—kiru—a>paṇṇukira, iru—kkiru—a>irukkira, cūṭṭuvi—kkiru—a>cūṭṭuvikkira. kē[l] [root final loss]+ṭkiru—a>kēṭkira.

### The Participial Noun

The participial nouns are formed by adding the gender number suffixes to the relative participle. The glide v will come in between the relative participle -a and the suffix, if the latter begins in a vowel.

Masculine	paṇṇuki <u>ra</u> -v-aṇ,	paṇṇappaṭṭa-v-aṇ
Epicene	niṇ <u>ra</u> -v-arkaḷ	allāta-v-arkaḷ
	kaṭukken <u>ra</u> -v-arkaḷ	kuṭiyāṇa-v-arkaḷ.

### Infinitive

The verbal participle of the pattern ceya is called the infinitive in Tamil. cey stands for the root and -a is the suffix.

ariya, cūṭṭuvikka, vaḷakkāṭa, eḷuta, koṭukka, tavira.

"akappaṭuṃpaṭikkū, nilaikōṇṭirukkūmpaṭikkū and oṇṛittuk-

koḷḷumpaṭiḱku” occur as one unit. They consist of a relative participle in the ceyyum pattern plus the noun “paṭi” in the dative. They as a whole are substitutable by the infinitives “akappaṭa, onṛittukkoḷḷa and nilaikōṭṭirukka respectively.

### Aorist Form as Relative Participle

The old finite aorist was formed by adding -um to the root. The pattern is [representing any root as cey] ceyyum.

onṛittukkoḷḷum, nilaikōṭṭirukkum, akappaṭum, vēnum.

### The Conditional

The conditional is expressed by adding /-āl/ to the past participial form.

enṛu + āl > enṛāl, vantu + āl > vantāl.

### First Person—Verbs

Coming to the finite verbs of the first person and second person, it has been already noted that the second person plural does not occur in the language. The first person plural occurs as referring to the Company or Governor and his advisory Council when issuing the plakkaat.

#### Present Tense

paṇṇukiṛōm

#### Past Tense

kaṇṭōm.

### Third Person Verbs

piṛacittamākkiṇatu

vēṇṭiyatu

paṭātu

### Implied Finite Verbs

There are two implied finite verbs. nallatu, nanṛu.

### Adverbs

We have also adverbial constructions modifying the verb. The noun with the verb /-āka/ or /-āy/ behaves like adverbs.

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uṇṭāvatāka, tuṇikaramāka, etiriṭaiyāka, uruṭiyāka, cāṭciyāka, kiristtavarkaḷāka, tiṭṭamāka, pirakāramāka, māṛāka, naṇṛāka, matiriṇvāka, mukāntiramāka, rakaciyamāka, kaṭūramāka, kūrmaiṇyāka, etiriṇyāka, naṇkoṭaiyāka, tāṇkaḷāka, paṇṇukira-vaṇāka, veḷiyarankamāka, vētamāy.

### Adjectives

By the suffixing of /-āna/ to nouns, adjectival meaning is derived. cakalamāṇa, vikaṭamāṇa, kiḷāṇa, tēvaiyāṇa, mēlāṇa, potuvāṇa.

### Glossary

*iraiyāl*: This is a loan-word from Portuguese “real”. The Portuguese introduced into Ceylon a coin called “real” which was of the value of one shilling and six pence. This coin was in circulation even in the time of the Dutch as is evidenced by this plakkaat.

*eksttera oṭutaṇāri*: This phrase is derived from Dutch “extra ordinari” and means “extraordinary”. It refers to the membership of the Governor in the Council of India in Batavia. An ordinary member of that Council, when he was present in Batavia, had the right to vote in the Council; the extraordinary member was allowed to attend meetings only but had no vote.

*kāppai*: This refers to the place called “Cape”.

*kompañṇiya*: The Portuguese word for “company” is “companhia” and this is derived from it. The term applies to the Dutch East India Company.

*kōmēcāyiru*: This term is derived from Dutch “commissaris” and means “commissioner”.

*cekkatattāri*: This is a Tamilisation of the Dutch word “secretaris” and it means a secretary.

*ticaī*: This is derived from Sanskrit “diśā” which means “direction”. Ticaī or Dessave was a Sinhalese title for a Governor of a province, used by the Dutch in the maritime provinces for a high European official whose functions corresponded nearly to those of a Government Agent.

*tōmpu*: This is derived from Portuguese “tombo” and means “register”. It was introduced to Ceylon by the Portuguese during their rule

of the maritime provinces [Sinhalese thombuwa]. The tōmpu were a system of registration which the Portuguese borrowed from the Sinhalese, and which the Dutch again took over from the Portuguese.

*patiriñu* This is a Tamilisation of the Portuguese word “padrinho” meaning “Godfather”.

*palakkāttu*: The proclamations issued by the Dutch during their rule of Ceylon were called “plakkaats”. This word is a corruption of the Dutch word “plakkaat”.

*pātiri*: This is from Portuguese “padre” meaning “priest”.

*peskkāl*: This is from Dutch “Fiskaal”. Under the Dutch, the Fiscal was an officer who in civil cases deliberated and voted as a judge, and in criminal cases was considered the public accuser. He also superintended the carrying out of the orders of the government. Fiscal was a new office introduced by the Dutch into Ceylon.

*matiriñ*: This is a Tamilisation of the Portuguese word “madrinha” meaning “godmother”.

*yākkōppuk kiristtiyām pīlāt*: Jacob Christiaan Pielat was Special Commissioner of the Dutch government in Ceylon from 1732-34. Pielat’s position in Ceylon as Special Commissioner was higher than that of the Governor. This is a Tamilisation of his name.

*rūlankāvu*: Roland Cau was the name of a secretary to the Council and this is a rendering in Tamil of his name.

*rōmānuvētam*: This compound word is derived from Portuguese “romano” and Sanskrit “vēda” and it means the Roman Catholic religion.

S. THANANJAYARAJASINGHAM

## *Narasimha and Manavamma*

IN one of the important papers Hultzsch contributed fifty years ago to the J.R.A.S., Great Britain, he disclosed that there was an error of about 23 years in the Sinhalese chronology, in the dates of Ceylon kings as given by Wijesinha, particularly discernible in the first half of the eleventh century A.D., and tried to collect the island's chronology by applying the results of his inquiry to the period of the kings from the seventh century upto the eleventh century. This discovery of Hultzsch has been adopted ever afterwards by authors, who were aware of not only the mistakes committed by Hultzsch, but also of the incompleteness of his study. The great scholar who tried to establish such a serious chronological error by pointing out synchronisms had omitted to discuss the synchronisms afforded in the *Mahāvamsa* in the two chapters pertaining to the reigns of Sena I and Sena II, and this grave omission, in an otherwise critical study, by which he advocated a correction of 23 years to the chronology of the kings of the island, only served to discredit his conclusions about the error. The very important synchronisms afforded in the two chapters left out by Hultzsch without discussion, are confirmed by events of the reigns of two successive Pandya kings, for which there is considerable evidence available from inscriptions in South India. Besides this initial mistake in Hultzsch's paper, discrediting his finding, there is no reason why scholars should have uncritically attempted to correct this error of twenty three years, discovered by Hultzsch in reference to the first half of the eleventh century, in dates of the Ceylon kings belonging to the previous centuries and particularly the seventh century.

Debreuil, accepting Hultzsch's findings<sup>1</sup> and application of the error of 23 years to the dates of the Sinhalese kings, which gave A.D. 668-703 for Mānavamma, and taking the synchronistic date that Narasimha was the Pallava who assisted in Mānavamma's getting the Sinhalese throne and agreeing with Venkayya,<sup>1</sup> who first identified this Narasimha with Pallava Narasimha I, fixed the reign of Narasimha I as A.D. 630-663. His dating of the Pallava has been accepted by a host of other scholars. The unwarranted application of the error of 23 years noticed in the period of the first half of the eleventh century to the dates of the kings of the seventh

1. *Journal of the Royal Asiatic Society* (Great Britain and Ireland), 1913, p. 528.

2. *Epigraphia Indica*, Vol. III, p. 277.

century has not been questioned so far, inspite of the fact that Hultzsch's paper disclosed grave omissions, and Dubreuil's dates have become the basis for others' writings.

Recently many errors in the chronology of the reigns of the kings of Ceylon have been discovered and a thorough investigation of the several synchronisms afresh, and a reassessment of all the evidences available on the subject have been undertaken by the veteran Sinhalese archacologist and epigraphist Professor S. Paranavitana,<sup>3</sup> and the results of his researches show that the error of 23 years could not be blindly carried backwards to any century. Of particular interest to our present enquiry is the finding that the period of the king Hatthadāṭha in whose reign Mānavamma fled to India and during which he made his first attempt to get the Sinhalese throne for himself, was A.D. 659-667, and that the period of actual rule of Mānavamma was A.D. 684-718.<sup>4</sup> The chronology of the Ceylon kings belonging to the second half of the seventh century, as fixed by him, is as follows :<sup>5</sup>

Kassapa II	A.D. 650—659
Dappula	659
Dāṭhopatissa (Hatthadāṭha)	659—667
Aggabodhi IV	667—683
Datta	683—684
Hatthadāṭha	684
Mānavamma	684—718

The 47th chapter of the Sinhalese chronicle *Mahāvamsa* reveals an important synchronism in the romantic history of Mānavamma, claimant to the throne of Siṃhala, who fled to India for help. Kassapa II (650-659), when his end was approaching, sent for his nephew Māna and appointed him as regent, entrusting to his care the kingdom and his sons. But on the death of Kassapa, a revolution occurred in the country. Māna was killed and Hatthadāṭha seized the capital and proclaimed himself king under the name Dāṭhopatissa in 659. The sons of Kassapa were not yet ripe in years, and Mānavamma, probably the eldest among them, whose legitimate claims to the throne was thus set at naught, lived secretly in the northern country. He came of age and married the princess Saṅghā the daughter

3. *Epigraphia Zeylanica*, Vol. V, pp. 86ff., *University of Ceylon Review*, Vol. XVIII, pp. 129ff.

4. *Ep. Zey.* Vol. V. p. 110.

5. *Ibid.*, and *University of Ceylon Review*, Vol. XVIII, p. 155.

of Malayarāja, and lived for sometime in that region. When these tidings reached the ears of the reigning king Dāṭhopatissa, it became insecure for Mānavamma to live in the island. Hence he went over to India, accompanied by his wife, and entered the service of Narasiha. He made friends with the king Kaṇḍuvethi. Narasiha and Mānavamma were placed on equal footing. From the foregoing it will be plain that the date when Mānavamma fled to India, after a short stay in hiding in the northern country during which period he was married to Malayarāja's daughter, was say 3 or 4 years after the commencement of the reign of Dāṭhopatissa, that is roughly in circa A.D. 661-2. The country to which he fled was the Pallava kingdom. The ruling king was Kaṇḍuvethi i.e. Kāḍuveṭṭi, the Pallava. The Sinhalese chronicle narrates further, how when Mānavamma was staying in the Pallava capital, king Vallabha came to war and Narasiha started to fight Vallabharāja. Mānavamma desirous of exhibiting his talent in war, went to assist Narasiha in the fight against the enemy and displayed great valour in the field of battle. With his assistance Narasiha routed the enemy. Narasiha, grateful for Mānavamma's services, obtained the consent of the Pallava ministers to help him to recover his kingdom. 'And the king thus granted unto Mānavamma an army, with all the equipage and material.' With these he landed in the island of Ceylon and gave battle to Dāṭhopatissa. Dāṭhopatissa fled from the capital and Mānavamma followed him with a small battalion leaving behind the major part of his Indian army at the capital. Meanwhile the Pallava soldiers having received tidings that their king was smitten with a great disease, lost heart and quit the island leaving Mānavamma to his fate, and reached India. Thus handicapped, Mānavamma was soon defeated by Dāṭhopatissa, but managed to escape and safely returned to India. He entered the services of Narasiha, a second time, and having regained his favour, dwelt in his court until four kings had reigned in the island. The subsequent account of his second endeavour to regain his throne shows that the first defeat was partly due to the reluctance of the Pallava soldiers to fight alone in the personal absence of their king. The above noted part of the account shows that the attack of the Vallabharāja on the Pallava kingdom, the first expedition of Mānavamma to Ceylon and his return to the Pallava court, took place in the reign of Dāṭhopatissa (659-67), after his arrival in India in circa 661-2 and after he had spent some time there. The period of stay of Mānavamma when he joined the services of Narasiha a second time, lasted for the duration of reigns of four kings of the island during which time his wife Saṅghā bore him four sons and four daughters. As stated by Wijesinha, these kings were Dāṭhopatissa, Aggabodhi, Datta and Hatthadāṭha. On the

death of king Aggabodhi (667-683) at Polonnaruva, a Tamilian Potthakutṭha seized the reins of government and governed the kingdom through Datta for six months and through Hatthadāṭha for another six months. When the news of the disturbed state of the island reaching Mānavamma, he gathered an army with the help of Narasiha to invade the island. This happened in A.D. 684. The chronicle says that as the soldiers of the army sent to aid Mānavamma in the first instance showed their unwillingness to fight in the absence of their king, Narasiha 'having pondered well over the matter, resolved on this stratagem. Keeping himself so that his army might not see him, he gave over to Mānavamma, all his retinue, and insignia of royalty, together with the ornaments with which he adorned his person, and sent him secretly on board the ship, bidding him take the royal drum, the *kotta* with him, and sound it from the deck of the vessel. And Mānavamma did as he was directed, and the soldiers thinking that it was the king (who was sounding the call), embarked, leaving him alone in the land.' Thus the Pallava king did not accompany Mānavamma, but sent him with an army to invade the island. Mānavamma landed in Ceylon with the army, and gave battle and succeeded in defeating and putting to death the king Hatthadāṭha, whose head was exhibited to the victor by the warriors. Thus Mānavamma raised the parasol of sovereignty in Lanka. And this happened after the six months' rule of Hatthadāṭha, whom he killed in A.D. 684. Mānavamma ruled in Ceylon for 35 years from then i.e. from A.D. 684 to A.D. 718. That he had a long rule of 35 years is only in keeping with the facts that he was just a married man perhaps in his twenties when he fled to India and that he stayed in the Pallava country for nearly twenty years. He was thus roughly in his fortieth year when he finally crowned himself as king of Ceylon.

From the foregoing account the following facts are clear. As it is well known that Paramēśvaravarman was the ruler of Kāñchi in circa A.D. 670-674 and that he had not less than 20 years rule and since his son Narasiṃha II was the ruler of Kāñchi in 684 when Mānavamma succeeded in establishing himself on the Siṃhala throne with the Pallava's help, the Narasiha (Narasimha) whose services Mānavamma entered, and with whose help he regained his throne in 684, was no other than Narasiṃhavarman II. The fact that Narasiṃha II was the king of Kāñchi in 684 is confirmed by Chinese sources.<sup>6</sup> From this source it is seen that Vajrabodhi visited Kāñchi in 689. The kingdom of *Kien-tchi* (Kāñchi) had then for three years been afflicted with a desolating famine, and the king *Na-lo-seng-kia*

6. *J.R.A.S., Ceylon Branch*, Vol. XXIV, pp. 88ff.

## NARASIMHA AND MANAVAMMA

*pau-to kia-ma* (Narasimha Potakarman, Cor.-varman) implored the assistance of the monks. By means of *dhāranīs*, Vajrabodhi brought down rain. He then visited Ceylon. The Cūlavamsa account of Mānavamma's career mentions only one king named Narasiha, who helped him with forces for the two attempts he made to get the throne, and this king, as shown above was none other than Narasimha II.

With these fixed facts we may examine the other synchronistic details furnished in the Chronicle's account. It is plain from the above that Mānavamma came to India in circa A.D. 661-2, stayed in the court of the Pallava king Kāḍuveṭṭi, for nearly twenty years upto A.D. 684. As such the invasion of the Vallabharāja into the Pallava's country, which happened sometime after Mānavamma's recruitment to the services of the Pallava must be dated a few years after A.D. 661-2. Since it is plain from the account that Mānavamma entered the services of Narasiha, and was befriended and given the same status equal to Narasimha, it is reasonable to infer that the king Kāḍuveṭṭi was Pallava Paramēśvara and that Mānavamma enlisted himself in the royal military service of which Paramēśvara's son Narasimha *alias* Rājasimha was the supreme commander. The Vallabharāja who invaded the Pallava kingdom may either have been the Western Chālukya Vikramāditya (654/5-680) who bore the name Śrīvallabha, or the Western Gaṅga Bhūvikrama (608-670) who had also the same name. Both of them were enemies of the Pallava, and both of them had made inroads into the Pallava's kingdom. Of the two, the Gaṅga claims to have defeated the Pallava even in his 25th year i.e. A.D. 633, and therefore the only other Vallabharāja who could be said to have made war against the Pallava after 661-2 is Vikramāditya. Pallava Paramēśvara succeeded his father Mahēndravarman II, who had reigned peacefully before him, though the length of his reign is not known. Of Vikramāditya's war against Paramēśvara we have many accounts. Even in his early years Vikramāditya had crushed the glory of Narasimha, caused the power of Mahēndra to be dissolved, and subdued Īśvara by polity. This shows that even before the first invasion of the Pallava country during Paramēśvara's rule, Vikramāditya had employed a stratagem against Paramēśvara. As such there can be no reasonable doubt that the invasion into the Pallava country, when Mānavamma having enlisted himself in the service of Narasimha II was staying in Kāñchi, occurred sometime after he had effected the submission of the Pallava Paramēśvara by polity. We shall ascertain when exactly this happened.

The first attempt of Mānavamma must be placed before 667, for it was made during the reign of Dāṭhopatissa (659-667). And as it was just preceded by Mānavamma's assistance to Narasiṃha in routing the army of the invader Vallabharāja, that Chālukya's invasion must also be placed in or before circa 665-6. As is clear from the statements of the Gadval, Savanur and Haiderabad plates of Vikramāditya, that he had achieved independence only after a protracted struggle against the three Pallava kings, Narasiṃha I, Mahēndravarman II and his son Paramēśvaravarman, it is plain, as Fleet<sup>7</sup> stated, that even in the first part of the reign of Paramēśvara, Vikramāditya had made war with him, and this was evidently after A.D. 654/5 and before A.D. 670. The Chinese evidence referring to Vajrabodhi's sojourn in India and Ceylon shows that Narasiṃha II was on the Pallava throne in A.D. 686-9, while the fact that Mānavamma got the island's crown in 684 with that Pallava ruler's help would carry the date of accession of Narasiṃhavarman II to A.D. 684. Now, as it is certain that the rule of Narasiṃha's father lasted for not less than 20 years, since we have his 19th regnal year on his Guruvayapalem plates,<sup>8</sup> it will be reasonable to infer that, even if we assume A.D. 684 to be the date of accession of Narasiṃha II, his father Paramēśvara's rule should have commenced not later than circa A.D. 664/5. This is an important point which shows that the king who was on the throne of Kāñchi when the Vallabharāja invaded it was none other than Paramēśvaravarman I. It is further clear that the Western Chālukya Vikramāditya had been in the vicinity of Kāñchi even in A.D. 670, for he had issued a grant recorded in the Honnur plates, made from his camp at Malliyūr to the west of the Pallava capital Kāñchipura. And this fits in well with the fact that Vallabha's invasion occurred only after some years of Mānavamma's stay in the Pallava kingdom after A.D. 661/2. We are thus assured of the fact that the Vallabha who invaded the Pallava country, when Mānavamma was in the military camp of the Pallava, treated on an equal footing with Narasiṃha, was identical with Vikramāditya. As the chronicle states, the invasion of the Western Chālukya was stoutly opposed by Narasiṃha with the counted assistance of Mānavamma and the invader was driven away. This invasion must be placed in or before circa 665/6 and was thus one of the earliest attempts of Vikramāditya to overcome Pallava Paramēśvaravarman I.

The identification of this Narasiṃha and his opponent Vallabharāja, with the Pallava king Narasiṃhavarman I and the Chālukya Pulakēśin II,

7. Bombay Gazetteer, p. 362.

8. Ep. In. Vol. XXXII, pp. 91ff.

respectively, first made by Venkayya, and later endorsed by Hultzsch, Dubreuil and others, is thus seen to be untenable. It remains to note that the last known date of Pulakēśin II is A.D. 634/5, and there is no evidence to show how long Narasiṃha I ruled after the sack of Badami in his 13th year. Evidence is forthcoming in the records of the Western Chālukyas to show that Pulakēśin II's rule ended in A.D. 635, that two of his sons<sup>9</sup> held the reins of government from 636 to 654, when finally Vikramāditya, the third and youngest of the sons of Pulakēśin II, succeeded in firmly establishing himself in the entire region of this father's kingdom, having crushed the glory of Narasiṃha, dissolved the power of Mahēndra and subdued Īśvara by polity. He was in complete possession of the country that lay in the immediate north of the Pallava's kingdom from the very beginning of his reign. As such the invasion of Vallabharāja, if he was ever to be identified with Pulakēśin II, occurred only in circa A.D. 634/5, in the reign of Narasiṃha. This invasion was quickly beaten back, and the enemy pursued to his very capital which was sacked. There is no indication in the chronicles that Mānavamma's arrival and stay in the Pallava kingdom ever happened in circa A.D. 634/5, and that the routing of the invader Vallabharāja was followed by the counter invasion of the enemy's country and sack of his capital. Even if we apply the correction of 13 years to Wijesinha's date of Dāthopatisa and get thereby A.D. 641-50 as his period of rule, it would mean, as shown above, that Mānavamma arrived in India first after 3 or 4 years' rule of that king in circa 644/5 and he stayed in the Pallava country for some years after which Vallabharāja's invasion, as pointed out already, occurred. This would show that the Chālukya's invasion was made some years after 644/5. And this demonstrates that Vallabha was not Pulakēśin II, who had died long before. It deserves to be remembered that though no record of Pulakēśin II dated later than A.D. 634/5 has yet been discovered, and even if we assume he ruled for some more years, his reign ended definitely before A.D. 643. Fleet states that 'it may, with a close approximation to truth, be placed in A.D. 642.'

It is thus clear that Vallabharāja was not Pulakēśin II, but his son Vikramāditya I. It should also be noted that the invasion of Vikramāditya which was successfully routed by Narasiṃha II assisted by Mānavamma was not the invasion by that Western Chālukya that resulted in the defeat of Paramēśvarvarman I and the seizing of his capital Kāñchi as reported in the in the Gadval plates. It was an earlier attack that happened in or before

9. Ādityavarman, *J.B.B.R.A.S.* XVI, p. 223f. and Chandrāditya, *Indian Antiquary*, Vol. VII, p. 163; *Bom. Gaz.* p. 365; *I.A.* Vol. VIII, p. 44.

circa A.D. 665/6. Paramēśvara was reigning, when Mānavamma first set foot on the soil of India, and the second and final attempt of Mānavamma was made by him when Narasiṃha had succeeded his father Paramēśvara-varman as king of Kāñchi, in or before A.D. 684.

K. S. VAIDYANATHAN

## Verbs in the Jaffna Dialect of Tamil

IN the north and the east of Ceylon, Tamil is the language spoken by the people. Tamils are the indigenous people of this area. There is no direct evidence so far known that they had come to these parts from any other country. But from the early centuries of the Christian era they have been in communication with the Tamil country, i.e. South India. The northern part of the island is known as Yālpāṇam. When Europeans such as the Portuguese and the Dutch ruled this part of the island they distorted this name as Jaffna. It is my purpose to give here a short analysis of the verbal forms occurring in the language spoken in this region. I have already analysed the phonology of this language elsewhere.

### Verbs in the Jaffna dialect of Tamil

#### Singular

The crude theme of the verb or the shortest form of the root is used in the Jaffna dialect of Tamil as the second person singular of the imperative.

#### Examples:

*naḍa*, walk; *uṇ*, eat; *tiṇ*, eat; *vai*, put; *pō*, go.

Particle *aṇ* is sometimes suffixed to the root.

#### Examples:

<i>naḍa-v-aṇ</i>	—	“walk”
<i>uṇ-aṇ</i>	—	“eat”
<i>tiṇ-aṇ</i>	—	“eat”
<i>vai-aṇ</i>	—	“put”
<i>pō-v-aṇ</i>	—	“go”
<i>vā-v-aṇ</i>	—	“come”

Normally the verbal root is enough to indicate the imperative; but sometimes the second person singular pronoun *nī* is placed before it.

#### Examples:

<i>nī naḍa</i>	:	“you walk”
<i>nī uṇ</i>	:	“you eat”
<i>nī vai</i>	:	“you put”
<i>nī pō</i>	:	“you go”
<i>nī pār</i>	:	“you look”

\*This paper was read at the XXVI International Congress of Orientalists held in New Delhi in January 1964.

Sometimes *nī* is also prefixed for emphasis before this form with the suffix *aṇ*.

Examples:

<i>nī naḍa-v-aṇ</i>	:	"you have better walk"
<i>nī uṇ-aṇ</i>	:	"you have better eat"
<i>nī vai-aṇ</i>	:	"you have better put"
<i>nī pō-v-aṇ</i>	:	"you have better go"

The particle *um* is very often suffixed to indicate respect or sarcasm.

Examples:

<i>naḍa-v-um</i>	:	"please walk"
<i>vai-um</i>	:	"please put"
<i>pār-um</i>	:	"please look"

In these cases *nīr* is sometimes placed before it.

Examples:

<i>nīr naḍa-v-um</i>	:	"you please walk"
<i>nīr vai-um</i>	:	"you please put"
<i>nīr pār-um</i>	:	"you please look"
* <i>nīr-pōm</i>	:	"you please go"

To these forms also the particle *aṇ* is added.

Examples:

<i>nīr pōm-aṇ</i>	:	"you have better go"
<i>nīr naḍavum aṇ</i>	:	"you have better walk"
<i>nīr pār-um aṇ</i>	:	"you have better see"

Plural

The suffix *kō/gō* is added to this form to indicate the second person plural.

Examples:

<i>naḍa-v-uṇ gō</i>	—	"you please walk"
<i>pō-v-uṇ gō</i>		
and <i>pōm-gō</i>	—	"you please go"
<i>pār-uṇ gō</i>	—	"you please look"
<i>vār-uṇ-gō</i>	—	"you please come"
<i>vai-uṇ gō</i>	—	"you please put"

\*The verbal root *pō*— "go" assumes the form *pōm*— "please go".

The original form might have been \* *pō -um* which through assimilation has become *pōm*.

## VERBS IN THE JAFFNA DIALECT OF TAMIL

To these forms also *aṇ* is added to indicate emphasis.

Examples:

- naḍa-v-uṇ-gō aṇ — “you had better please walk”  
 pōṇ-gō aṇ — “you had better please go”  
 pār-uṇ-gō aṇ — “you had better please look”  
 vār-uṇ-gō aṇ — “you had better please come”  
 vai-uṇ-gō aṇ — “you had better please put”

Sometimes the second person plural form *nīṅgaḷ* is placed before this form.

Examples:

- nīṅgaḷ naḍa-un-gō — “you please walk”  
 nīṅgaḷ pār-uṇ-gō — “you please look”  
 nīṅgaḷ vai-uṇ-gō — “you please put”  
 nīṅgaḷ pōṇ-gō — “you please go”

Very often as in the singular the suffix *aṇ* is placed after this form whether the word *nīṅgaḷ* is prefixed or not.

- (a) pōṇ-gō-aṇ — “you have better go”  
 (b) nīṅgaḷ pōṇ-gō-aṇ — “you have better go”

The *kō/gō* in the Jaffna dialect is probably from the form *kaḷ*, the plural suffix of the classical Tamil. This suffix *kaḷ/gaḷ* becomes *gō* in the Jaffna dialect, and *ga* in the South Indian dialect. The classical Tamil form *naṭa-v-uṇ-kaḷ* becomes *naḍa-v-un-gō* in the Jaffna dialect and *naḍa-v-uṇ-ga* in the South Indian dialect. The classical form *nīṅkaḷ pōṇkaḷ* becomes *nīṅgaḷ pōṅgō* in the Jaffna dialect and *nīṅga pōṅga* in the South Indian dialect. It is to be observed in the last example that the final *ḷ* of *nīṅkaḷ* is retained in the Jaffna dialect whereas it disappears in the South Indian dialect. The suffix *aṇ* used in the Jaffna dialect to indicate emphasis may be a development from the particle *ēṇ* which is used in the sense of “why”.

The personal forms of the verb in Tamil are divided into rational and irrational groups; masculine and feminine genders form the rational group and the neuter gender form the irrational group. There are two numbers: singular and plural; three moods: indicative, imperative and negative; and two voices: active and passive.

Indicative is formed by the addition of personal terminations to the stem of the participles:

*Past rational:*

1st. pers. sg:

vaccan	:	"I placed"
vāsiccan	:	"I read"
kēṭṭan	:	"I asked"
irundan	:	"I sat"
kuḍuttan	:	"I gave"

1st. pers. pl:

kuḍuttam	:	"we gave"
irundam	:	"we sat"
pōnam	:	"we went"

2nd. pers. sg:

kiḷappiṇāy	:	"you stole"
pēsiniṇāy	:	"you spoke"
vaccāy	:	"you placed"
niṇḍāy	:	"you stood"

3rd. pers. mas. sg:

kiḷappiṇān	:	"he stole"
vandavan	:	"he came"

pl. hon:

pōṭṭār	:	"he went"
vandār	:	"he came"

fem. sg:

sonn āl	:	"she spoke"
irund āl	:	"she sat"
vand āl	:	"she came"

pl. hon:

sonn ā	:	"she told"
irund ā	:	"she sat"
vand ā	:	"she came"
pōn ā	:	"she went"

It may be observed in this connection that the personal suffixes *an*, *ān*, *āl* are suffixed to the participial forms. The pronominal form *ār* is suffixed to denote honorific plural. Caldwell says *ār* is the episcene plural used to denote the plurality of both men and women. But in the Jaffna dialect *ā* is the suffix used to denote the honorific plural of women. The episcene

## VERBS IN THE JAFFNA DIALECT OF TAMIL

plural form has come in the Jaffna dialect to denote only the masculine plural. The original episcene plural of the Tamil language has changed in the Jaffna dialect into masculine plural and feminine plural.

3rd. mas. pl.

soṁṁāṇ gaḷ : "they (men only) told"

vandāṇ gaḷ : "they came"

irundāṇ gaḷ : "they sat"

poṇāṇ gaḷ : "they went"

3rd. fem. pl:

vandāḷu gaḷ : "they (women) came"

pōṇā gaḷ : "they went"

In these examples in masculine singular forms like *soṁṁāṇ*, *vandāṇ* are turned into plural by the addition of the plural suffix *gaḷ*. The feminine singular verbal form with pronominal suffix *āḷ* is changed into the plural by the same process. Very often in such cases *āḷ* drops the final *ḷ* and forms the plural.

*Past irrational:*

3rd. pers. sg:

vandadu : "it came"

vandudu : "it came"

kiḍandadu : "it lay"

kuḍuttadu : "it gave"

āyccu : "it happened"

pōyccu : "it went"

In these examples, forms like *vandadu* instead of the classical form *vantatu* may be due to a change in pronunciation.

3rd. pers. pl.

vandadu gaḷ : "they came"

vandudu gaḷ : "they came"

pōḍḍudu gaḷ : "they went"

*Present rational:*

1st. pers. sg:

solrāṇ : "he tells"

virrāṇ : "he sold"

niṇaikkirāṇ : "he remembers"

kēkkirāṇ : "he hears"

1st. pers. pl:

vāram	:	"we come"
seyyiram	:	"we do"
solram	:	"we tell"
nikkiram	:	"we stand"

2nd. pers. sg:

irukkirāy	:	"you sit"
solrāy	:	"you tell"
ninaikkirāy	:	"you remember"
pōray	:	"you g"

2nd. pers. pl:

irukkiriyaḷ	:	"you sit"
nikkiriyaḷ	:	"you stand"
pōriyaḷ	:	"you go"

2nd. pers. pl. hon:

nikkirir	:	"you stand"
nikkirir	:	"you stand"
vārir	:	"you come"
solrir	:	"you tell"
naḍakkirir	:	"you walk"

Forms like *pōriyaḷ nikkiriyaḷ* are changed forms of the classical words *pōrirkaḷ nikkirirkaḷ*

3rd. pers. mas. sg:

vārāṇ	:	"he comes"
solrāṇ	:	"he tells"
nikkirāṇ	:	"he remembers"

3rd. pers. mas. pl:

vārāṅgaḷ	:	"they (men only) come"
solrāṅgaḷ	:	"they (men only) tell"
nikkirāṅgaḷ	:	"they (men only) stand"

3rd. pers. fem. sg:

solrāl	:	"she says"
irukkirāl	:	"she sits"
kuḍukkirāl	:	"she gives"
pēsirāl	:	"she scolds"

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3rd. pers. fem. pl:

seyyirā gaḷ	:	"they (women only) do"
mikkirā gaḷ	:	"they (women only) stand"
pēsirāḷu gaḷ	:	"they (women only) scold"
tiṅgirāḷu gaḷ	:	"they (women only) eat"

3rd. pers. fem. pl. hon:

seyyirā	:	"she does"
pōrā	:	"she goes"
vārā	:	"she comes"
nikkirā	:	"she stands"

*Present irrational:*

3rd. pers. sg:

pōgudu	:	"it goes"
nikkudu	:	"it stands"
eḍukkiradu	:	"it takes"
solradu	:	"it says"

In examples like *pōgudu*, *nikkudu* it may be observed there is an absence of the suffix - *kir* - denoting the present tense, whereas in forms like *pōradu*, *solradu*, *nikkiradu*, it is present.

*Future rational:*

1st. pers. sg:

iruppān	:	"he will sit"
nippān	:	"he will stand"
nippān	:	"he will stand"
varuvān	:	"he will come"
taruvān	:	"he will give"

1st. pers. pl:

pōvam	:	"we will go"
kadaippam	:	"we will speak"
uḍupam	:	"we will dress"
tiṇpam	:	"we will eat"

2nd. pers. sg:

solluvāy	:	"you will say"
pōvāy	:	"you will go"
tiṇpāy	:	"you will eat"
naḍappāy	:	"you will walk"

2nd. pers. pl:

- tinpiyaḷ : "you will eat"  
varuviyaḷ : "you will come"

3rd. pers. mas. sg:

- varuvāṇ : "he will come"  
iruppāṇ : "he will sit"  
kuḍuppāṇ : "he will give"  
nippāṇ : "he will stand"

3rd. pers. mas. pl:

- varuvāṇ gaḷ : "they (men only) will come"  
iruppāṇ gaḷ : "they (men only) will sit"  
kuḍuppāṇ gaḷ : "they (men only) will give"  
seyvāṇ gaḷ : "they (men only) will do"

3rd. pers. fem. sg:

- varuvāḷ : "she will come"  
iruppāḷ : "she will sit"  
solluvāḷ : "she will say"  
nippāḷ : "she will stand"

3rd. pers. fem. pl:

- iruppaḷu gaḷ : "they (women only) will sit"  
ōḍuvāḷu gaḷ : "they (women only) will run"  
solluvāḷu gaḷ : "they (women only) will say"  
paḍippāḷu gaḷ : "they (women only) will study"  
nippā gaḷ : "they (women only) will stand"  
kēppā gaḷ : "they (women only) will hear"

*Future irrational:*

3rd. pers. sg:

- varum : "it will come"  
seyyum : "it will do"  
irukkum : "it will sit"

3rd. pers. pl:

- varuṇ gaḷ : "they will come"  
pōguṇ gaḷ : "they will go"  
ēruṇ gaḷ : "they will climb"

## VERBS IN THE JAFFNA DIALECT OF TAMIL

Some finite verbal forms are found in this dialect which are made of suffixing the pronouns to the adjectival participles. The past and present are formed in the following way:—

### *Rational:*

<i>Past</i>		
1st Pers.	2nd Pers.	3rd Pers.
Sg. kaṇḍa nān “I saw”	kaṇḍa nī “you saw”	kaṇḍavan “He saw”
Pl. kaṇḍa nāṅgaḷ “we saw”	kaṇḍa nīṅgaḷ “you saw”	kaṇḍavaṅgaḷ “they (men only) saw”
<i>Present</i>		
1st. pers.	2nd pers.	3rd pers.
Sg. kāṇira nān = kāṇra nān = “I see”	kāṇira nī = kāṇra nī = “you see”	kāṇiravan = kāṇravan = “he sees”
Pl. kāṇira nāṅgaḷ kāṇra nāṅgaḷ “we see”	kāṇira nīṅgaḷ kāṇra nīṅgaḷ “you see”	kāṇira vaṅgaḷ kāṇravaṅgaḷ “they (men only) see”

### *Irrational*

<i>Past</i>	
Sg. kaṇḍadu	: “it saw”
Pl. kaṇḍavai	: “they saw”
<i>Present</i>	
Sg. kāṇiradu kāṇradu	} “It sees”

The rational third person plural very often ends in *-iṇam*. This is peculiar to this dialect. This form is common to both masculine and feminine plurals.

### *Past:*

vandiṇam	: “they came”
niṇḍiṇam	: “they stood”
irundiṇam	: “they sat”
kaṇḍiṇam	: “they saw”
ōḍiṇam	: “they ran”
viḷundiṇam	: “they fell”

*Present:*

varugiṇam	:	"they come"
nikkiṇam	:	"they stand"
irukkiṇam	:	"they sit"
pōgiṇam	:	"they go"
tingiṇam	:	"they eat"
pākkiṇam	:	"they see"

*Future:*

varuviṇam	:	"they will come"
nippiṇam	:	"they will stand"
iruppiṇam	:	"they will sit"
pōviṇam	:	"they will go"
pāppiṇam	:	"they will see"
tippiṇam	:	"they will eat"

It is mentioned in Nannūl that the finite future *ceyyum* will not occur in the language in the rational third, second and first persons. But in the Jaffna dialect this rule cannot be applied. It occurs in the second person plural also.

*Examples:*

nīr seyyum	:	"you please do"
nīr vārum	:	"you please come"
nīr paḍiyum	:	"you please study"
nīr irum	:	"you please sit"

When *nīṅgaḷ* comes as the subject a suffix *kō/gō* is added to this verb (also please see pages 2 and 3).

*Examples:*

nīṅgaḷ seyyuṇ gō	:	"you do"
nīṅgaḷ vāruṇ go	:	"you come"
nīṅgaḷ paḍiyuṇ gō	:	"you study"
nīṅgaḷ iruṇ gō	:	"you sit"

A finite verbal form ending in *i* occurs with the particles *ē* or *ō* to denote question. This may be a remnant of such forms found in the Sangam dialects.\*

*Examples:*

kēṭṭi	—ē	:	"have you heard"
vāri	—ē	:	"are you coming"

\* See *Puraṇānūru* stz. 8:  
"poḷutu eṇa varaiti purakkoḷuttu iratti māri varutī malai maṇaintu oḷitti akal iru  
vieumpi nāṇum pakal viḷaṅkuti yāl palkatir virittē."

## VERBS IN THE JAFFNA DIALECT OF TAMIL

niṇḍi	—ē	: “did you remain”
varuvi	—ē	: “did you come”
sonṇi	—ē	: “did you tell”
paḍikkṛi	—ē	: “are you studying”

*Examples:* ō:

vāri	—ō	: “are you coming”
pōri	—ō	: “are you going”
sonṇi	—ō	: “did you tell”
niṇḍi	—ō	: “did you stand”
vandi	—ō	: “did you come”
ōḍini	—ō	: “did you run”

Sometimes the auxilliary *aṭṭum* is used in the sense of “let”. This suffix is added to the infinitive.

*Examples:*

pōgaṭṭum	:	“let it go”
irukkaṭṭum	:	“let it remain”
nikkaṭṭum	:	“let it stand”
varaṭṭum	:	“let it come”

The auxilliary *aṭṭu* suffixed to the infinitive occurs in the sense of question in the first person when the particle *ē* is added. This form is also found in Malayalam.

*Examples:*

vāngaṭṭē	:	“shall I get”
taṛaṭṭē	:	“shall I give”
viṛkaṭṭē	:	“shall I sell”
ōḍaṭṭē	:	“shall I run”
pākkaṭṭē	:	“shall I see”
seyyaṭṭē	:	“shall I do.”

K. KANAPATHI PILLAI.

## Demaladuva Sannasa of King Bhuvanekabahu VII

**T**HIS *sannasa* is engraved on a thin sheet of copper  $13\frac{1}{4}$  in. in length and  $2\frac{3}{16}$  in. in width. On the obverse side of the *sannasa* there is a margin of  $14/16$  in. at either end. At the top of the margin on the left there is a conventional representation of the sun and at the bottom a similar representation of the moon—both figures intended to indicate that the document was to be effective as long as the sun and the moon endured. On the reverse the left hand margin is  $13/16$  in. wide while that on the right is only  $10/16$  in. In the centre of the left hand margin which is otherwise blank is engraved the conventional royal monogram consisting of the letters *sa* and *sri*<sup>1</sup> which represent an abbreviation of the phrase *svasti-śrī*. There are eight lines of writing on each side of the *sannasa*.

The text of the Demaḷadūva Sannasa was first published by Y. Vana-ratana in the Sinhalese Journal *Jñānādarśaya* in 1900,<sup>2</sup> and was again printed in 1912 in the Journal of the Ceylon Branch of the Royal Asiatic Society by P. E. Pieris as a part of a paper entitled The Date of King Bhuvanekabāhu VII.<sup>3</sup> As a full discussion of the Demaḷadūva Sannasa apparently was not intended to be given in this paper and as the text of the *sannasa* as given in this paper is not altogether free from errors it is proposed in the present paper to study this interesting document afresh with a discussion of the several problems connected with it.

According to a note appended to the text printed in the *Jñānādarśaya* the *sannasa* at the time it was printed in this Journal appears to have been in the possession of Mudaliyar Vikramasimha Vilegoḍa of Gaṅgabaḍa Pattu in Galle, whose family had come to inherit it with other *sannasas* as an heirloom.

1. For identification of this symbol see, P. E. E. Fernando, Kandy District Court Him-patraya of Pātra Ābo-Śatru-Rāja, *Paranavitana Felicitation Volume*, Colombo, 1965, p. 147, f.n. 10.

2. *Jñānādarśaya*, Vol. IV, Colombo, 1900, p. 140.

3. Journal of the Ceylon Branch of the Royal Asiatic Society, Vol. XXII, Colombo, 1910-1912, pp. 272-273, a reproduction of the *sannasa* appears on Plate I. The text and translation were furnished by Simon de Silva Mudaliyar.

## DEMALADUVA SANNASA

Today the Copper Plate is in the possession of Mr. A. S. Panawatta of the National Museum, Kandy, who had purchased it in 1964 from one Mr. W. A. Samarasekara of Nugegoda. The latter had informed Mr. Panawatta that the *sannasa* had been found in the collection of his father the late Pandit W. A. Samarasekara of Galle, who had been an Inspector of Schools and Pirivenas. P. E. Pieris has not indicated how he came by this *sannasa* in 1912. It would seem that Pandit W. A. Samarasekara had obtained the document after 1912.

I must here acknowledge my deep gratitude to Mr. Panawatta for giving me this *sannasa* on loan for a period of over three months and also for furnishing me with a note on the history of the *sannasa*.

The *sannasa* records the grant of a village named Demaḷadūva situated in the Salpiṭi-kōraḷē of the Western Province to a person named Vijayarāja Palihavaḍana Śembahapperumālā by a king named Sakala-kalā Sāhitya-Paṇḍita Bhuvanekabāhu in recognition of loyal services rendered to the King by the former. Actually the land in question had been granted as *praveṇi* to the ancestors of Palihavaḍana Śembahapperumālā by a previous ruler and the present *sannasa* seeks to confirm and make permanent the grant which had lapsed at the time, (සමස්තම පවතින පනතට) so that the land would settle on his descendants after the demise of the donee.<sup>4</sup> The grant is dated on the seventh day of the bright fortnight of the month of Vesak in the year following the ninth year of the King's accession.

The identity of the grantor has been a matter of some doubt, though P. E. Pieris rightly has taken him to be the last of that name, i.e., King Bhuvanekabāhu VII<sup>5</sup> (1521-1551). Bell, who obviously did not have the comparable material available today, stated that it should be assigned to the reign of King Bhuvanekabāhu V,<sup>6</sup> while Codrington, in his introduction to the Oruḷa Sannasa,<sup>7</sup> has not altogether precluded the possibility of the grantor of this document being identified as King Bhuvanekabāhu VI of Dādigama.

A comparison of the script of the Dādigama Slab-Inscription of King Bhuvanekabāhu VI,<sup>8</sup> with the script of the document under discussion

4. See the phrase *svasthīraṇa pavatīnā panatata* in the *sannasa*. The corresponding phrase in the passage from Yājñavalkya quoted in note 40 is *nibandham kṛtvā*.

5. J.C.B.R.A.S. Vol. XXII, p. 270.

6. *Ibid.*, pp. 283-295.

7. Epigraphia Zeylanica, Vol. III, Colombo, 1928-1933, p. 57.

8. *Ibid.*, Plate 33. See Fig. 1.






















	1	2	3
ka			
na			
ta			
na			
ba			
ma			
ra			

Fig. 1

Column 1: Sagama Rock-Inscription of Bhuvanekabāhu V  
 Column 2: Dādigama Slab-Inscription of Bhuvanekabāhu VI  
 Column 3: Demaḷadūva Sannasa

however, will clearly demonstrate that the script of the former is very much anterior in date to that of the latter, and confirm the conclusions of P. E. Pieris in regard to the identity of the grantor of the Demāḥadūva Sannasa. Characters such as *ka*, *ṇa*, *ta*, *na*, *ba*, *ma* and *ra* in the Dādigama Slab-Inscription are comparatively quite archaic and not developed to the same extent as the corresponding characters employed in the Demāḥadūva Sannasa. The right hand downward curves of the characters *ka*, *ṇa*, *ta* and *na* occurring in the Dādigama Slab-Inscription do not reach the level of the main element of the letter, but remain terminated about half-way down the side of this element. Furthermore the cerebral *ṇa* is not yet separated into two components as the *ṇa* of the Demāḥadūva Sannasa. The letters *ba* and *ma* have arms on the right moving upwards but they do not take a turn to the left as in the more developed forms of these letters occurring in the Demāḥadūva Sannasa. The only type of *ra* found in the Dādigama Slab-Inscription is the tadpole type, whereas in the Demāḥadūva Sannasa a more developed type, almost like the character used in the present day, is found side by side with the former type. The script of the Demāḥadūva Sannasa, on the other hand, is of the same type as is employed in the Palkumbura Sannasa<sup>9</sup> which is with certainty identified as a grant of King Bhuvanekabāhu VII<sup>10</sup>, the only difference being that the letter *ma* employed in the Palkumbura Sannasa appears to be of a type slightly earlier than the one employed in the document which forms the subject of this paper. The script employed in the Gaṇḍoḍa Sannasa<sup>11</sup> which I assign to the reign of Bhuvanekabāhu VII bears a close resemblance to the script of the Demāḥadūva Sannasa. It is therefore to be concluded that the present document is later than the Dādigama Slab-Inscription of Bhuvanekabāhu VI by a considerable number of years and that the Bhuvanekabāhu mentioned in the Demāḥadūva Sannasa must be therefore the last of that name, i.e., Bhuvanekabāhu VII, A.D. 1521—1551. A comparison of the key letters *ṇa*, *ma*, and *ra* occurring in the Demāḥadūva Sannasa with those occurring in the Sagama Rock-Inscription of Bhuvanekabāhu V<sup>12</sup>, will show that there is absolutely no possibility of assigning the Demāḥadūva Sannasas to the reign of the same ruler as has been proposed by Bell.

The grantee mentioned in this document is a person of some standing, evidently an officer in the service of King Bhuvanekabāhu VII. His name

9. *Ibid.*, Plate 28.

10. *Ibid.*, p. 241.

11. H. C. P. Bell, *Report on the Kegalle District*, Colombo, 1904, Plate opposite p. 92.

12. *Epigraphia Zeylanica*, Vol. IV, Colombo, 1934-1941, Plate 28. See Fig. 1.

is given as Vijayarāja Palihavaḍana Śembahapperumālā and he resided in the village of Māmpē in the Salpiṭikōraḷē in the present-day Western Province. Māmpē is a hamlet in the vicinity of Piḷiyandala. The name Śembahapperumālā, or its Sinhalese form Sapu-kumaru, occurs in Sinhalese documents for the first time in reference to a prince who had been adopted as a son by King Parākramabāhu VI and who became king later as Bhuvanekabāhu VI at Dādigama.<sup>13</sup>

It is, indeed, quite likely that the Sembahapperumālā mentioned in the present document was a kinsman of the first perhaps a nephew, and that he was living not far from the capital, Koṭṭe, in the reign of King Bhuvanekabāhu VII. It also can be taken, as has been shown by P. E. Pieris, that the grantee of the present document is identical with the person who is named Vijayarāja Palihavaḍana-mātiṇḍu in the Sinhalese *Dahamsoṇḍakava* of Alagiyavanna.<sup>14</sup> This person had obtained many offices from a king named Bhuvanekabāhu, who cannot but be the seventh of that name and is described as living in Māmpē in the Pāṇabuṇu Kōraḷē. His grandson, a scribe named Samaradivākara at whose invitation the *Dahamsoṇḍakava* was written by Alagiyavanna, had been brought up as a boy in the company of King Rājasimha of Sītāvaka<sup>15</sup>, 1554-1594. If the conclusion based on palaeographic evidence furnished by the documents discussed above that the *sannasa* under discussion was granted by King Bhuvanekabāhu VII is correct, then the date of issue of this grant would be 1531, when the grantee Palihavaḍana Śembahapperumālā would have been in his manhood. A son may have been born to him at this stage and his grandson Samaradivākara would have been born somewhere about 1560. King Rājasimha I's reign lasted from 1554 to 1593. Thus it would have been quite possible for this grandson of Śembahapperumālā to have been brought up under the protection of King Rājasimha, noting also that the *Dahamsoṇḍakava* was composed in 1610, by which time Samaradivākara would have been about fifty years of age.

The word *daja* in the name Vijayadaja occurring in the *Dahamsoṇḍakava* as a prefix to the name of Palihavaḍana-mātiṇḍu may be a copyist's error, the name of the grantee as given in the Demaḷadūva Sannasa being

13. *Sālahiṇi Sandēśaya*, stanza No. 29, and *Rājāvaliya* ed. Vatuvattē Pēmānanda, Colombo, 1926, pp. 65-66. The same prince is referred to as Campaka-perumāla in a recently deciphered inscription on the Bōlāna Slab, S. Paranavitana, Princess Ulakuḍaya's Wedding, University of Ceylon Review, Vol. XXI, Peradeniya, 1963, p. 133.

14. *Dahamsoṇḍakava* ed. W. Sorata, Colombo, 1928, stanza No. 8.

15. *Ibid.*, stanzas Nos. 6-10.

Vijayarāja. The grantee's title Vijayarāja Palihavaḍana, the Bearer of the Victorious Royal Shie'd, probably is an indication of the esteem in which he was held in court circles as the namesake and kinsman of an illustrious ruler of the land, who was panegerised by the poet Śrī Rāhula in the *Sālahiṇi-sandēśaya* as the fearless conqueror of Jaffna.<sup>16</sup>

The *sannasa* is attested by a secretary named Sanhas Tiruvaraṅgan Perumāl, the formula of attestation reading: වදන මෙහෙවරින් මෙ සන්නස් කාව්‍යය ලියාදුන් බවට සන්නස් කිරුවරුගන් පෙරුමාළුනි. The terminology employed in this formula, similar to that of formulae employed in other contemporary *sannasas*<sup>17</sup>, appears to indicate that the copper plate on which the *sannasa* has been engraved was in fact engraved by Tiruvaraṅgan Perumāl and that in this formula and formulae of contemporary *sannasas* the phrase has to be apparently understood in the sense of *engraving* and not in the sense of *writing* or *drafting* which the verb *liyanavā* normally carries. This interpretation of the formula of attestation appears to be further supported by the attestation occurring in the Palkuṁbura Sannasa which was also issued by King Bhuvanekabāhu VII.<sup>18</sup>

According to this attestation the order to engrave the copper plate was given by the King-in-Council and the secretary certifies to the fact of having engraved the *sannasa* on copper plate in accordance with this order.

A slightly different form of formula, however, is generally employed in the *sannasas* of this period engraved on stone. In these lithic records instead of the phrase *liyā dun bavāṭa* the phrase *liyavā dun bavāṭa* or *koṭavā dun bavāṭa*,<sup>19</sup> to the fact of causing (this *sannasa*) to be engraved, has been employed. In these two types of phrase the causative forms *liyavā* and *koṭavā* which have been used by the secretary appear to make a distinction between a copper plate 'engraved' by the secretary himself and a *sannasa* engraved on stone where the engraving was entrusted to a craftsman who was specially trained for this kind of work. It is however, not possible to conclude that the *sannasas* engraved on copper plate were in fact engraved by the scribes who attest these documents, because there are at least two instances where the same phrase as is employed in *sannasas* engraved on copper plate is also used in *sannasas* engraved on stone. In the Dādigama

16. *Sālahiṇi Sandēśaya*, stanza No. 29.

17. See Appendix where attestations from *sannases* of 13th-16th century have been collected.

18. Appendix, 22.

19. Appendix, 4, 7, and also 5, where a slightly different form is used.

Slab-Inscription of Bhuvanekabāhu VI (A.D. 1472/1473—1480/81) it is stated that Sanhas Tiruvaraṅgan Vikramasiṃha Adhikāra has written the Sannasa in question on stone<sup>20</sup> and a similar statement is made in the Kālaṇiya Inscription of Parākramabāhu IX, <sup>21</sup>(1509-1528). In the Gaḍalādeṇiya Slab-Inscription I, again the same phrase is used<sup>22</sup> though the phrase used in Inscription No. II reads *liyavā dun bavaṭa*.<sup>23</sup> In the instances noted above, the phrase employed to attest the document is the same as that used in copper plate *sannasas* of the time. If we assign to the phrases *lī bavaṭa* and *liyā dun bavaṭa* the sense of engraving then it has to be concluded that the attestor of the Dādigama Slab-Inscription who is described by no less a title than the title *adhikāra*, prime minister, was competent in stone carving—a skill which is hardly in keeping with his exalted position the duties appertaining to which possibly left no leisure for him to indulge in such laborious activities as engraving grants on stone. It is also unlikely that the attestor of the Gaḍalādeṇiya Slab-Inscriptions and the attestor of the Kālaṇiya Stone Inscription had either the leisure, the inclination or the skill to undertake engraving on stone as a professional duty in view of the responsibilities that must have devolved on them as officers holding the office of *sannas* or *sanhas liyana māti*<sup>24</sup>, for it is known that during the time of King Parākramabāhu VI of Kotte a member of the family of *sanhas-liyana-māti* bearing the title of *adhikāra*, was a member of the King's Council of Ministers.<sup>25</sup> The position of the *sanhas liyana māti* can be presumed to have been no less exalted at other times as well. In the Kāragala Slab-Inscription of King Parākramabāhu VI it is clearly indicated that even when the King himself handed over to the attestor a stone carving chisel the latter caused the record in question to be engraved on stone by another person.<sup>26</sup> Thus in stone records whether the phrase used is *liyā dun bavaṭa*, *lī bavaṭa*, *liyavā*

20. Appendix, 13.

21. Appendix, 16.

22. Appendix, 15. I

23. Appendix, 15. II

24. The Sinhalese word *sanhas* or *sannas* from Sanskrit *saṃjñā*+*hansa*, literally, means figure of an Indian goose, which appears to have been used in the seal of the king. In course of time it appears to have meant any document carrying this seal, a royal edict carrying the king's monogram. In the Kotte period it appears to have specially signified a royal document recording a grant of land by the king. For the representation of the Indian goose in the royal signet, see *Hamsasandēśaya*, stanza 2. The person who was responsible for drafting a *sannasa* also came to be known as *sanhas* in which sense it appears to be used in the attestations of *sannases*, just as the official who kept accounts or books came to be known as *potā* from *pot*, book; see *Sikurā mudal-potunṭa* in the Pāpiliyāna Inscription, *Katikāvat-saṅgarā*, ed. D. B. Jayatilaka, Colombo, 1955, p. 40.

25. *Hamsasandēśaya*, stanza 50.

26. Appendix, 4.

*dun bavaṭa* or *koṭavā dun bavaṭa*, the phrase has to be understood in the sense that the attestor employed some competent person other than himself to engrave the document.

As has been pointed out above a different phrase was used by the attestor in copper plate *sannasas*, but it cannot be concluded that the attestor was responsible for also engraving the copper plate, for in these copper plate *sannasas* too the phrase ලියා දුන් බවට must be assigned the same sense as is assigned to the phrase when it occurs on lithic records. It may also be remembered that even engraving on copper would not have been considered a proper occupation for a person of the rank of *sanhas*. There is hardly any information available regarding the method of engraving on copper plate employed at this time, but there is no doubt that engraving a *sannasa* on copper plate required a very high degree of skill as well as a considerable volume of labour, and it is hardly likely that a secretary who functioned also as a member of the Council of Ministers would have had the skill or the time to undertake the engraving of *sannasas* in addition to drafting them for the King.

It is evident that first drafts of *sannasas* were made on palm leaf by the secretary and these drafts were later copied on copper plate or stone, the choice of material probably depending on the importance of the grant. Both the Ampīṭiya Rock-Inscription of King Vikramabāhu III<sup>27</sup> who came to the throne about 1357 A.D., and the Maḍavaḷa Rock-Inscription<sup>28</sup> show that before a grant of land was recorded on stone, the deed of conveyance was written on a strip of palm leaf which was handed over to the grantee. A copy of this deed was engraved either on a dressed stone which would be placed in the land concerned or on a rock situated in the land, so that the fact of the grant would be proclaimed to the public.

It may perhaps be surmised that copper plates were engraved in the office of the secretary or somewhere else in the vicinity of his office whereas engraving on dressed slabs or pillars of stone took place outside the precincts of Court, while engraving on living rock had to be carried out at the place where such rock was situated. This circumstance may have made it necessary for the secretary to state in some lithic records that the secretary caused the stone or rock to be engraved (by a third party). In the case of copper plates it was considered hardly necessary to make such a statement as the engraving took place, as stated above, in the office of the secretary or

27. Appendix, 2.

28. Appendix, 5.

at least in a place within easy reach of the secretary's department. When a first draft of a *sannasa* was made on palm leaf the secretary would take into account the material on which the text of the *sannasa* would ultimately be engraved and phrase the formula of attestation accordingly. Whether a *sannasa* was to be engraved on copper plate or on stone appears, at least in some instances, to have been decided by the King. For example there is in the Kāragala Slab-Inscription a statement to the effect that the direction to engrave the grant in question on stone was given by the King who is said to have handed over a chisel for the purpose to the *sanhas*.<sup>29</sup> A similar statement occurs in the Palkuṃbura Sannasa where the King is said to have directed that a copper plate be engraved for the purpose of the grant.<sup>30</sup> These statements, however, may have been dictated by formality, and the actual decision to use stone or copper plate, in each instance, may have been taken by the *sanhas* or even by a subordinate working under him.

In India, in ancient and early mediaeval times the name of the engraver was rarely mentioned in copper plate grants though there is usually in these documents a statement to the effect that the document was written (*likhitam*) by a high official of the King, such as the Minister in charge of War and Alliance (*Sandhi-vigrahika*) the Commander-in-Chief (*Senāpati*) or by a minister, (*amātya*).<sup>31</sup> In these instances it can be surmised that the actual engraving of the document in contrast to the *drafting* of the document was done by a skilled engraver. In later times the engraver's name was mentioned specifically in copper plate grants,<sup>32</sup> in addition to the name of the person who drafted it and the person who supervised it on behalf of the King. The engravers whose names are mentioned in mediaeval copper plate grants belonged to castes such as those of goldsmith, ironsmith and copper-smith.<sup>33</sup>

Most probably a similar procedure was followed in Ceylon too in the preparation of copper plate grants, the function of the *sanhas liyana māti*

29. Appendix, 4.

30. Appendix, 22.

31. G. Buhler, *Indische Palaeographie*, Strassburg, 1896, pp. 94-95; R. B. Pandey, *Indian Palaeography*, Part I, Banaras, 1952, pp. 93-94. At the end of the Conjeevaram Copper Plate of Vijaya Gaṇḍagopāla it is stated that the grant was inscribed in his own hand, but it is obvious that, if at all, only his signature appearing at the bottom of the record was inscribed by him, the body of the record being engraved by some one else, probably a professional engraver, *Epigraphia Indica*, Vol. XIII, 1915-1916, p. 197 and foot-note on p. 198.

32. For example see the contemporary Udayambakam Grant of the Vijayanagara Ruler Kṛṣṇadevarāya, dated Saka 1450, *Epigraphia Indica*, Vol. XXIV, p. 134, and the Conjeevaram Plates of the same ruler, *Epigraphia Indica*, Vol. XIII, p. 122.

33. G. Buhler, *op. cit.*, p. 95.

being limited to the drafting of the grant, a duty performed in India usually by the Minister of War and Alliance (*Sandhi-vigrahika*) or some other high official. The actual engraving of the copper plate would have been entrusted to a trained engraver.

As stated above the document under consideration is attested by a secretary named Sanhas Tiruvaramagan Perumāl, a name which, with insignificant variations, occurs in several other contemporary *sannasas*.<sup>34</sup> The name is also mentioned in the *Hamsasandēśaya*<sup>35</sup>, said to have been composed in the reign of King Parākramabāhu VI, as the name of a family from which was drawn one of the most important members of the King's Council of Ministers, while the latest document attested by a secretary bearing the same name is possibly the Gaṇēgoḍa Sannasa which was also issued in the reign of King Bhuvanekabāhu VII of Koṭṭe. Thus for a period of over one hundred years persons bearing this name and without doubt belonging to the same family had functioned as secretaries in the Court of the kings of Kotte. Even in the reign of King Bhuvanekabāhu VII which lasted for thirty years there appear to have been more than one secretary bearing this name. The Māmpē Sannasa issued in the year following the third year of King Bhuvanekabāhu VII and the Demaḷadūva Sannasa, with which this paper is concerned and which was issued in the year following the ninth year of the same king, can definitely be stated to have been drafted by two different secretaries known by the same name Sanhas Tiruvaramagan Perumāl and also to have been engraved by two different engravers as well, unless of course the two secretaries were responsible for this part of the task as well. In the Māmpē Sannasa orthography is faulty whereas in the Demaḷadūva Sannasa the orthography conforms to contemporary usage as is demonstrated in the works of the learned living at the time. Even common words such as *vatta*, garden, and *dūva*, island, are misspelt in the Māmpē Sannasa where even the name of the village Māmpē has not been correctly spelt. Even the name of the attestor appears to be spelt wrong in this document.<sup>36</sup> Thus while author of the Demaḷadūva Sannasa appears to be a competent secretary well versed in the official language of the time, the same cannot be said of the author of the Māmpē Sannasa. In the Demaḷadūva Sannasa the first element of the ligature *ñda* (*saññaka dayanna*) is represented by a hook-like limb similar to that of *la* (*saññaka layanna*).

34. Appendix, 4, 16, 17, 18, 21, 22, 24, and 25.

35. *Hamsasandēśaya*, stanza No. 50.

36. Orthographical differences in the two documents are tabulated below:—

In the designation of the secretary who has attested the present *sannasa*, the word *Tiruvaraṅgan* represents the name of the family to which he belonged. The *Haṁsasandeśaya* too calls the family of Vikramasimha Adikāra by this name. *Tiruvaraṅgan* which is the Tamil equivalent of Sanskrit *Śrī Raṅgam*,<sup>37</sup> is the name of a village near present-day Tiruchirappalli in South India. The village is noted for its temple dedicated to god Viṣṇu who is also called *Śrī Raṅga*. It is very probable that the family migrated to Ceylon from South India and retained the name to perpetuate their connections with a village well-known for its Vaishnava temple. People from this village, as did others from other well-known places, connected the name of their birth place or home town to their personal names. Hence appeared names such as *Tiruvarangattu Amudanar*, Amudanar from *Tiruvarangan*, the name of a distinguished pupil of the Hindu saint Rāmānuja.<sup>38</sup> In Ceylon these immigrants from *Śrī Raṅgam* secured employment at Court as secretaries, as is evident from the several *sannasas* attested by secretaries who were members of this family, the earliest record to be so attested being the Kāragala Slab-Inscription of Parakramabāhu VI. How members of this family could find employment readily at Court, however, remains to be explained.

It will be noted that the land conveyed by this *sannasa* is transferred to Vijayarāja Palihavaḍana in an indirect manner. First the land is offered to the sacred Tooth Relic and then the grantee is permitted to enjoy the produce of the land by the payment of five *fanams* annually as a donation to the Tooth Relic. This same device is employed in the Māmpē Sannasa whereby again land was granted by the same King to the same person. In the Oruvaḷa Sannasa provision is made for the donation of fifteen *fanams*

*Demalaḍūva Sannasa*

වනුවකි  
මාමිසෙ  
ගෙලිගප්පෙරුමාලා  
එකාන්ත  
වන්ත  
දුව  
ශ්‍රීදන්ත ධාතුන්වහන්සේ  
සන්තක  
අවන්තකකිසායිව  
පත්‍රය

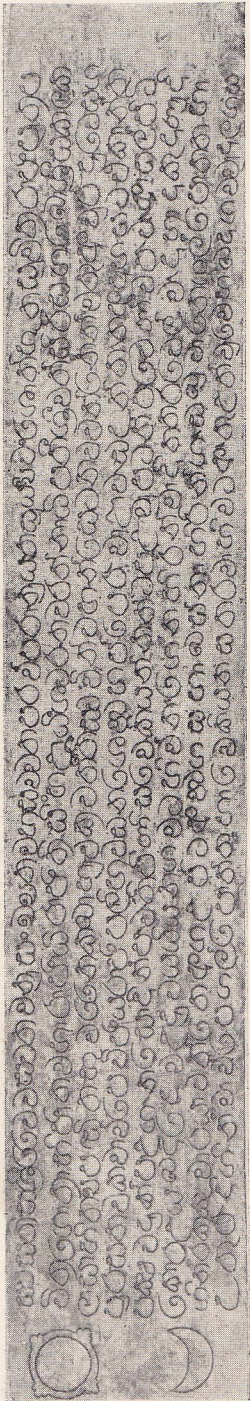
*Māmpē Sannasa*

වනුවකි  
මාමිසෙ  
සෙම්බගප්පෙරුමාලා  
එකාන්ත  
වන්ත  
දුව  
ශ්‍රීදන්ත ධාතුන්වහන්සේ  
සන්තක  
අවන්තකකිසායිව  
පත්‍රය

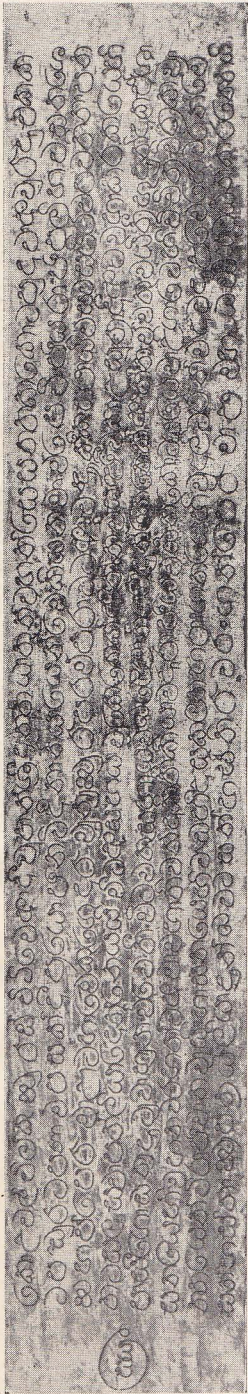
37. B. A. Saletore, *Social and Political Life in the Vijayanagara Empire*, Vol. I, Madras, 1934, p. 340.

38. K. A. Nilakanta Sastri, *The Cholas*, Madras, 1955, p. 681.





Obverse



Reverse

The Demaladūva Sannasa

## DEMALADUVA SANNASA

annually to God Utpalavarna and a similar provision appears to have been made in the Palkumbura Sannasa as well.<sup>39</sup>

Though several errors have crept into the document possibly owing to the carelessness or the ignorance of the engraver, the orthography of the *sannasa* is of a high order when compared with similar contemporary documents. Attention may be drawn to *manusankhyata*, *päva-ā*, *ḍakudanu digin*, as being due to sheer carelessness. But the words *Mayitri Bhudum* and *Koṭṭhaye* cannot be explained as being due to carelessness.

### Text

1. සමස්තසුඵ්‍රි වෙවසවන මනුසංඛ්‍යාන<sup>1</sup> මහසමමන පරම්පරානුයාන සුයඨවංශොත්භූත සුමිත්‍ර රාජ පුත්‍ර ප
2. චිත්‍ර ගොත්‍රානිජාත මහරාජාධිරාජ ත්‍රිසිංහලාධිපති නවරත්නාධිපති ශ්‍රීමත් සිරිසහබො ශ්‍රී සකලක
3. ලා සාහිත්‍ය පඬින භුවනෙකබාහු වක්‍රවර්ණී සමිත්තවහන්සෙට<sup>2</sup> නව වන්තෙන් මතු අවුරුදු වෙසග
4. පුර සතවක මාමපෙ විජයරාජ පලිභවධන ගෙඹහස්පෙරුමාළා වැඩ උන්තැන අදහසට එකාන්ත
5. පක්‍ෂවදුක් පැළ ගැන සොදින්<sup>3</sup> පැවැති පිණිස මෙකියන්නන්ට පළමු පටන් ප්‍රවේණි ව පැවැ<sup>4</sup> ආ සල්පිටි
6. කොරළය බඳ දෙමළදවයයි<sup>5</sup> යන ගමට හිමි නැගෙනහිරින් මාදින්නර වෙල් මැද හා දකුණු දි
7. ගිත් රක්‍ෂමාරයා වන්නෙ අගළ පිට අඟගස හා බස්නාහිරින් ගැඹුබුවානෙ ගල්පොත්ත හා
8. උතුරු දිගින් මාමපෙ ගල් පොත්තහා මෙකියන සතර මාහිමට ඇතුළත් වූ මෙහි බඳ ගමුදල ගස
9. කොළ වල් විල් කුඹුරු ඔව්වි මෙ ආදී වූ තැන් ශ්‍රී දත්තධාතුන්වහන්සෙ සනත්තකොට පුදවා අවුරුදු එකක
10. ට පඬුරට පණම් පසක් දී ප්‍රයොජන විදිනා නියායෙන් මෙකියන මාමපෙ විජයරාජ පලිභවධන ගෙ
11. ඹහස්පෙරුමාළාට හා මෙකුගේ දරු මුනුඹුරු පරම්පරාවට ආවන්දාකික-සාධිව සමසර්ව පවතිනා පන
12. තට සලසවා පන්ලියා දෙන්නෙයයි මීට<sup>6</sup> අසහය වූ කෙනෙක් ඇත්නම් සජීව කාළසූත්‍රාදී අට මහා නරකයෙහි
13. පැයිය ගොඩ නුදුටුවාහු නම් වෙති මීට මතු සහායට බලෙ ලා නිල ලා දුන් කෙනෙක් ඇත්නම් මතු මයිත්‍රි භද්‍රන් දක ඒ ශා
14. සනායෙහි මහනව රහත්ව අමාමහානිවන් දකිති කියා වදරා ජයවඩින කෝට්ඨයෙ මාලිගාවෙහි විචිත්‍ර චිත්‍ර කමු<sup>7</sup>

39. The Oruvala Sannasa, Epigraphia Zeylanica, Vol. III, p. 68, The Palkumbura Sannasa, *ibid.*, p. 245.

15. නනයෙන් විරාජමානවු සිංහාසනයෙහි වැඩ හිඳ සකලනභරාංගනයෙහි මුදලිවරුන් මැද වදළ මෙහෙවරින් මෙ
16. සන්තස් තාමු පත්‍රය ලියාදුන් බවට සන්තස් තිරුවරංගන් පෙරමාළුමෙක ධම්මය වඩින කරනෙකයි
1. Read මනුසංඛ්‍යාන
2. Read ස්වාමීන්වහන්සේට
3. Read සොදින්
4. Read පැවැන
5. Read දෙමළදුට
6. Read මිට
7. Read කම්මාන

## Translation

Blessings and Success<sup>40</sup>!

On the seventh day of the bright half of the month of Vesak in the year subsequent to the ninth year (of His reign) His gracious Majesty the Emperor Sirisaṅgabo Sakala-kalā-sāhitya-pañḍita Bhuvanekabāhu, the Great King of Kings, born of the unblemished clan of prince Sumitra,<sup>41</sup> sprung from the race of the sun in lineal descent from Mahāsammata also called Manu-Vaivasvata, Sovereign of the three divisions of Laṅkā and lord of the nine Gems, (gave the command) that a deed be written to the effect that whereas Vijayarāja Palihavaḍana Śembahapperumālā of Māṃpe has served His Majesty well, attending upon him in absolute

40. According to traditional classification the Demalaḍūva Sannasa belongs to the category called *sāsana*, which is described in the *Yājñavalkya-Smṛti* as follows:

datvā bhūmim nibandham vā kṛtvā lekhyam tu kārayet  
āgāmibhadrāṇpatiparijñānāya pāṭhivah  
paṭe vā tāmrapaṭe vā svamudroparicihnitam  
abhilekhyātmano vāmśyātmanāṇaṃ ca mahipatih  
pratigrahaparimāṇaṃ dānacchedopavarṇanam  
svahastakālasampannaṃ sāsanaṃ kārayet sthiram

'Having given a plot of land or made a permanent endowment the king should cause a record to be prepared for the information of the future good kings. The king should further cause a permanent writ to be made on a piece of cloth or copper-plate impressed with his seal and autograph and containing his genealogy, personal eulogy, the name of the donee, the quantity of the gift, the boundaries of the plot and the date of the deed'. R. B. Pandey, *op. cit.*, p. 118. For other descriptions of the features of a *sāsana* see, *The Institutes of Vishnu*, translated by Julius Jolly (Sacred Books of the East), Oxford, 1880, III. 82; *The Minor Law Books*, translated by Julius Jolly, Part I, *Nārada and Bṛhaspati*, (Sacred Books of the East), Oxford, 1889, IV, 3 and VIII, 12-18.

41. Sumitra was the brother of King Vijaya, the first king of Ceylon. Vijaya had no sons to succeed him on the throne and Paṇḍuvāsudeva, the youngest of the three sons of Sumitra, had to come to Ceylon to succeed to the throne left vacant by the death of King Vijaya, *Mahāvamsa* ed. Wilhelm Geiger, Pali Text Society, London, 1905, VIII. 1-12. Hence the attempt to connect Bhuvanekabāhu with the family of Sumitra.

loyalty, undergoing misery and hardship,<sup>42</sup> the building-site, the produce, the forests and lakes, fields and *ovitas*<sup>43</sup>—all this appertaining to the land Demaḷadūva in Salpiṭi kōraḷē which from former times has heretofore remained a *praveni*<sup>44</sup> land of these (the members of this family) and which is circumscribed by the following four boundaries, namely the centre of the field at Mādittara<sup>45</sup> on the east, the mango tree on the ditch in the land belonging to Prince Rak on the south, the stretch of rock at Gāḍubuvāṇa<sup>46</sup> on the west, and the stretch of rock at Māmpē on the north, be caused to be offered to His Lordship the Tooth Relic as (His) property so that the right of enjoying the fruits thereof will permanently<sup>47</sup> devolve, as long as the moon and the sun last, on Vijayarāja Palihaḷaḍana Śembahapperumālā of Māmpē in the lineal descent of his children and grand children, on the payment of five *fanams* (to His Lordship the Tooth Relic) per annum. If there be any person who is hostile to this (act), he shall suffer in the eight hells beginning with Saṅjīva and Kāḷa-Sūtra and shall not see land. If in the future any person by exercising his power or official authority supports this act, he shall in the future see Buddha Maitreya and be admitted to his order, attain to arahatship and finally attain to the immortal and noble state of *Nirvāṇa*. I, Sanhas Tiruvaraṅgan Perumāl attest that this copper plate deed was written at the command orally given by his majesty seated on the lion throne decorated with variegated paintings and presiding over the assembly of ministers in the courtyard of the palace of Jayawardhana Kōṭṭē. May (they) promote the *Dharma*.

P. E. E. FERNANDO

42. දුක් පල ලැබ: The word පල is the same as the word වෙළ occurring in the phrase ඉන් රජයෙ ඇත්තවුන් වෙළ ලක්කා in the Pṛiti-dānaka-maṇḍapa Rock-Inscription of King Nīśaṅkamalla, Epigraphia Zeylanica Vol. II, Colombo, 1912-1927, p. 169. The word also occurs as වෙළ in වෙළ හෙළ එවු රනැහිලි in King Nīśaṅkamalla's Galpota Inscription, *ibid.* p. 10 and as වෙහෙළ in වෙහෙළ හෙළ එවු රනැහිලි in the Ran-kot-dāgāba Gal-āsana Inscription of the same ruler, *ibid.*, p. 135. Wickremasinghe has equated the word with Sk. *viheṭha*, distress. In the present context, however, the word appears to have undergone a slight semantic change and the phrase එකාන්ත පක්කව දුක් පල ලැබ යොදින් පැවති පිණිස is used precisely in the same sense as the phrase ඉතා පක්කපතවු හොඳ හිතින් දුගලන හිටිනා නිසා commonly found with or without variation in *sannases* granted by Kandyan kings.

43. *Oviṭa*: swampy arable land on the bank of a river.

44. ප්‍රවේණි, heritable land that passes from one generation to the next.

45. This village today is known as Māvittara and is situated in Pallē Pattu, Salpiṭi Kōraḷē. Rak-kumarayāge-vatta: this name probably survives in Rajakumārāyāge-vatta, the name of a block of land situated to the east of Demaḷadūva.

46. Gāḍubu-vāṇa, literally 'Asses' Rock'. The name survives today as Gāḍubuvāṇa-vatta, the name of a coconut plantation near Demaḷadūva. I am thankful to Mr. S. K. Liyanage, an under-graduate member of the Department of Sinhalese, University of Ceylon, for the information contained in this note and in note 45 above.

47. ස්ථාවරව, permanently. This corresponds to the phrase *nibandham vā kṛtvā* in the verses quoted from *Yājñavalkya-Smṛti* in note 40 above. This *sannasa* as pointed out above is not an original grant, but is only an act of confirmation.

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## APPENDIX

### EXTRACTS FROM SANNASES

1

Vaharakgoda Rock-Inscription of Parākramabāhu, possibly Parākramabāhu II, A. D. 1234-1269, H. C. P. Bell, *Report on the Kegalla District*, Colombo, 1892, p. 82.

.....මෙ කුසලන් පත (ලියා දුන්) බවට මුඤ්ඤ පොතැ.....කර ලියනනාමා මැ වු

2

The Ampitiya Rock-Inscription issued in the third year of King Vikramabāhu III, A.D. 1357-1374, E.Z. IV, p. 272.

.....සෙන්කඩගල දෙවියන්ට සයමීර කරව මේ පත්කඩ දුන් බවට අරාවෙ අත්තායක ඇපාණ වුමෙ

3

Beligala Copper Plate Sannasa of Parākramabāhu VI, dated 1958 B.E. (A.D. 1415), H. C. P. Bell, *Report on the Kegalla District*, pp. 94-95.

.....මෙ තාංත්‍ර පත්‍රය ලියා දුං බවට සම්පෙළ පෙරුමාඵමි හ

4

Kāragala Slab-Inscription issued in the 11th year of King Parākramabāhu VI, A.D. 1412-1467, J.C.B.R.A.S. Vol. XXII, Colombo, 1910-12, pp. 353-354.

.....බහුවිධානාස් නො කියන නො කරන ලෙසට ශිලා ලෙඛනයක් පිහිටුවන්ට යයි ජයවර්ධ කෝට්ටේ මාලිගාවෙ බලිබන්කුඩම වැඩසිට ගල්කටුවක් ශ්‍රී භයායෙන් ගෙනදී වදළ මෙහෙවරින් මේ ශ්‍රී ශිලාලෙඛය ශාසනපත්‍රය ලියවා දුන් බවට සන්නස් කිරු වරහම් පෙරුමාඵමෙහ.

5

Maḍavaḷa Rock-Inscription, issued in the year following the 46th year of Parākramabāhu VI, A.D. 1412-1467, E.Z. III, p. 239.

.....දන්තොට වතුරෙ දෙවන් දිවාණවතෙහ ලංකාඅධිකාරීන් මැදවැ මෙ දිවෙල් පත්කඩ දුන් බවට දුම්ර අසම්පති දසදෙන මැදව කෙටවු සිලාලෙඛයයි

6

Vannipola Sannasa issued in the year following the 12th year of Siri Saṅgabo Śrī Senā-sammata Vikramabāhu, c. A.D. 1472/3-1520. Ceylon Literary Register, Vol. II, third series, 1932, p. 290.

This is a modern Copper Plate but the text appears to be authentic.

.....අමා මහ නිවන් දක්නාහු නම් වෙති යනාදීන් වදරා මේ පත ලියා දෙන්නේ යයි වදළ මෙහෙවරින් මේ තාමු පත්‍ර ලියාදුන් බවට සන්නස් සිව්නන නෙනනාරුමෙ ඉමං ලිඛිත පුඤ්ඤාන මෙතෙතයං උපසංකම් පතිශ්භිත්වා සරණෙ සුප්පතිසාම් සාසනෙ සිඨිරසතු.

7

The Gaḍalādeniya Inscription of Senāsammatā Vikramabāhu issued in the 8th year of his reign, E.Z. IV, p. 14.

.....වදළ මෙහෙවරින් මේ ශිලාලෙඛය කොටවා දුන් බවට සන්නස් සිව්නන නායිනාරුමෙහ

# DEMALADUVA SANNASA

8

Alutnuvara Slab-Inscription of Senāsammata Vikramabāhu, (no date) E.Z. IV, p. 267.

.....සෙනාසමමත වික්‍රමබාහු රජපුරුෂාමීන්ගේ මෙහෙවරින් මෙ ගෞලලෙක්කියායක් තුළ  
බවට වික්‍රමබාහු ඇපාණ වමන.

9

Kobbākaḍuwa Vihāre Sannasa issued in the 37th year of the reign of Senāsammata Vikramabāhu, Ceylon Literary Register, Vol. II, (third series), 1932, p. 290; J.C.B.R.A.S. Vol. XXXII, 1932, p. 168.

.....සෙන්කඩගල සිරිවඩිත මාලිගාවේදී උභයවාසයෙ මහ සංඝයා වහන්සේ මැදෙනි වදල  
මෙවරින් මෙ සන්තස්දනපත්‍රය ලියා දුන් බවට සන්තස් සිව්තන නායිනාරුමිහැ

10

Alutnuvara Inscription on Slab No. 2, E.Z. IV, p. 265, n. 3 and H. C. P. Bell, *Report on the Kegalla District*, p. 81. Codrington takes this record to have been issued by Senāsammata Vikramabāhu.

.....වදල මෙහෙවරින් ලෙකේ කල බවට සන්තස් සිව්තන නායිනාරුමිහ

11

Galgāne Vihāre Sannasa issued B.E. 2050 (A.D. 1570) by Sri Senāsampat Vikramabāhu. Ceylon Literary Register, Vol. II (third series), 1932, p. 290; J.C.B.R.A.S. Vol. XXXII, p. 70.

.....වදල මෙහෙවරින් සන්නාය්‍ය වන්නේ කල පෙරුමාළමනැ

12

Kuṭṭangal Vihāre Sannasa issued by Srisena Samasta Vikramabāhu in A.D. 1510, Ceylon Literary Register, Vol. II, (New Series) 1932, p. 291. Only a summary of this Sannasa is available in English. Obviously the Secretary's name should read: Sannas Sivatta Kulapperumal.

..... This Sannasa has been inscribed by Sannissiwatte Kulapperumal.

13

Dādigama Slab-Inscription issued in the year following the eighth year of the reign of King Bhuvanekabāhu VI, A.D. 1472/3-1480/1, E.Z. III, p. 281.

.....වදල මෙහෙවරින් මේ අභයදන ශිලාලෙක්කිය ලී බවට සන්තස් තීරුවරහන් වික්‍රමසිංහ  
අධිකාර වමන.

14

The Oruvaḷa Sannasa (Copper Plate) issued in the year following the third year of King Parākramabāhu identified as either Parākramabāhu VII, A.D. 1480/1-1484, or Parākramabāhu VIII, c. A.D. 1484-1513/1518, E.Z. III, p. 65.

.....මෙලෙස වදල මෙහෙවරින් මෙ සන්තස් තාමු පත්‍රය ලියා දුන් බවට පාලාන්තරුමන

15

Gaḍalādeniya Slab-Inscriptions issued probably by King Parākramabāhu IX, A.D., 1509-1528 issued in the fifth year of King's reign, E.Z. IV, pp. 21-24.

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## I

.....ලියා දෙන්නේ යයි වදල මෙහෙවරින් මේ ශිලාලෙඛනය ලියා දුන් බවට

## II

.....ශිලාලෙඛනය ලියවා දුන් බවට.....මේණවරතුණායාරුත් පෙරුමාළුන් වමන

16

Kālāni Rajamaha-Vihāra Slab-Inscription issued in the nineteenth year of King Siri Saṅgabo Śrī Parakramabāhu, A.D. 1509-1528, Ceylon Antiquary and Literary Register Vol. I, Colombo, 1915-1916, pp. 156-157.

.....ජයවර්ධන කෝට්ටයෙහි ශ්‍රී මාලිගාවේ සිංහාසනයෙහි වැඩ හිඳ මුදලිවරුන් මැද වැ වදල මෙහෙවරින් මේ ශිලාලෙඛනය ලියා දුන් බවට සන්නස් තීරුවරහන් පෙරුමාළුම්හ

17

Vēragama Copper Plate Sannasa issued in the 7th year of King Vijayabāhu VII, A.D. 1509-1521, E.Z. Vol. V. p. 451.

.....ඉරසඳු හිමි පමුණුකොට පත් ලියා දෙන්නේ යයි ජයවර්ධන කෝට්ටයේ මාලිගාවේ විහුකුට මඩපයෙහි ගනු දේවේන්ද්‍ර ලීලාවෙන් සිංහාසනාරූඪ වැ වැඩහිඳ මුදලිවරුන් මැද වදල මෙහෙවරින් මේ සන්නස් තාමු පත්‍රය ලියා දුන් බවට තීරුවරහන් පෙරුමාළුම්හ

18

Devundara Dēvāle Copper Sannasa of King Vijayabāhu VII, A.D. 1509-1521, H. C. P. Bell, *Report on the Kegalla District*, p. 96.

.....ආ වන්දා කිකසායායිව සවසරී පවතිනා පණතට සලසවා පත් ලියා දෙන්නේ යයි ජයවර්ධන කෝට්ටයේ මාලිගාවේ සිංහාසනයෙහි වැඩහිඳ මුදලිවරුන් මැද වදල මෙහෙවරින් මේ සන්නස් තාමු පත්‍රය ලියා දුන් බවට සන්නස් තීරු වරහන් පෙරුමාළුම්හ.

19

Copper Plate Sannasa of King Vijayabāhu of Udugampala, possibly Vijayabāhu VI, A.D. 1397-1409 or Vijayabāhu VII, 1509-1521, Journal of the Ceylon Branch of the Royal Asiatic Society, 1873, Part 1, pp. 78-79.

.....මේ තාමු පත්‍රය ලියා දුන් බවට සන්නස් මකුට බෙරුන් වනප පෙරුමාළුම්හ.

20

Kappāgoḍa Pillar Inscription of King Vijayabāhu VII, probably issued in the 13th year of his reign, H. C. P. Bell, *Report on the Kegalla District*, p. 86.

Side A

.....සෙලලේබෙට (රැස්) කොට පවත්න පනනේ සිටු වූ බවට විජයසිංහ එකනායක පෙරුමාළුම්හ

Side C

.....මෙකියන විහාරය එකනායකයම්ගෙ විධානයෙන් මවා ගත් බවට විජය අදිකර ගරුඬපෙරුමාළුම්හ

21

Māṃpe Copper Plate Sannasa issued in the year following the 3rd year of the reign of King Bhuvanekabāhu VII, J.C.B.R.A.S. Vol. XXII, p. 271-271.

.....වදහල මෙවරින් මේ සන්නස් තාමුදනපාප්‍රිය ලියා දුන් බවට සන්නස් තීරුවරහපෙරුමාළුම්හ.

# DEMALADUVA SANNASA

22

The Palkumbura Sannasa (Copper Plate) issued in the reign of King Bhuvanekabāhu VII, A.D. 1521-1551, E.Z. III, p. 245.

.....ආ වන්දනා කීකරු සාධාරණ සමස්තීරව පවතිනා පණතට සලස්වා තබා පන ලියා දෙන්නේ යයි ජයවර්ධන කෝට්ටේ මාලිගාවේ සිංහාසනයේ වැඩිහිටි මුදලිවරුන් මැද වදල මෙහෙවරින් මේ සන්නස් තාමු පත්‍රය ලියා දුන් බවට සන්නස් නිරූපණන් නය.....

23

Kandy Nātha Dēvāle Inscription I, issued in A.D. 1543, E.Z. Vol. IV, p. 31.

.....මේ සිලාලේඛනය කොටාවා දුන් බවට ශ්‍රී ජයවීර මහාවැඩිලත්තැන වම්භ

24

Gaṇēgoda Copper Plate Sannasa of King Bhuvanekabāhu, probably Bhuvanekabāhu VII, 1521-1551, issued in the year following the 25th year, H. C. P. Bell, *Report on the Kegalla District*, p. 93.

.....වන්දනා කීකරු සාධාරණ සමස්තීරව පවතිනා පණතට ..... තබා පනක් දෙන්නේ යයි වදල මෙහෙවරින් මේ සන්නස් තාමු පත්‍රය ලියා දුන් බවට සන්නස් නිරූපණන් පෙරුමාපමහ

25

Godagama Copper Plate Sannasa, issued in the twenty eighth year of the reign of King Bhuvanekabāhu, probably Bhuvanekabāhu VII, 1521-1551. Jñānādarsaya, Vol. IV, 1900, Colombo, P. 180; J.C.B.R.A.S. Vol. XXII, p. 270.

.....ආ වන්දනා කීකරු සාධාරණ සමස්තීරව පවතිනා පණතට සලස්වා පන ලියා දෙන්නේ යයි ජයවර්ධන කෝට්ටේ මාලිගාවේ සිංහාසනයේ වැඩි ඉඳි මුදලිවරුන් මැද වදල මෙහෙවරින් මේ සන්නස් තාමු පත්‍රය දුන් බවට සන්නස් නිරූපණන් පෙරුමාපමහ.

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