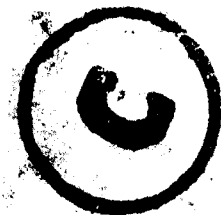


Journal of the Annamalai

University

1936-March-5-2



JL
T4 m 211A, N32
N36.5.2
94968

Vol. V, No. 2.

March, 1936.

JOURNAL

OF THE

ANNAMALAI UNIVERSITY

EDITOR

PROFESSOR B. V. NARAYANASWAMI NAIDU, M.A., B.COM., PH.D.,
BAR-AT-LAW.

EDITORIAL BOARD

PROFESSOR C. S. SRINIVASACHARIAR
M.A.

PROFESSOR S. SOMASUNDARA
BHARATI, M.A., B.L.

PROFESSOR A. NARASINGA RAO,
M.A., L.T.

PROFESSOR M. S. SUNDARAM,
M.A., B.LITT. (OXON).

PROFESSOR S. RAMACHANDRA RAO,
M.A., PH.D. (LOND.), F. INST. P.
(LOND.).

PROFESSOR S. N. CHAKRAVARTI,
M.Sc., D.PHIL. (OXON).

PROFESSOR K. RAMA PISHAROTI,
M.A., L.T.



PUBLISHED BY THE UNIVERSITY

ANNAMALAINAGAR

1936

NOTICE

To contributors and others

Contributions, remittances, books for review, exchanges and correspondence regarding all matters may be addressed to:—

Dr. B. V. Narayanaswami Naidu

Economics Department,

Annamalai University,

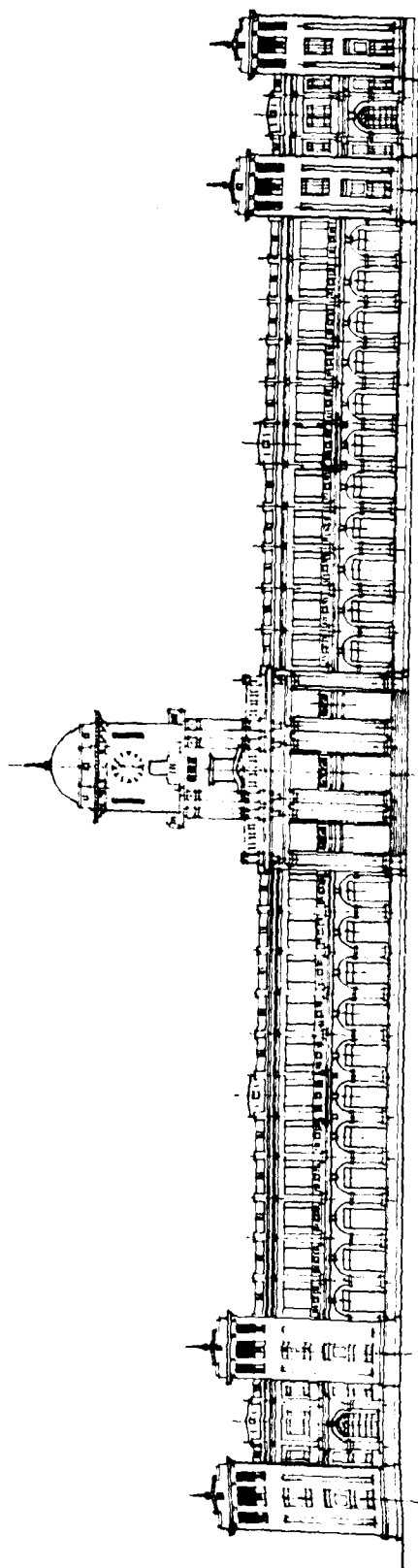
Annamalainagar.



CONTENTS

1. On Waring's Problem By S. Sivasankaranarayana Pillai, B.A., D.Sc.	.. 145
2. Notes on Comparative Anatomy of Some Indian Melaniidae By R. V. Seshaiya, M.A.	.. 167
3. A Study of Working Class Family Budgets By B. V. Narayanaswami Naidu, M.A. and V. Sivar- raman, M.A., M.Litt.	.. 183
4. Śikhara By K. Rama Pisharoti, M.A.	.. 200
5. Tholkappia Araichi By S. S. Bharati, M.A., B.L.	.. 217
6. Jagannātha Paṇḍita By V. A. Ramaswami Sastri, M.A.	.. 233
7. Abhiṣeka-Nāṭaka By K. Rama Pisharoti, M.A.	.. 243
8. Preliminary Synthetic Experiments in the Cytisine Group. Part II By Satyendranath Chakravarti, M.Sc., D. Phil. (Oxon). and P. L. Narasimha Rao, B.A.	.. 254
9. Preliminary Synthetic Experiments in the Cytisine Group, Part III By Satyendranath Chakravarti, M.Sc., D.Phil. (Oxon) and P. L. Narasimha Rao, B.A.	.. 259
10. Chemical Investigation of Indian Medicinal Plants, Part V By Satyendranath Chakravarti, M.Sc., D.Phil. (Oxon.) and T. S. Kuppuswamy, B.A.	.. 269
11. Siddhitraya By R. Ramanujachariar, M.A., and K. Srinivasachariar.	
12. Nyayakulisa By R. Ramanujachariar, M.A., and K. Srinivasachariar.	
13. Samasasaktivimarsah By V. Subrahmanya Sastri	
14. Trimsacchloki By K. Rama Pisharoti, M.A.	

15. University Notes	
<i>By B. V. Narayanaswami Naidu, M.A.</i>	.. 271
16. Reviews :—	.. 276
1. Dashopanishads <i>By K. R. P.</i>	
2. The Great Temple at Tanjore <i>By S. S. B.</i>	
3. A Survey of the Marketing of fruit in India <i>By M. K. M.</i>	
4. Defective Sight <i>By C. R. M.</i>	
5. Cheap and Healthy Homes for the Middle Classes of India <i>By S. P. R.</i>	
6. Śrimad Bhagavadgītā <i>By R. R.</i>	
7. The Uṇādisūtras in Various Recensions <i>By V. A. R.</i>	
8. Planned Economy for India <i>By V. G. R.</i>	



The MAIN ELEVATION
(Facing South).

JOURNAL OF THE ANNAMALAI UNIVERSITY

VOL. V.

MARCH 1936

NO. 2.

On Waring's Problem

By

S. S. PILLAI

(Annamalai University)

Let $g(n)$ denote the least value of s required to represent every positive integer as the sum of s non-negative n th powers. Further, let $l = [(\frac{3}{2})^n]$ and $j = [(\frac{1}{3})^n]$ where $[x]$ denotes the integral part of x . The object of this paper is to prove the following results:—

Theorem I: $g(n) = 2^n + (\frac{3}{2})^n + O(\frac{1}{3})^n$.

Theorem II: When $n > n_0$ and $\{(\frac{3}{2})^n\} \leq 1 - \frac{l+3}{2^n}$,

$$g(n) = 2^n + l - 2, \quad (1)$$

where $\{x\}$ denotes the fractional part of x .

Theorem III: When $n > n_0$ and $\{(\frac{3}{2})^n\} \geq 1 - \frac{l}{2^n}$,

$$g(n) \geq 2^n + l + j - 3.$$

It is not unlikely that $\{(\frac{3}{2})^n\}$ is uniformly distributed in the interval $(0, 1)$. If it is true, then (1) is true for almost all n . Further, it may be possible that when $n \geq n_0$, $\{(\frac{3}{2})^n\} \leq 1 - (l+3)/2^n$. If this is proved, $g(n)$ is completely determined.

Vinogradov proved recently that

$$G(n) = O(n \log n).$$

(On Waring's problem—The Annals of Mathematics, Vol. 36, No. 2, (395—405). The proof is based on his method. (x) denotes the distance of x to the nearest integer.

1. NOTATION AND LEMMAS.

n is a positive integer. $v = 1/n$.

$$k = [n \log(12n^2) + 5]; \quad t = n^0; \quad f = 4/t.$$

$$o = n(1 - v)^k.$$

θ is a number whose modulus is less than unity. The constants in O are always independent of n .

N_0 is a positive integer.

$$P = [3^{-1} N_0^v + 1]; \quad P_1 = [n^v P^{1-v}]; \quad R = [P^{1-v/2}];$$

$$R_1 = [n^v R^{1-v}]; \quad Y = [P^{(v-v^2)/2}]; \quad \tau = 2n \cdot 3^{n-1} P^{n-1/2}$$

N is an integer lying in the interval $N_0 - N_0 P^{-1/4} < N \leq N_0$.

$$N_0 \geq \beta \text{ where } \beta = n^{5n^{1/4}}. \quad (A)$$

Then we can easily verify that

$$2^n P^n - N_0 P^{-1/4} > P^n; \quad N_0 > 8o \cdot 3^{n-4} P^n;$$

$$Y^n \leq 2^{-1} \sqrt{P}; \quad \tau \leq P^n. \quad (1)$$

p is a prime.

$E\{x\}$ denotes e^x ; $\eta = E\{2\pi i/q\}$.

If $q > 0$, $(a, q) = 1$, we put

$$S_{a,q} = \sum_{r=0}^{q-1} E\{2\pi i a r^n/q\}; \quad B_{a,q} = (1/q) S_{a,q}.$$

$$S'_{a,q} = \sum_h E\{2\pi i a h^n/q\}, \text{ where } (h, q) = 1, \quad 0 < h \leq q.$$

$$A_q(N) = \sum_a B_{a,q} \cdot E\{-2\pi i a N/q\},$$

where a runs through all integers less than and prime to q .

$\chi = \chi_x = \chi_x(m)$ denotes the $h(= \varphi(q))$ Dirichlet's characters modulus q . χ_1 is the principal character; $\bar{\chi}$ is the character conjugate to χ . $\chi' = \chi_{\chi'}$ denotes a special character, that is, a character such that

$$\chi_{\chi'}^n = \chi_1.$$

$$\delta = (h, n) = (\varphi(q), n).$$

P.N. 4 refers to the paper by Hardy and Littlewood in *Mathematische Zeitschrift*. Band 12. (1920). (101—188).

P.N. 6 refers to the paper by the same authors in the same journal. Band 23. (1925). (1—38).

Lemma (1): If $\tau_{\chi} = \sum_{l=1}^q \eta^{ol} \bar{\chi}_{\chi}(l)$, then for all q ,

$$|\tau_{\chi}| \leq \sqrt{q}.$$

$$\text{Let } f(m) = \sum_{r=1}^q \chi(r) \cdot \eta^{mr},$$

$$\text{and } g(m) = |f(m)|^2.$$

Then from page 493, Landau's Primzahlen, we have

$g(m) = |\bar{\chi}(m) f(1)|^2 = g(1)$, when $(m, q) = 1$; and $g(m) \geq 0$, when $(m, q) > 1$.

$$\begin{aligned} \text{So } \varphi(q) g(1) &\leq \sum_{m=0}^{q-1} g(m) = q \sum_n \chi(nn') & (\text{page 494}) \\ &= q \varphi(q). \end{aligned}$$

Hence $g(1) \leq q$.

Therefore, when $(m, q) = 1$, we have

$$g(m) \leq q.$$

$$\text{So } |\tau_{\chi}| = |f(a)| \leq \sqrt{q}.$$

Lemma (2): The number of special characters is δ .

This is lemma 7 in P. N. 4.

$$\text{Lemma (3): } S'_{a,q} = \sum_{l=0}^{q-1} \eta^{al} \sum_{\chi'} \bar{\chi}_{\chi'}(l).$$

This is lemma 10 in P. N. 4.

$$\text{Lemma (4): } \sum_l \eta^{al} \bar{\chi}_1(l) = 0, \quad \text{when } \lambda > 1 \\ = -1, \quad \text{when } \lambda = 1,$$

where $q = p^\lambda$.

See page 167 in P. N. 4.

Lemma (5): When $q = p^\lambda$, $\lambda \leq n$,

$$|S_{a,q}| \leq p^{\lambda-1} + np^{\lambda/2}.$$

Since $\lambda \leq n$,

$$S_{a,q} = p^{\lambda-1} + S'_{a,q} \\ = p^{\lambda-1} + \sum_l \eta^{al} \bar{\chi}_1(l) + \sum_l \eta^{al} \sum_{\chi'} \bar{\chi}_{\chi'}(l),$$

where in the last sum the principal character is excluded from summation and l runs through $0, 1, \dots, q-1$.

So from lemmas (2), (4), the present one follows.

Lemma (6): If $\lambda \leq n$, $p^\lambda \geq (4n)^{2n/(n-2)}$,

$$|B_{a,p^\lambda}| \leq p^{-\lambda/2}.$$

With the help of lemma (5), this can be easily verified.

Lemma (7): $|B_{a,q}| \leq 1 - 1/(4q^4)$, when $q \geq 3$.

$$|S_{a,q}|^2 = \left(\sum_{r=0}^{q-1} \cos \frac{2\pi a}{q} r^n \right)^2 + \left(\sum_{r=0}^{q-1} \sin \frac{2\pi a}{q} r^n \right)^2 \\ = \sum_{r=0}^{q-1} \sum_{s=0}^{q-1} \left\{ \cos \frac{2\pi a}{q} r^n \cos \frac{2\pi a}{q} s^n + \sin \frac{2\pi a}{q} r^n \sin \frac{2\pi a}{q} s^n \right\} \\ = \sum_{r=0}^{q-1} \sum_{s=0}^{q-1} \cos \frac{2\pi a}{q} (r^n - s^n)$$

$$\leq q^2 - 2 + 2|\cos(\pi/q)|; \quad \{\text{for } (a, q) = 1.\} \\ \leq q^2 - 2 + 2[(1 - (1/4q^2))]; \quad \{\text{for } q \geq 3.\} \\ < [q - 1/(4q^3)]^2.$$

So the lemma follows.

$$\text{Lemma (8): } \text{When } n > n_0, q \leq (4n)^{2n/(n-2)}, \\ |B_{a,q}|^t \leq 1/q^3.$$

This follows from lemma (7); for $t = n^2$.

$$\text{Lemma (9): } |B_{a,q}|^t \leq 1/q^3.$$

Let $\lambda = \alpha n + \mu$, $0 < \mu \leq n$.

Then from the proof of lemma (3) in P.N. 6, whether p divides n or not,

$$|B_{a,p^\lambda}| \leq 1/p^{\alpha t} |B_{a,p^\mu}|^t \leq 1/p^{\alpha t} \cdot 1/p^{3\mu} \leq 1/p^{3\lambda}; \\ \text{[(from lemmas (6), (8)).]}$$

Since, when $(m, k) = 1$,

$$B_{a,m} \times B_{a,k} = B_{a,km},$$

from the above the lemma follows.

$$\text{Lemma (10): } \sum_{q=1}^{\sqrt{P}} A_q(N) \geq 1/2.$$

$$| \sum_{q=1}^{\sqrt{P}} A_q(N) - 1 | \leq \sum_{q=3}^{\sqrt{P}} |A_q(N)|; \\ \text{for } A_2(N) = 0, A_1(N) = 1 \\ \leq \sum \varphi(q)/q^3; \text{ from lemma (9)} \\ \leq 1/q^2 < 1/2.$$

$$\text{Lemma (11): } |B_{a,q}| \leq n/q^f.$$

(a) Let $p|n$, $\lambda = \alpha n + \mu$, $0 < \mu \leq n$.

Then from (3.47) in P. N. 6,

$$|B_{a,q}| = q^{-v} |B_{a,p}| p^{uv} \leq q^{-v} \prod_{p|n} p \leq nq^{-v}.$$

(b) Let p do not divide n . Then from 3.44, 3.45, in P. N. 6,

$$|B_{a,q}| \leq (q_2^n Q)^{-v} B_{a,q_1} \leq (q_2^n Q)^{-v} \prod_p |B_{a,p}|$$

But $|B_{a,p}| \leq n/\sqrt{p} \leq p^{-v}$, provided $p > n^{2n/(n-2)}$

$$\begin{aligned} \text{So } |B_{a,q}| &\leq (q_2^n Q)^{-v} \prod_{p > n^{2n/(n-2)}} \{1/p^v\} \\ &\leq (q_2^n Q)^{-v} \cdot 2/q_1^f \leq 2/q^f; \end{aligned}$$

$$\text{for } \prod_{p \leq n^{2n/(n-2)}} 1 \leq 2 / \left(\prod_{p \leq n} p \right)^f.$$

From (a) and (b) the lemma follows; for $t = n^9$ and so $f < v$.

Lemma (12): If every integer M for which $f < M \leq h$ is a sum of $s-1$ n th powers ≥ 0 , and if m is the greatest integer such that

$$(m+1)^n - m^n < h - f,$$

then every integer M in the interval $[f, h + (m+1)^n]$ is a sum of s n th powers ≥ 0 .

This is proved by L. E. Dickson: *Proof of a Waring theorem on fifth powers*, Bulletin of the American Mathematical Society, Vol. 37. (1931). (549—553).

Lemma (13): If m is any positive integer,

$$N = M + a,$$

where M is a sum of $(2 \log N / \log 2) [m/(m-1)]^n$ n th powers and

$$0 \leq a \leq m^n.$$

Let $b_1 = [(N/2)^v]$, $N = q_1 b_1^n + r_1$, where $q_1 = [N/b_1^n]$, $r_1 < b_1^n$. Then $r_1 \leq N/2$.

Put $b_2 = [(r_1/2)^v]$, $r_1 = q_2 b_2^n + r_2$, where $q_2 = [r_1/b_2^n]$, $r_2 < b_2^n$. So $r_2 \leq N/2^2$.

Put $b_3 = [(r_2/2)^v]$ and so on.

Then $N = q_1 b_1^n + \dots + q_l b_l^n + r_{l+1}$, where $r_l \leq N/2^l$, $b_l = [(r_{l-1}/2)^v]$, $q_l = [r_{l-1}/b_l^n]$.

Choose l so that

$$r_{l-1} \geq 2 \cdot m^n > r_l.$$

Then $r_{l+1} \leq m^n$.

$$\begin{aligned} \text{Now } q_l &\leq r_{l-1} / [(r_{l-1}/2)^v]^n \leq r_{l-1} / \{(r_{l-1}/2)^v - 1\}^n \\ &= 2 / \{1 - (2/r_{l-1})^v\}^n \\ &\leq 2 / \{1 - (2/2m)^v\}^n = 2 \{m/(m-1)\}^n. \end{aligned}$$

Further $q_k \leq 2 / \{1 - (2/r_{l-1})^v\}^n$, for $k = 1, 2, \dots, l$.

So $q_1 + q_2 + \dots + q_l \leq 2l \{m/(m-1)\}^n$.

Now $N/2^{l-1} \geq r_l > 2 \cdot m^n$.

So $l < (\log N) / \log 2$.

Thus the lemma follows.

Lemma (14): If every positive integer M such that $F < M \leq F + 2^n$, is the sum of s n th powers, then every positive integer in the interval (F, β) is the sum of

$$s + (\frac{3}{2})^n + (\frac{4}{3})^n + 2(\frac{5}{4})^n - 3,$$

n th powers, provided $n > n_0$.

Starting from the interval $(F, F + 2^n)$, by the repeated application of lemma (12) we get that every positive integer in the interval $(F, F + m^n)$ is the sum of

$$s + (\frac{3}{2})^n + \dots + (m/m-1)^n$$

n th powers.

Now from lemma (13),

$$N = q_1 b_1^n + \dots + q_l b_l^n + r_{l+1}.$$

Since $q_1 + \dots + q_l \leq (2 \log N / \log 2) (m/m-1)^n$

we can put

$$N = \sum_{r=1}^u h_r^n + a$$

where $u \leq (2 \log N / \log 2) (m/m-1)^n$ and $F < a \leq F + m^n$.

{If $r_{l+1} < F$, add some of the n th powers $b_1^n, \dots, b_l^n$, etc.}

Now $\beta = n^{5n^u}$.

So

$$\left(\frac{5}{8}\right)^n + \left(\frac{7}{8}\right)^n + \dots + (m/m-1)^n + \frac{2 \log \beta}{\log 2} (m/m-1)^n \\ < \left(\frac{5}{4}\right)^n - 2, \text{ when } n > n_0.$$

and a requires at most $s + \left(\frac{3}{2}\right)^n + \dots + (m/m-1)^n$ n th powers.

So the lemma follows.

Lemma (15): Let $3^n = l \cdot 2^n + r$ and $n > n_0$.

If $\left(\frac{4}{3}\right)^n + 2\left(\frac{5}{4}\right)^n \leq r \leq 2^n - \left(\frac{3}{2}\right)^n - \left(\frac{4}{3}\right)^n - 2\left(\frac{5}{4}\right)^n$, every integer $\leq \beta$ is the sum of

$$2^n + l - 2$$

n th powers.

Now every integer $\leq l \cdot 2^n$ is the sum of $2^n + l - 2$, n th powers. In virtue of the hypothesis every integer between $l \cdot 2^n$ and $(l+1)2^n$ requires at most

$$2^n - \left(\frac{4}{3}\right)^n - 2\left(\frac{5}{4}\right)^n$$

n th powers.

From this and lemma (14), the present lemma follows.

Lemma (16): If $r \leq \left(\frac{4}{3}\right)^n + 2\left(\frac{5}{4}\right)^n$, every integer $\leq \beta$, is the sum of

$$2^n + l - 2$$

n th powers.

It can be easily verified that every integer in $(ul2^n, u3^n)$ is the sum of $u(l+r)-1$, n th powers and every integer in $[u3^n, (ul+1)2^n]$ is the sum of $2^n - u(r-1)-1$, n th powers, provided $(ul+1)2^n > u3^n$.

Now $u(l+r)-1$ and $2^n - u(r-1)-1$ are each less than $2^n - \left(\frac{4}{3}\right)^n - 2\left(\frac{5}{4}\right)^n$, provided $\{1/(r-1)\}\left(\frac{4}{3}\right)^n + \{2/(r-1)\}\left(\frac{5}{4}\right)^n < u < \{1/(l+r)\}\{2^n - \left(\frac{4}{3}\right)^n - 2\left(\frac{5}{4}\right)^n\}$.

Now the above interval is greater than 1, when $r \geq 3$.

So u has an integral value and $(ul+1)2^n > u3^n$.

Hence when $r \geq 3$, every integer in the interval $[ul2^n, (ul+1)2^n]$ is the sum of

$$2^n - \left(\frac{4}{3}\right)^n - 2\left(\frac{5}{4}\right)^n$$

n th powers.

Obviously $r \neq 2$.

Let $r = 1$

So $3^n \equiv 1 \pmod{2^n}$

Hence $n \equiv 0 \pmod{2^{n-2}}$

So $n = 1, 2, 3, 4$.

Hence when $n > n_0$, from lemma (14), the present lemma follows.

Lemma (17): Let

$$2^n - \left(\frac{8}{2}\right)^n - \left(\frac{4}{3}\right)^n - 2\left(\frac{5}{4}\right)^n \leq r \leq 2^n - (l+3)$$

Then every integer $\leq \beta$ is the sum of $2^n + l - 2$, n th powers.

Now we can verify that every integer in the interval $[(ul+u-1)2^n, u3^n]$ is the sum of $2^n - u(2^n - l - r - 1) - 2$, n th powers; and every integer in the interval $[u3^n, (ul+u)2^n]$ is the sum of $u(2^n - r + 1) - 1$, n th powers.

Now we can verify that there is an integer u such that $2^n - u(2^n - l - r - 1) - 2$ and $u(2^n - r + 1) - 1$ are each less than $2^n - \left(\frac{4}{3}\right)^n - 2\left(\frac{5}{4}\right)^n$, when $n > n_0$ and $(ul+u-1)2^n < u3^n < (ul+u)2^n$.

Hence from lemma (14), every integer in $[(ul+u-1)2^n, \beta]$ is the sum of $2^n + l - 2$ n th powers.

Further, it can be verified that this is true for every integer less than $(ul+u-1)2^n$ also, for $u \leq \left(\frac{4}{3}\right)^n$. For every integer in $[l \cdot 2^n, (l+1)2^n]$ requires at most $2^n - 3$, n th powers. So the lemma follows.

Lemma (18): If $r \leq 2^n - (l + 3)$, where $3^n = l2^n + r$, then every integer less than β and greater than $l \cdot 2^n$ is the sum of $2^n + l - 2$ n th powers.

This follows from lemmas (15), (16), (17).

Lemma (19): If $b < 2^{(5/4)^n}$, then b requires at most $2^n + (3/2)^n + O((1/3)^n)$, n th powers.

In lemma (13), put $b = N$, $m = 17$. Then

$$b = M + a,$$

$$a \leq 17^n.$$

But from lemma (12), a is the sum of at most

$$2^n + (3/2)^n + \dots + (17/16)^n, \text{ } n\text{th powers.}$$

But $(1/8)^n + \dots + (17/16)^n = O((1/8)^n)$.

$$(2 \log N / \log 2) (17/16)^n \leq 2 (5/4)^n (17/16)^n = O((1/8)^n).$$

Hence the lemma follows.

Lemma (20): If $0 \leq f'(t) \leq 1/2$, $f''(t) \geq 0$, $g \leq t \leq h$, then

$$\sum_{t=g}^h E\{\pm 2\pi i f(t)\} = \int_g^h E\{\pm 2\pi i f(t)\} dt + 5\theta$$

Lemma (21): Let λ be real but not an integer and $G < H$. Then

$$\left| \sum_{x=G}^H E\{2\pi i \lambda x\} \right| < 1/2\{\lambda\}.$$

These are lemmas C, D in Vinogradov's paper. Hereafter I closely follow his paper. c is a constant independent of n but different on different occasions.

2. THE CONSTRUCTION OF THE NUMBERS u .

We take a set of numbers

$$s_1 = 1^n, 2^n, \dots, P_1^n.$$

The difference of two successive values of s_1 is

$$s_1'' - s_1' \leq P_1^n - (P_1 - 1)^n < nP_1^{n(1-\nu)}.$$

Between every pair of successive numbers s_1' and s_1'' , we introduce a new set of numbers of the form $s_1' + w^n$, where w is an integer and

$$0 < w < (s_1'' - s_1')^\nu.$$

Thus we get a new set s_2 . The difference of two successive numbers of s_2 does not exceed

$$n^{1+(1-\nu)} P_1^{n(1-\nu)^2}.$$

Repeating this process, we obtain sets s_3, s_4 , and so on. Let ξ denote a typical number of s_{k-1} and X the number of ξ 's in s_{k-1} . The difference of two successive values of ξ is less than

$$n^{1+(1-\nu)+\dots+(1-\nu)^{k-2}} P_1^{n(1-\nu)^{k-1}} < n^n P_1^{n(1-\nu)^{k-1}}$$

$$\leq n^{n+1} P^\sigma.$$

$$P_1 > P^{1-\nu}, \text{ so } P_1^n > P^{n-1}.$$

$$\text{Hence } X > P^{n-1-\sigma}/n^{n+1}.$$

Now we form a set of numbers u

$$u = \xi + v^n$$

where ξ runs over the numbers in s_{k-1} and

$$v = P, P+1, \dots, 2P-1.$$

It is easy to see that the numbers u are all different and

$$P^n < u < 2^n P^n.$$

In the same way as we formed by means of P, P_1 , the sets of numbers ξ, v, u , we form by means of R, R_1 , the sets ξ_1, u_1, v_1 . Let X_1 denote the number ξ_1 . Then

$$X_1 > P^{(1-\nu/2)(n-1-\sigma)}/n^{n+1}.$$

3. AN INTEGRAL.

Let y be an integer $0 < y \leq Y$.

We introduce the sums depending on a .

$$T = \sum_{x=1}^P E(2\pi i a x^n);$$

$$T_1 = \sum_{x=1}^{3P} E(2\pi i a x^n);$$

$$V = \sum_v E(2\pi i a v^n);$$

$$V_v = \sum_{v_1} E(2\pi i a y^{n_1} v_1^n);$$

$$S = \sum_{\xi} E(2\pi i a \xi);$$

$$S_v = \sum_{\xi_1} E(2\pi i y^n \xi_1);$$

and the integral.

$$I_{v,N} = \int_0^1 T^{t-3} T_1 V^2 S^2 V_v S_v E(-2\pi i a N) d\alpha,$$

where for the interval of integration, we can substitute

$$-r^{-1} \leq \alpha \leq 1 - r^{-1}.$$

For every α in the last interval, we have

$$\alpha = (a/q) + z; (a, q) = 1; 0 < q < r; |z| \leq 1/q^r. \quad (2)$$

We divide the interval of integration into intervals of two classes. In the first class we put the intervals with

$$\alpha = (a/q) + z; (a, q) = 1; 0 < q \leq \sqrt{P}; -r^{-1} \leq z \leq r^{-1};$$

and in the second class the remaining intervals. The intervals in the first class do not overlap.

Corresponding to this division of the interval of integration, the integral is represented as the sum of two terms

$$I_{v,N} = H_{v,1} + H_{v,2}.$$

4. ASYMPTOTIC FORMULA FOR $H_{v,1}$.

Now we introduce the integrals

$$\varphi = \int_0^P E(2\pi i z x^n) dx;$$

$$\varphi_1 = \int_0^{3P} E(2\pi i z x^n) dx;$$

$$\psi = \int_P^{2P} E(2\pi i z x^n) dx;$$

$$\psi_v = \int_R^{2R} E(2\pi i z y^n x^n) dx.$$

In T , for x , we put

$$x = tq + r, r = 0, 1, \dots, q-1,$$

where for every r , t takes all integral values satisfying the condition

$$0 < qt + r \leq P.$$

$$\text{So } T = \sum_{r=0}^{q-1} \sum_t E\{2\pi i (a/q + z)(qt + r)^n\}$$

$$= \sum_{r=0}^{q-1} E\{2\pi i a r^n / q\} \cdot K_r;$$

$$\text{where } K_r = \sum_t E\{2\pi i z (qt + r)^n\}.$$

The function $f(t) = |z|(qt + r)^n$ satisfies in the interval of (3) the conditions of lemma (20).

$$\text{So } K_r = \int_{r/q}^{(P-r)/q} E\{2\pi i z (qt + r)^n\} dt + O(1) \\ = \varphi/q + O(1).$$

Hence

$$T = \varphi B_{a,q} + O(q) \quad (4)$$

Similarly we get

$$T_1 = \varphi_1 B_{a,q} + O(q) \quad (5)$$

$$V = \psi B_{a,q} + O(q). \quad (6)$$

$$\text{and } V_v = (\psi_v/q) \sum_{r=0}^{q-1} E(2\pi i a y^{n_1} r^n / q) + O(q).$$

$$\text{But } \sum_{v_1} E(2\pi i a y^{n_1} v_1^n / q) = (R/q) \sum_r E(2\pi i a y^{n_1} r^n / q) + O(q).$$

Hence

$$V_y = (\psi_y/q) \sum_{v_1} E(2\pi i a y^n v_1^n/q) + O(q). \quad (7)$$

Further

$$S = \sum_{\xi} E(2\pi i a \xi/q) + O(n |z| X P^{n-1}) \quad (8)$$

$$S_y = \sum_{\xi_1} E(2\pi i a y^n \xi_1/q) + O(n |z| X_1 P^{n-1}) \quad (9)$$

$$E(-2\pi i a N) = E\{-2\pi i a N/q - 2\pi i z N_0\} + O(3^n |z| P^{n-1/4}); \quad (10)$$

$$\text{for } N_0 - N_1 < N_0 P^{-1/4} < 3^n P^{n-1/4}.$$

We put

$$\begin{aligned} Z &= P, \text{ if } |z| \leq P^{-n} \\ Z &= |z|^{-n}, \text{ if } |z| \geq P^{-n}. \end{aligned} \quad (11)$$

Then we can verify that

$$\varphi = O(Z); \quad \varphi_1 = O(Z); \quad \psi = O(Z).$$

$$\text{Let } T' = \varphi B_{a,q}; \quad A = n Z q^{-1}; \quad r_1 = n^{-1} Z^{-1} q^{1/4}.$$

With the help of lemma (11), it is easy to see that

$$T' = O(A).$$

Further since $N_0 > \beta$, $q \leq \sqrt{P}$, we can verify that

$$tr_1 = O(P^{-1/4}) = o(1).$$

$$\text{So } T'^{t-3} = (T' + O(q))^{t-3} = \{T' + O(Ar_1)\}^{t-3}$$

$$\begin{aligned} &= T'^{t-3} + O\{t-3 C_1 (cT')^{t-4} Ar_1 + t-3 C_2 (cT')^{t-5} A^2 r_1^2 + \dots\} \\ &= T'^{t-3} + O(c^{t-3} A^{t-3}) \{tr_1 + t^2 r_1^2/2! + \dots\} \\ &= T'^{t-3} + O(c^t A^{t-3} tr_1), \end{aligned}$$

where c is the constant in the O of $O(Ar_1)$, which is independent of n .

Now with the help of the above result and (5)–(10), we can verify that

$$\begin{aligned} T'^{t-3} T_1 V^2 S^2 V_y S_y e^{-2\pi i a N} &= F_y E_y \\ &+ O(c^t X^2 X_1 R A^t P^{-1/4}) \{P^n |z| + 1\}, \end{aligned} \quad (12)$$

where F_y depends only on z, y, n and N_0 and

$$E_y = B_{a,q} \left(\sum_{\xi} e^{2\pi i (a/q) \xi} \right)^2 \sum_{u_1} e^{2\pi i (a/q) y^n u_1} e^{-2\pi i (a/q) N} \quad (13)$$

where $|E_y| = O(X^2 X_1 R q^{-3})$, [from lemma (9)]

Now integrate (12) with respect to z between the limits $z = -\tau^{-1}$ and $z = \tau^{-1}$. Then the part of $H_{y,1}$ corresponding to any fixed a and q is

$$Q_y E_y + L,$$

where Q_y depends only on y, n and N_0 . Now

$$\begin{aligned} L &= O[c^t q^{-4} n^t X^2 X_1 R P^{-1/4} \int_0^{\tau^{-1}} Z^t (P^n |z| + 1) dz] \\ &= O(c^t q^{-4} n^t X^2 X_1 R P^{-1/4}) \left\{ \int_0^{P^{-n}} P^t dz + \int_{P^{-n}}^{\tau^{-1}} |z|^{1-t} dz \right\} \\ &= O(c^t n^t X^2 X_1 R P^{t-n-1/4} q^{-4}). \end{aligned}$$

$$\text{So } \sum_{q=1}^{\sqrt{P}} \sum_{(a,q)=1} L = O(c^t n^t X^2 X_1 R P^{t-n-1/4}).$$

Hence

$$H_{y,1} = Q_y D_y + O(c^t n^t X^2 X_1 R P^{t-n-1/4});$$

$$D_y = \sum_{q=1}^{\sqrt{P}} \sum_a E_y. \quad (14)$$

5. ESTIMATION OF Q_y .

We sum up the equality

$$I_{y,N} = H_{y,1} + H_{y,2} \quad (15)$$

of § 3 for all values of N satisfying the condition

$$N_0 - N_0 P^{-1/4} < N \leq N_0.$$

The result of summation of the left side is equal to the number of solutions for x and N_1 of the system of inequalities

$$N_1 - N_0 P^{-1/4} < x^n \leq N_1, \quad (16)$$

where $N_1 = N_0 - x_1^n - x_2^n - \dots - x_{t-3}^n - u - u' - y^n u_1$,
and x runs over the values $1, 2, \dots, 3P$; every x_i runs over the set
 $1, 2, \dots, P$; u, u_1 are the values described in § 2, and u' takes on
the same values as u but independent of u .

Now with the help of (1), if $t < 3^n/2$, we can easily verify that

$$N_1 - N_0 P^{-1/4} > P^n.$$

If $n > n_0$, $t < 3^n/2$. So the above is satisfied when $n > n_0$. We
assume that $n > n_0$.

The number of solutions of (16) for every given N_1 is

$$N_1^v - (N_1 - N_0 P^{-1/4})^v + O(1).$$

Since $N_0 \geq \beta$,

$$N_1^v - (N_1 - N_0 P^{-1/4})^v > 2P^{1-1/4}/n.$$

So the whole number of solutions of (16) is

$$\geq (1/n) X^2 X_1 R P^{t-1/4}.$$

When $q = 1$, that part of $H_{\nu, 1}$ is

$$Q_{\nu} X^2 X_1 R.$$

So when $q = 1$

$$\sum_N H_{\nu, 1} = Q_{\nu} X^2 X_1 R \{N_0 P^{-1/4} + O(1)\}.$$

When $q \geq 2$, from lemma (16)

$$\left| \sum_N E(-2\pi i a N/q) \right| < \frac{1}{2(a/q)} = q/2a.$$

So by (13), when $q \geq 2$

$$\begin{aligned} \sum_N H_{\nu, 1} &= O \left\{ Q_{\nu} X^2 X_1 R \sum_{q=2}^{\sqrt{P}} q^{-3} \sum_a q/2a \right\} \\ &= O(Q_{\nu} X^2 X_1 R). \end{aligned}$$

Hence for all q , $0 < q \leq \sqrt{P}$.

$$\sum_N H_{\nu, 1} = Q_{\nu} X^2 X_1 R \{N_0 P^{-1/4} + O(1)\}.$$

In the intervals of the second class

$$\alpha \geq \tau^{-1} \geq 1/(2n3^{n-1} P^{n-1/2}).$$

$$\text{So } \left| \sum e^{-2\pi i a N} \right| < \frac{1}{2(a)} = O(n3^n P^{n-1/2}).$$

Hence

$$\begin{aligned} \sum_N H_{\nu, N} &= O(P^{t-2} X_1 R n \cdot 3^n P^{n-1/2}) \int_0^1 \sum_u \sum_{u'} e^{2i\pi \alpha (u-u')} d\alpha \\ &= O(n \cdot 3^n P^{n+t-3/2} X X_1 R). \end{aligned}$$

Hence

$$\begin{aligned} Q_{\nu} X^2 X_1 R \{N_0 P^{-1/4} + O(1)\} &= \sum_N H_{\nu, 1} \\ &= \sum_N \{I_{\nu, N} - H_{\nu, 2}\} \\ &\geq (1/n) X^2 X_1 R P^{t-1/4} + O(n \cdot 3^n P^{n+t-3/2} X X_1 R). \end{aligned}$$

Since $N_0 > \beta$, $k = [\log(12n^2) + 1]$

$$n \cdot 3^n P^{n+t-3/2} X X_1 R = o(1/n X^2 X_1 R P^{t-1/4}).$$

Hence when $n > n_1 > n_0$,

$$Q_{\nu} X^2 X_1 R N_0 P^{-1/4} > (c/n) X^2 X_1 R P^{t-1/4}$$

and so

$$Q_{\nu} > (c/n) P^t N_0^{-1} > c \cdot P^{t-n}/n3^n. \quad (17)$$

6. ESTIMATION OF D_{ν} .

It follows from the formula (13) that

$$E_{\nu} = \sum_{N_2} E(-2\pi i a N_2/q) B_{a, q}^t$$

where $N_2 = N - \xi - \xi_1 - y^n u_1$;

$$\text{Therefore } D_{\nu} = \sum_{N_2} \sum_{q=1}^{\sqrt{P}} A_q(N_2)$$

and by lemma (10)

$$D_\nu \geq \frac{1}{2} N_2 = \frac{1}{2} X^2 X_1 R. \quad (18)$$

Therefore from (17), (18)

$$Q_\nu D_\nu > c X^2 X_1 R P^{t-n}/n3^n.$$

Since $N > \beta$, when $n > n_2$, we can verify that

$$c^t n^t X^2 X_1 R P^{t-n-1/4} = o\{X^2 X_1 R P^{t-n}/n3^n\}.$$

So from the above and (14), we get that

$$H_{\nu, 1} > c X^2 X_1 R P^{t-n}/n3^n. \quad (19)$$

7. THE FUNDAMENTAL INTEGRAL.

Now we put $N = N_0$ and consider the integral

$$I_{N_0} = \sum_{\nu=1}^Y I_{\nu, N_0} = \int_0^1 T^{t-3} T_1 V^2 S^2 \sum_{\nu} V_\nu S_\nu E(-2\pi i a N_0) d\alpha.$$

By dividing the interval of integration into two classes as in § 3, we write

$$I_{N_0} = H_1 + H_2. \quad (20)$$

From (19), we have

$$H_1 = \sum_{\nu} H_{\nu, 1} > c \cdot X^2 X_1 Y R P^{t-n}/n3^n. \quad (21)$$

8. ESTIMATION OF H_2 .

In the intervals of the second class

$$\sqrt{P} < q \leq \tau = 2n3^{n-1} P^{n-1/2}; \quad Y < (q/2)^\nu.$$

So

$$\begin{aligned} \sum_{\nu} V_\nu S_\nu &= \sum_{\nu} \sum_{u_1} E(2\pi i a y^n u_1) \\ &\leq \sum_{u_1} \left| \sum_{\nu} E(2\pi i a y^n u_1) \right| \\ &\leq \sqrt{\{X_1 R \sum_x \left| \sum_{\nu} E(2\pi i a y^n x) \right|^2\}}, \quad x \leq 2^n R^n \end{aligned}$$

$$\leq \sqrt{\{X_1 R \sum_{y=1}^Y \sum_{y_1=1}^Y \left| \sum_x E[2\pi i a x (y^n - y_1^n)] \right|^2\}}, \quad x \leq 2^n R^n$$

$$= \sqrt{\{X_1 R (S_1 + S_2)\}},$$

where S_1 represents the coefficient of $X_1 R$ when $y^n \equiv y_1^n \pmod{q}$ and S_2 the other coefficient.

Now obviously

$$S_1 = 2^n R^n Y.$$

Now if $t = y^n - y_1^n \neq 0$, then $|t| < q/2$, $(a, q) = 1$.

Since $y \leq Y$ and $y_1 \leq Y$, when t is fixed, t cannot be represented in the above form $(y^n - y_1^n)$ more than Y ways. Further, since $|t| < q/2$, $(a, q) = 1$, if $at \equiv s \pmod{q}$, where $1 \leq s \leq q-1$, then s is different for different values of t . So from lemma (16),

$$\begin{aligned} S_2 &\leq \sum_{y, y_1} \frac{1}{2(\alpha t)^{-1}}, \quad t = y^n - y_1^n \neq 0, \\ &\leq (Y/2) \sum_{t \leq Y^n} \left(\frac{at}{q} + \frac{\theta t}{q\tau} \right)^{-1} \\ &\leq (Y/2) \sum \left(\frac{s}{q} + \frac{\theta}{2q} \right)^{-1} \quad (\text{at most } Y^n \text{ terms}) \\ &\leq Yq \sum_{s \leq Y^n} 1/s \quad (\quad , \quad , \quad) \\ &\leq Yq \sum_{s \leq Y^n} 1/s \\ &\leq Yq (n \log Y + 1) \\ &\leq Y 2n3^{n-1} P^{n-1/2} (n \log Y + 1) \end{aligned}$$

Since

$$N_0 > \beta, \quad n \log Y + 1 < P^{1/2n^2}.$$

$$\text{So } S_2 \leq Yn3^n P^{n-1/2} + (1/2n^2).$$

Hence

$$\begin{aligned} S_1 + S_2 &\leq R \{2^n Y R^{n-1} + [Y \cdot n \cdot 3^n P^{n-1/2} + (1/2n^2)]/R\} \\ &< R \cdot 2n \cdot 3^n P^{n-1/2} + (1/n). \end{aligned}$$

Therefore

$$\begin{aligned} \sum V_r S_r &\leq R \sqrt{X_1} \sqrt{2n} \cdot 3^{n/2} P^{(n/2) - \frac{3}{4} + (1/2n)} \\ &< c^n R \sqrt{X_1} P^{(n/2) - \frac{3}{4} + (1/2n)} \end{aligned}$$

$$\begin{aligned} \text{So } H_2 &< P^{t-2} c^n R \sqrt{X_1} P^{(n/2) - \frac{3}{4} + (1/2n)} \int_0^1 \sum_u \sum_{u'} e^{2\pi i(u-u')\alpha} d\alpha \\ &< c^n X R \sqrt{X_1} P^{(n/2) - \frac{3}{4} + t + (1/2n)}. \end{aligned}$$

Since $N_0 > \beta$, and $k = [\log(12n^2) + 5]$, by making use of results in §2, it can be verified that when $n > n_3$, $n_3 > n_0, n_1, n_2$,

$$c^n X R \sqrt{X_1} P^{(n/2) - \frac{3}{4} + t + (1/2n)} = o\{X^2 X_1 Y R P^{t-n}/n3^n\}.$$

$$\text{So } H_2 = o(H_1). \quad (22)$$

9. PROOF OF THEOREM I:—

From (20), (21), (22), when $N_0 \geq \beta$, and $n > n_3$,

$$I_{N_0} > (c/n3^n) X^2 X_1 Y R P^{t-n} > 0.$$

But I_{N_0} is the number of representations of N_0 in the form

$$N_0 = x^n + x_1^n + \dots + x_{t-3}^n + u + u' + y^n u_1,$$

where $x, x_1, \dots, x_{t-3}, u, u', u_1, y$ run over the set of numbers we have already considered.

The right hand side of the above equality is a sum of

$$t - 2 + 3k < 2 \cdot n^0 < (\frac{1}{8})^n, \quad n > n_4,$$

terms of the type h^n , $h \geq 0$.

$$\text{Hence when } N_0 \geq \beta, n > n_5, \text{ where } n_5 > n_3, n_4. \quad (23)$$

N_0 is a sum of $O(\frac{1}{8})^n$, n th powers.

Now when $n > n_6$,

$$2^{(\frac{5}{4})^n} > n^{5n^{11}} = \beta. \quad (24)$$

Let $n_7 > n_6, n_5$, etc.

Then from (24) and lemma (19), when $n > n_7$

$$\begin{aligned} \text{Every positive integer less than } \beta \text{ is the sum of} \\ 2^n + (\frac{3}{2})^n + O(\frac{4}{3})^n, \end{aligned} \quad (25)$$

n th powers.

From (23) and (25) we arrive at the result that

$$g(n) \leq 2^n + (\frac{3}{2})^n + O(\frac{4}{3})^n. \quad (26)$$

But we know that

$$g(n) \geq 2^n + (\frac{3}{2})^n + O(1).$$

From (25), (26), we obtain theorem I.

10. PROOF OF THEOREM II:—

From (23), when $n > n_0$ and $N \geq \beta$, N is the sum of $O(\frac{4}{3})^n$, n th powers.

From lemma (18), if $l \cdot 2^n \leq N \leq \beta$, then N is the sum of

$$2^n + l - 2$$

n th powers.

If $N \leq l \cdot 2^n$, N is the sum of $2^n + l - 2$ n th powers.

If $N = l \cdot 2^n - 1$, N requires exactly $2^n + l - 2$, n th powers.

$$O(\frac{4}{3})^n \leq 2^n, \quad n > n_0.$$

From all these the theorem follows.

11. PROOF OF THEOREM III:—

Let $N = (j - 1)3^n + l \cdot 2^n - 1$.

Now $N < 4^n$.

So N can be made up of 1, 2^n and 3^n alone.

Let us put

$$N = s \cdot 3^n + M,$$

where
$$\begin{aligned} M &= (j-s-1)3^n + l \cdot 2^n - 1 \\ &= (j-s-1)(l \cdot 2^n + r) + l \cdot 2^n - 1 \\ &= (j-s)l \cdot 2^n + r(j-s-1) - 1. \end{aligned}$$

Let $r = 2^n - m$. Then from the hypothesis $m \leq l$.

So $r(j-s-1) - 1 = 2^n(j-s-2) + 2^n - m(j-s-1) - 1$

Now $m(j-1) \leq l(j-1) < 2^n$.

Hence

$$N = s \cdot 3^n + (j-s)l \cdot 2^n + 2^n(j-s-2) + 2^n - m(j-s-1) - 1.$$

Hence N is the sum of

$$s + l(j-s) + (j-s-2) - m(j-s-1) - 1 + 2^n$$

nth powers.

$$\begin{aligned} s + l(j-s) + (j-s-2) - m(j-s-1) - 1 + 2^n \\ = 2^n + l + (j-s-1)(l-m) + j-3 \\ \geq 2^n + l + j-3. \end{aligned}$$

Hence the theorem III is proved.

Note added on 25-1-36.

In theorem II, n_0 may work out to be near 100. But by varying the above proof, the author has brought down n_0 to 7. Further it has been verified that $\{(\frac{3}{2})^n\} \leq 1 - (l+3)/2^n$, for $4 \leq n \leq 100$. Hence it follows that

$$g(n) = 2^n + l - 2, \text{ when } 7 \leq n \leq 100.$$

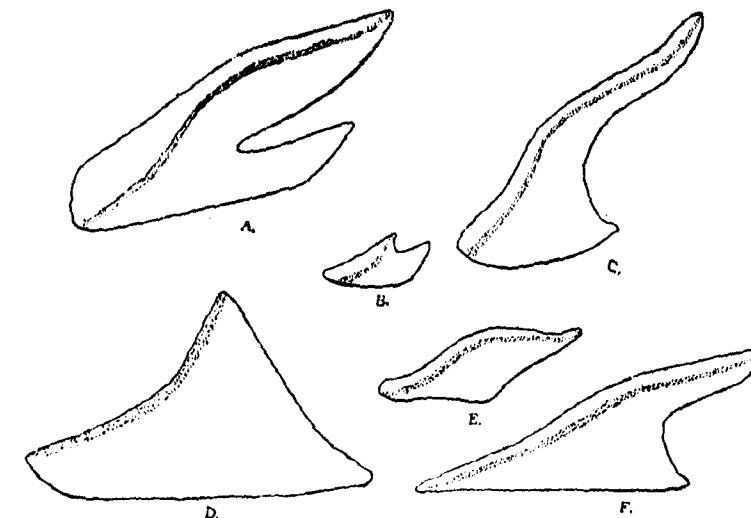
Notes on the Comparative Anatomy of Some Indian Melaniidae

With Special Reference to *Melania (Radina) crenulata* (Deshayes)

By

R. V. SESHAIYA,
(Annamalai University)

In continuation of my work on *Paludomus* (31) I undertook, some time ago, the study of *Melania (Radina) crenulata* (Desh), var. *tirouri* from the Coleroon river, and var. *confusa* from the Godavary canal, Cocanada. I was able to examine also *Melanoides tuberculatus* (Müller) and *Melanoides scabra* (Müller), and through the kindness of Dr. Bains Prashad, specimens of *Acrostoma baccata*, f. *bituberculata* Rao, *Acrostoma reevi*, f. *olivacea*, *Paludomus regulata* Benson, *Paludomus blanfordiana* Nevill, and *Stomatodon stomatodon* from the Indian Museum, Calcutta. I was not, however, able to make a detailed study of the specimens from the Indian Museum, as in almost all cases only a single, preserved specimen was available. This paper records comparative notes on those different forms.



Text-Fig. 1.—The gill-lamellae of Melaniids.

A. *Melania (Radina) crenulata*; B. *Melanoides tuberculatus*. C. *Paludomus regulata*; D. *Acrostoma baccata*; E. *Stomatodon stomatodon*; F. *Melanoides scabra*.

THE ANIMAL

Both the varieties of *Melania*, viz., *crenulata* and *tirouri*, are very much alike, differing only in size and to a little extent in colour. The account given here, though mainly for the variety *tirouri*, will apply equally well to the *confusa* variety also. Both the varieties are found in running water with a muddy bottom. When the streams are full they retire into the mud and can be seen only after the level of the water goes down. The *tirouri* variety is the hardier of the two and less susceptible to artificial conditions of life. It can be kept in the laboratory for several weeks, while the *confusa* variety is difficult to keep for more than a few days. The animals show habits similar to those of *Paludomus tanschaurica* (Gmelin) in coming usually to the water edge. *Melanoides tuberculatus* (Müller) is found usually along with *Paludomus* in slow moving streams with sandy bottom. The young ones of *Melanoides tuberculatus* (Müller) and *Melanoides scabra* (Müller) can float under the surface of water like some of the Hydrobiid molluscs. The adults are incapable of floating.

The general disposition of the organs is similar to what I described in *Paludomus* and does not call for any further detailed remarks. The body consists of about $5\frac{1}{2}$ whorls. The foot is flat, quadrate and about 20 mm. by 17 mm. The anterior edge of the foot shows a transverse groove. The structure of the pedal glands is similar to what I described in *Paludomus*. The locomotion of the animal consists partly of gliding and partly of dragging movements, during which the shell does not always rest on the operculum. The foot glides forward for a short distance and then, the foot holding on to the substratum, the body is lifted and pulled forward.

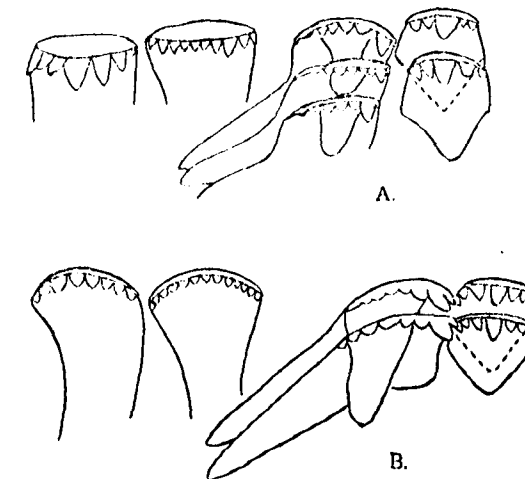
The snout is longer than in *Paludomus* and measures about 8 mm. in length. It is heavily pigmented.

THE MANTLE AND MANTLE CAVITY

The general structure of the mantle and mantle cavity is the same as in *Paludomus*, but the mantle processes are different in shape, arrangement and probably in function also.

In *Melania crenulata* there are usually eleven processes of which the four on the left are the largest. The first process on the left side is almost always bent over the shell, and sometimes the next two also clasp the outer lip of the shell, but by no means so constantly as the first process. The next eight processes, i.e., process III to X are connected by a kind of membranous expansion of the ventral epithelium, unlike the first two, which are separate. When the processes are contracted they appear like a continuous wavy membrane projecting

from the ventral surface of the mantle. The last or the eleventh process is remote from the other processes and situated opposite to the termination of the rectum and may be termed the anal or sutural process. It is narrower and larger than the others, being filiform. Like the first process on the left side, this sutural process clasps the inner lip or sutural margin of the shell constantly. The processes may be termed peripheral, median and sutural. The median processes, i.e., from the fourth to the tenth, show a tendency to a gradual diminution in size from left to right.



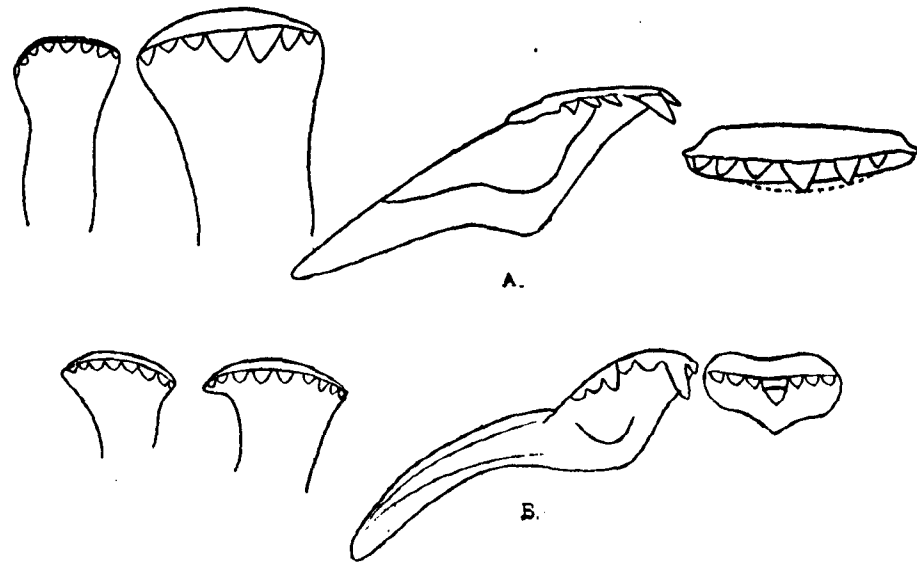
Text-Fig. 2.—Radular teeth of (A), *Paludomus regulata* and (B) *Paludomus blanfordiana*.

In the fully extended condition, the processes have a more or less conical basal part and a tapering, filiform, distal part which is usually tipped with black pigment. The lateral margins also contain usually a black pigment. In the first process, on the left side, it is the filiform part of the process that clasps the shell.

The general structure of the processes resembles that of *Paludomus*, but the cilia are better developed. In the outer or peripheral processes the cells show black pigment in their distal portions. Blood spaces are present in the processes as in the case of *Paludomus*.

From the way in which some of the processes constantly clasp the shell and from their constant number in all the specimens and from their relation to the spiral, broad, black lines found in younger shells, usually twelve in number with eleven interspaces, it seems very probable that they are responsible for the formation of the lines as Benson (7) suggested. The formation of the black transverse or spiral lines takes place after the formation of the shell and in the recently added part of the shell, the lines are not usually discernible.

In *Melanoides tuberculatus* the processes are similar in form and arrangement. In *Melanoides scabra* whose sculpture is different from that of a *Melanoides tuberculatus*, the mantle margin is not even, but shows a number of small processes, in which two varieties may be distinguished according to their size; but this distinction is most probably due to differences in the degree of contraction. About 35 processes were counted. They are mainly prolongations of the mantle margin. Besides these, processes of the type found in *Melania crenulata* and *Melanoides tuberculatus* are also found, usually about 13 in number, of which three are on the left, nine are the median, connected processes, and one is the anal or sutural process.



Text-Fig. 3.—Radular teeth of (A) *Melania (Radina) crenulata* and (B) *Melanoides scabra*.

In *Paludomus regulata* the mantle edge shows a large number of processes, about thirty in number and uniform in size and appearance. The general outline and size of these processes are as in *Paludomus tanschaurica*. In *Paludomus blanfordiana* the mantle processes are seventeen in number, larger than in *Paludomus regulata*. The processes on the left are larger. The processes are all brownish in colour.

In *Acrostoma* and *Stomatodon* the mantle does not show any processes.

The histology of the mantle edge with reference to the shell glands resembles that of *Paludomus tanschaurica*, the shell glands opening into the supra-marginal groove.

The pallial circulation is of the interesting type described in *Paludomus tanschaurica*. *Acrostoma* also shows a circum-pallial vessel.

The hypobranchial gland is more prominent in sections than in the case of *Paludomus*.

The groove noticed in *Paludomus* on the mantle floor is not present in *Melania*; nor is the epithelium over the efferent ctenidial vein so much modified as in *Paludomus*. The osphradium is in the form of a long, simple ridge measuring about 10 mm.

The gill lamella in *Melania (Radina) crenulata* var. *tirouri* differs in shape from that of *Paludomus* and other species. The superior or efferent margin is slightly prolonged and the inferior or afferent margin is deeply cleft near the base. In *Melanoides scabra* the inferior margin is curved but not cleft. In *Melania tuberculatus* (Müller) the inferior margin is raised and slightly curved. In *Paludomus regulata* the gill lamella is rather tall and narrow in the upper part. In *Paludomus blanfordiana* the lamella is shorter and of more uniform width throughout and the inferior margin is concave. In *Stomatodon stomatodon* the lamella is triangular and the inferior margin is oblique and even. In *Acrostoma baccata* the lamella is broadly triangular.

THE DIGESTIVE SYSTEM

The general structure of the digestive system also resembles that of *Paludomus*. The animal feeds chiefly on aquatic vegetation, for in the rectal contents I found vegetable tissues besides sand grains and diatoms.

The buccal cartilages are rather L-shaped in transverse section. Under the sub-radular epithelium reduced cartilage-like structures are found in a better developed condition than in *Paludomus*.

THE RADULA

The central tooth in *Melania* is broad and short, the width or transverse measurement being nearly four times its height or longitudinal measurement. The base is almost even and does not show any backward protrusion as in *Paludomus*. Compared with *Melanoides scabra* and *Melanoides tuberculatus*, it is relatively much broader. It bears one big cusp and three smaller cusps on either side. The central cusp reaches nearly the base of the tooth. The sides are slightly protruding near the upper or anterior margin and not so much rounded as in *Melanoides scabra*. The lateral is not so much produced and oblique as in *Melanoides*; the basal prolongation is wider than in *Mela-*

noides scabra. The marginals are of the type seen in *Melanoides*. The radula of *Melanoides scabra* was described by Annandale and Prashad (3). I have however, given a complete sketch of the central and lateral for comparison. The radular teeth of *Acrostoma reevi* were sketched and described by Rao (27).

In *Paludomus regulata* the base of the central protrudes much more than in *Paludomus tanschaurica* and the laterals are broader and less obliquely bent. The marginals show prominent and larger cusps. In *Paludomus blanfordiana* the basal protrusion of the central cusp is a little less marked. The laterals are more oblique and the marginals approach those of *Paludomus tanschaurica*. In *Stomatodon stomatodon* the central is much broader than in *Paludomus* and bears a large number of uniform cusps. The lateral has rather blunt cusps and the inner marginal has numerous minute cusps, while the outer has about seven larger cusps.

The digestive gland occupies the apical whorls of the visceral mass and extends anteriorly to some extent on the ventral surface of the stomach. The ducts are five in number and open together in conjunction with oesophagus into the gutter found in the stomach.



Text-Fig. 4.—Radula teeth of *Stomatodon stomatodon*.

THE CIRCULATORY SYSTEM

The circulatory system of *Melania* resembles that of *Paludomus*. The pallial circulation has been referred to already. The renal vein is distinct from the efferent ctenidal vein. I made out a circumpallial vessel in *Paludomus blanfordiana*, *Paludomus regulata* and *Acrostoma*, *Melanoides tuberculatus* and *Melanoides scabra*. From the nature of the pallial circulation it is evident that the mantle has an important role in respiration.

THE EXCRETORY SYSTEM

The kidney, though of the same type as in *Paludomus*, is more elongate. As in *Paludomus* it extends partly into the mantle cavity and partly alongside of the style sac. The cavity is traversed by lamellae. In *Paludomus* the renal vein is seen on the middle of the ventral surface

and the lamellae present the appearance of radiating from the centre. In *Melania* the vessel runs on one side and hence the lamellae present the appearance of traversing the entire width of the kidney. The renal aperture is in a position similar to that found in *Paludomus*.

THE NERVOUS SYSTEM

The nervous system of *Melania crenulata* is, in general, of the type found in *Paludomus* and *Melania costata*. The cerebral ganglia are oval and the five nerves which they give rise to are the same as those in *Melania costata*. The proboscidian nerves are about 8 mm. long. The pleural ganglia are even more closely approximated to the cerebral than in *Paludomus*. The pallial anastomosis on the right side is longer than in *Paludomus* but shorter than in *Melania costata*, and slightly closer than in *Paludomus*. The statocyst is found in a position similar to that in *Paludomus* and *Melania costata*. It contains a single elliptic statolith. Each pedal ganglion gives off two stout pedal cords, an anterior and a posterior. Close to the origin of each posterior cord, two slender nerves arise. The visceral ganglion is triangular in outline.

In *Stomatodon* the pedal ganglia are large and round. The statocysts are large sacs and contain numerous oblong statoliths, of which one is larger than the others.

REPRODUCTIVE SYSTEM

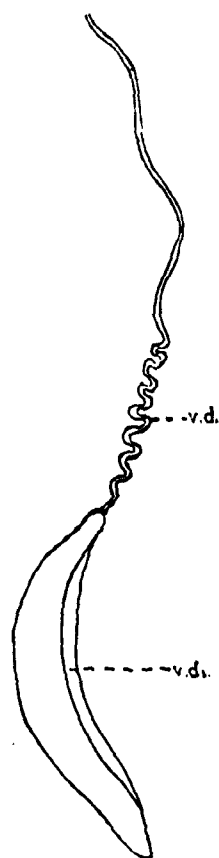
The reproductive system of *Melania* and *Melanoides* shows very interesting features which do not seem to have been described before. It differs from that of *Paludomus* as well as from that of the different viviparous genera described by Moore in his contributions on the South African Molluscs. As in the case of *Paludomus*, there is practically nothing to mark the sexes, except the stouter build of the body whorl of the shell in the female. When removed from the shell the female specimens can be distinguished to some extent by the slightly greyish yellow colour of the apical whorls which are of a blackish brown colour in the male; but the distinction between the genital glands of the two sexes is not so marked as in *Paludomus*. In fact it required a patient investigation by smears and sections to determine the sex of the genital gland in immature specimens.

THE MALE REPRODUCTIVE SYSTEM

The male reproductive system of *Melania* is of a much less specialised type than in *Paludomus*, and resembles that of *Faunus* to some extent. It consists of the testis, the vas deferens and the open groove and flap in the mantle cavity.

The testis occupies all the apical whorls and extends anteriorly to the posterior edge of the stomach. It overlies the digestive gland and almost surrounds it, except for a small portion on the columellar side.

The vas deferens runs on the collumellar side. It is a long, coiled duct. Its lower part on the ventral surface of the style sac is stout and thrown into about ten coils. In the variety *tirouri*, the coiled portion is found to be stouter than in the variety *confusa*. On entering the mantle cavity it passes into a wide, partially open furrow guarded by a flap. A penis is absent.

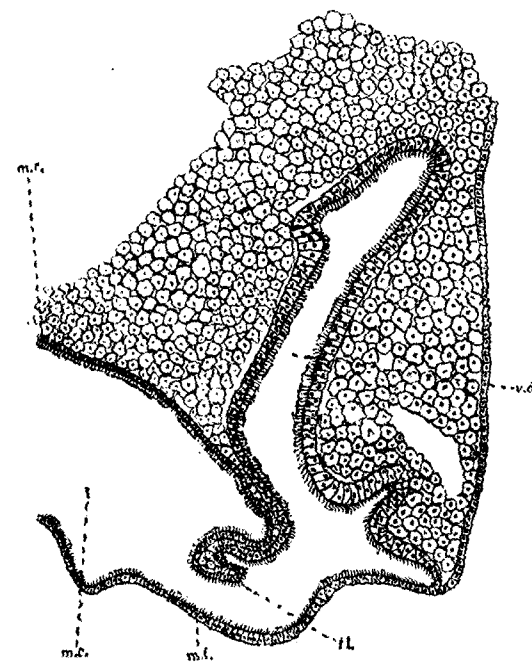


Text-Fig. 5.—Part of the male reproductive system of *Melania (Radina) crenulata* (testis not shown).—v.d. vas deferens; v.d., swollen part of the vas deferens.

The testis consists of branched tubular follicles and lies close under the body epithelium being separated from it by a thin layer of muscle fibres and connective tissue. The structure of the tubules is similar to that of *Paludomus*. The eupyrene sperms are much longer than those of *Paludomus*. The vas deferens has the usual structure.

The deep groove and the flap, which constitute the lower part of the male reproductive system are lined by ciliated and glandular epithelium, more or less of the type found in the seminal vesicle of *Paludomus*. It is enveloped by a thick layer of connective tissue containing numerous blood spaces. In transverse section, the genital groove appears as a deep channel with its opening directed towards the mantle cavity and guarded by a flap on which the inner epithelium of the groove is continued.

In *Melanoides tuberculatus*, all the specimens examined by me, though quite a large number, happened to be female specimens, but it is not possible to draw any conclusions from this, till I have examined a large number from different localities.



Text-Fig. 6.—Section through the lower part of the vas deferens of *Melania (Radina) crenulata*.—

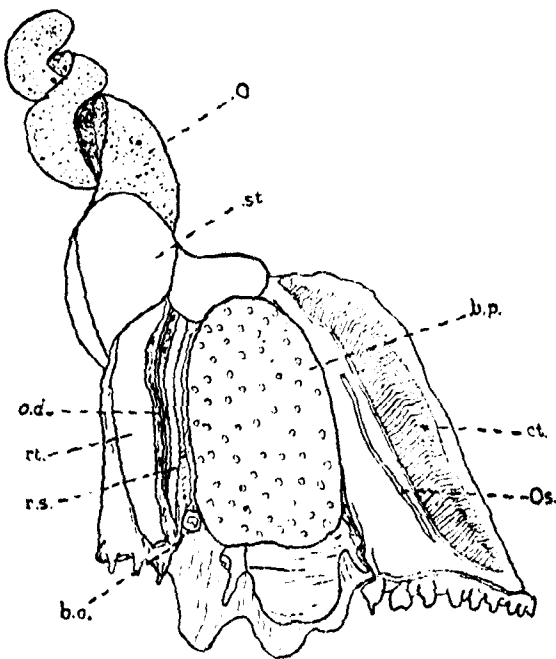
fl. flap; m.c. mantle cavity; m.f. mantle floor m.r. mantle roof; v.d. vas deferens.

THE FEMALE REPRODUCTIVE SYSTEM

Ramanan (26) says that *Melania*s are oviparous. According to him "the eggs are laid enveloped in a mass of transparent jelly resembling a fleecy cloud and are usually found attached to the wall of the aquarium or the under surface of the leaves of aquatic plants." This must be mistake, for I found that *Melania*, *Melanoides*, *Acrostoma* are all viviparous, possessing a brood chamber packed with young ones in various stages of development.

Rao (27) remarked about the meagre information we have regarding the reproductive system of the Indian Melaniidae and mentioned a brood pouch in *Acrostoma*, but due to the state of preservation, the relation between the genital system and the brood pouch could not be made out.

In *Melania crenulata*, in both the varieties, the ovary occupies a position corresponding to the testis, and as already stated, is of a light greyish yellow colour. Seen under low magnification, it is seen to consist of minute racemose follicles overlying and projecting into the digestive gland. As in the case of the testis, it extends as far as the posterior end of the stomach. In a transverse section of the apical whorls, the ovarian follicles may be seen to extend between those of the digestive gland. The ovary is separated from the general body epithelium by a deeper layer of connective tissue than the testis. The follicles are smaller than in *Paludomus*.

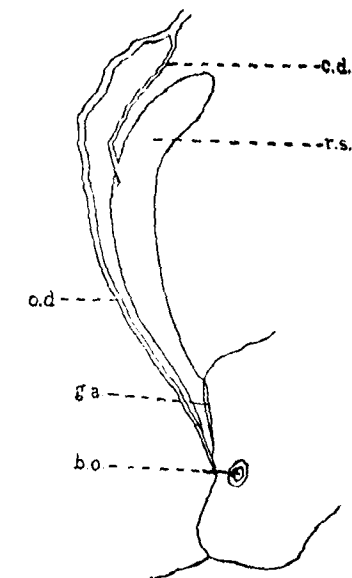


Text-Fig. 7.—Diagram of a partial dissection of *Melanoides tuberculatus* showing the brood pouch and its opening.—b.o. opening of the brood pouch; b.p. brood pouch; ct. ctenidium; o. ovary; o.d. oviduct; os. osphradium; r.s. receptaculum seminis; rt. rectum.

The oviduct is a slender duct and its lower part is of considerable interest. A figure of the lower part of the female is shown in Fig. 8. On opening the mantle cavity, on the extreme right, there is seen a fairly thick tube which opens by an elongate slit-like aperture. This tube is

the receptaculum seminis. Its posterior end, situated at the apex of the mantle cavity, is rounded, and a little below its apex or posterior end, it has on its left side a slender diverticulum continued into a minute coiled duct, which, passing up, joins the oviduct. The oviduct itself is a slender duct, which is apt to be overlooked in a dissection, since it passes in the connective tissue between the receptaculum seminis and the rectum. As the oviduct passes forwards, it comes to lie close to the receptaculum seminis, until finally it opens into its terminal region. The termination of the receptaculum seminis is continued as a very short furrow, shorter than in *Paludomus*.

The opening into the brood pouch is situated at a distance of about 3 mm. from the external opening of the receptaculum seminis. The brood pouch is placed under the mantle floor and is apparently developed as a system of tubular spaces in the connective tissue surrounding the oesophagus. In *Melania (Radina) crenulata* var. *tirouri* the breeding season commences in October, when very early stages of the embryos may be seen in the brood pouch. The brood pouch is very extensive in *Melania*, terminating posteriorly in the region of the style sac. In the *confusa* variety, which I collected in the month of April, no embryos were found but the opening into the brood pouch was clearly visible, and in sections, a system of tubular spaces could be seen extending in the connective tissue beneath the mantle floor.



Text-Fig. 8.—The lower part of the female reproductive system of *Melania (Radina) crenulata*.—b.o. opening into the brood pouch. c.d. duct connecting oviduct and receptaculum seminis; g.a. genital aperture; o.d. oviduct; r.s. receptaculum seminis.

In the receptaculum seminis of the *tirouri* variety, I was able to observe in sections large masses of sperms, and in fresh material the examination of the contents showed the ova in the process of impregnation by the sperms.

The receptaculum seminis has an outer investment of muscular fibres and is lined on the inside by glandular and ciliated epithelium which is thrown into longitudinal folds that appear as finger shaped projections in transverse sections. In structure it resembles that of *Paludomus*. The oviduct is very small and its narrow cavity is lined by ciliated epithelium. The duct connecting the receptaculum seminis and the oviduct is smaller than the oviduct and is lined by ciliated epithelium.

The structure of the reproductive system of *Melanoides tuberculatus* and *Melanoides scabra* is very similar to that described above; the former especially resembles *Melania crenulata* very closely. The opening into the brood pouch is comparatively larger than in *Melania* and slit-like; the receptaculum seminis is narrower. Gravid females were observed throughout the year. The brood pouch is shorter than in *Melania*.

The opening into the brood pouch is lined by ciliated columnar cells surrounded by muscle fibres. In the later stages the brood pouch, as seen in *Melanoides tuberculatus*, is divided into a number of chambers in each of which usually one embryo lies. The brood chamber is separated from the oesophagus by a partition of connective tissue.

In *Melanoides scabra* the opening into the brood pouch is large and provided with tumid lips; the oviduct is stouter. The duct of the receptaculum seminis also is thicker.

In *Acrostoma* the opening into the brood pouch is more removed from the genital opening. The aperture is narrow and slit-like.

The lower part of the female reproductive system in *Melania* can be homologised with that seen in *Paludomus*. A receptaculum seminis is present in both. The uterus, which is provided with thick glandular walls in *Paludomus*, is in the form of a simple thin duct in *Melania* and *Melanoides*. The slender duct connecting the spermatheca and the oviduct is probably a vestige indicating the origin of the receptaculum seminis as a diverticulum of the oviduct. The absence of very thick glandular walls in the lower part of the oviduct in *Melania* and *Melanoides* is significant. Such glandular tissue is found only in oviparous forms.

In *Paludomus regulata*, a single male specimen of which was available, the lower part of the male reproductive system was found en-

larged as in *Paludomus tanschaurica*. In *Stomatodon*, owing to the condition of spirit preservation, all that I could make out was that the lower part of the genital system was enlarged as in the male specimens of *Paludomus*.

My best thanks are due to Dr. Baini Prashad for the verification of the species and for placing at my disposal the specimens from the Indian Museum, Calcutta.

SUMMARY

(1) The anatomy of *Melania crenulata* is described with comparative notes of other Melaniidae.

(2) The foot and its glands have the same structure in the different forms.

(3) The mantle edge shows processes excepting in the case of *Stomatodon* and *Acrostoma*. The processes in *Melania* appear to play some part in the formation of the sculpture of the shell. The shell glands open into the supra-marginal groove.

(4) The osphradium presents a uniform structure in the family.

(5) The gill lamellae in the several forms studied show variations, which do not seem to be of taxonomic value.

(6) The pallial circulation shows interesting features in most of the forms. A circum-pallial vessel is found in all the forms studied except in *Stomatodon*. The mantle plays an important role in respiration.

(7) The structure of the radula shows variations in the family which have been found useful in the classification of the members of the family. Thiele (34) has used these characters as the basis of the sub-division into sub-families, Paludominae and Tiarinae, the Paludominae being characterised by a backward projection of the base of the central tooth and the Tiarinae by the strongly bent or produced laterals. From a comparison of the central teeth of different species I find that in *Melanoides* also the base is produced backwards a little, though by no means to such an extent as in *Paludomus*. In the forms studied by me the following types of radulae are noticed.

- (a) Radular teeth with few blunt denticulations .. *Acrostoma*
- (b) Radular teeth with pointed denticulations.
 - (a') Central with uniform cusps .. *Stomatodon*
 - (b') Central with one large cusp with smaller cusps on either side.

- (1) Central short and transversely broadened; base of the central slightly protruding; laterals strongly bent .. *Melanoides*
- (2) Central very much broadened and shorter; base of the central not protruding .. *Melania*.
- (3) Central not broad; base prominently protruding; .. *Paludomus*.

The chief distinction between *Paludomus* and the Tiarinae lies in the width of the central teeth. The radula of *Stomatodon* shows little resemblance to that of the other Melaniidae.

(8) The structure of the kidney is similar in the different forms. A blood gland is absent and there is a separate renal vein.

(9) In the circulatory system the pallial circulation is a striking characteristic.

(10) The nervous system, so far as has been studied, presents variations with regard to

- (a) the degree of approximation of the nervous centres
- (b) the proximity of the right pallial anastomosis to the pleural ganglia
- (c) the number of statoliths in the statocysts.

Melania crenulata shows a greater degree of concentration and a less distant right pallial anastomosis than "*Melania tuberculatus*." *Paludomus* and *Stomatodon* possess several statoliths.

(11) The reproductive system presents two interesting types:—

- (a) Without brood pouch .. *Paludomus*.
- (b) With brood pouch .. Tiarinae

In the genera without the brood pouch the lower part of the male reproductive system is much enlarged and a penis is present. In the forms with a brood pouch, at any rate in *Melania*, the lower part of the male genital duct is an open groove. A receptaculum seminis is present and in *Melanoides* and *Melania* it is connected with the oviduct.

LITERATURE

1. Amaudrut, A.—La partie antérieure du tube digestif et la torsion chez le Mollusques Gastéropodes. *Ann. Sci. Nat Zool.* (8) VII, pp. 1-291, pls. i-x (1898).

2. Annandale, N.—The Fauna of certain small streams in Bombay Presidency. *Rec. Ind. Mus.* XVI, pp. 139-152 (1919).

3. Annandale, N.—Prashad, B.—Aquatic Fauna of Seistan, *Rec. Ind. Mus.* XVIII, 1919-21.

4. Annandale, N.—Materials for a generic revision of the fresh water Gastropod Molluscs of the Indian Empire. *Rec. Ind. Mus.* XIX, pp. 107-110 (1920).

5. Annandale, N.—The Banded Pond-Snail of India (*Vivipara bengalensis*) pt. II. The edge of the mantle and the external ornamentation of the Shell. *Rec. Ind. Mus.* XXII, pp. 243-266 (1921).

6. Baudelot, M.—Recherches sur l'appareil generateur des Mollusques Gasteropodes. *Anni. Sci. Nat Zool.* (4) XIX, pp. 135-222, pls. ii-v (1863).

7. Benson, W. H.—Description of the Animal *Melania*. *Gleaning in Science, Calcutta*, II, pp. 21-23 (1830).

8. Bernard, F.—Recherches sur les organes palleux des Gasteropodes Prosobranches. *Ann. Sci. Nat. Zool.* (7), pp. 89-404, pls. vi-xv (1890).

9. Bouvier, M. E. L.—Système nerveux morphologie generale et classification des Gasteropodes Prosobranches. *Ann. Sci. Nat. Zool.* (7), III, pp. 1-510, pls. i-xix (1887).

10. Bregenzer, A.—Anatomie und Histologie von *Bythinella dunkeri*. *Zoolog. Jahrb. (Anat.)*, XXXIX, pp. 237-292, pl. xvi (1915).

11. Cooke, A. H.—Mollusca in the *Cambridge Natural History* III, (London: 1895).

12. Dakin, W. J.—*Buccinum*, L. M. B. C. *Memoir* XX, (London: 1912).

13. Fischer, P.—*Manual de Conchyliologie*, (Paris: 1887).

14. Lang, Arnold.—*Text book of Comparative Anatomy*, part II, (1896).

15. Moore, J. E. S.—The Molluscs of the Great African Lakes. I. Distribution. *Quart. Jour. Microsc. Sci.*, (n. s.) XLI, pp. 159-180 (1898).

16. Moore, J. E. S.—The anatomy of *Typhobias*, with a description of the new genus *Bathanalia*. *Quart. Journ. Microsc. Sci.*, (n. s.) XLI, pp. 181-204, pls. xi-xiv (1898).

17. Moore, J. E. S.—*Tanganayika rufiflosa*, and the Genus *Spekia*. *Quart. Journ. Microsc. Sci.*, (n. s.) XLII, pp. 155-185, pls. xiv-xix (1899).

18. Moore, J. E. S.—*Nassopsis* and *Bythoceros*. *Quart. Journ. Microsc. Soc.* (n. s.) XVII, pp. 187-201, pls. xx-xxi (1889).

19. Orton, J. H.—The Mode of Feeding in *Crepidula*, with an Account of the Current-producing Mechanism in the Mantle cavity, and

some remarks on the Mode of Feeding in Gastropods and Lamelli-branches. *Journ. Mar. Biol. Ass.* IX, pp. 444-478, text-figs. 1-20 (1912).

20. Pelseneer, P.—Mollusca in *Treatise on Zoology* (Edited by E. Ray Lankester, London: 1906).

21. Perrier, R.—Recherches Sur l'anatomie et l'histologie du rein des Gastéropodes Prosobranches—*Ann. Sci. Nat. Zool.* (7) VIII, pp. 61-311, pls. 13 (1889).

22. Prashad, B.—Anatomy of the Common Indian Apple-snail, *Pila globosa*. *Mem. Ind. Mus.* XVIII, pp. 51-151, pl. xvi (1925).

23. Prashad, B.—The Mantle and the Shell of the Viviparidae. *Mem. Ind. Mus.* XXIV, pp. 253-319, pl. xx (1928).

24. Prashad, B.—*Pila*, *The Indian Zoological Memoirs*, IV, (Lucknow: 1932).

25. Preston, H. B.—Mollusca Gastropoda and Pelecypoda (Freshwater) *Fauna of British India*. (1915).

26. Ramanan, V. V.—Non-marine Mollusca of Madras—Madras (1900).

27. Rao, H. S.—Note on a collection of freshwater Gastropods from Thazi. *Rec. Ind. Mus.* XXVII, pp. 97-100 (1925).

28. Robson, G. C.—On the Anatomy and Affinities of *Poludestrina ventrosa*. *Quart. Journ. Microsc. Sci.* (n. s.) LXVI, pp. 159-185 (1922).

29. Seshaiya, R. V.—The Stomach of *Paludomus tanschaurica* (Gmelin). *Rec. Ind. Mus.* XXXI, pp. 7-12 (1929).

30. Seshaiya, R. V.—Anatomy of *Mysorella costigera* Küster. *Rec. Ind. Mus.* XXXII, pp. 1-28 (1930).

31. Seshaiya, R. V.—Anatomy of *Paludomus tanschaurica* (Gmelin). *Rec. Ind. Mus.* XXXVI, pp. 185-212 (1934).

32. Sewell, R. B. S.—The Banded Pond-Snail of India (*Vivipara bengalensis*), pt. I, Anatomical. *Rec. Ind. Mus.* XXII, pp. 217-242 (1921).

33. Simroth, H.—*Bronn's Klassen and Ordnungen des Thier-Reichs* III (ii Abt.) Gastropoda, Prosobranchia (1896-1907).

34. Theile, J.—*Handbuch der Zoologie* (Funter Band)

35. Yonge, C. M.—The digestive diverticula in the Lamellibranchs. *Trans. Roy. Soc. Edinburgh* LIV, 703-718, 2 pl. (1926).

36. Yonge, C. M.—Notes on Feeding and Digestion in *Pterocera* and *Vermetus* with a discussion on the occurrence of the crystalline style in the Gastropoda. *The Great Barrier Reef Expedition 1928-29 Scientific Reports*, I, No. 10, pp. 259-281 (1932).

A Study of Working Class Family Budgets

By

B. V. NARAYANASWAMY NAIDU AND V. SIVARAMAN

(Annamalai University)

THE OBJECT OF OUR ENQUIRY

The state of poverty in our country and the very poor standard of living of our people never fail to impress any one who studies the conditions of the mass of our countrymen. In the following paper a comprehensive study of the living conditions of workers in Madras, Coimbatore and Nellikuppam is attempted. Coimbatore and Madras are important centres of cotton textile industry while at Nellikuppam, the sugar factory of Messrs. Parry and Co. is located. In all we collected the budgets of nearly 200 working class families chosen from each representative economic group of workers.

THE QUESTIONNAIRE

The study is based on a questionnaire in which all items, important from the point of view of the working class have been included. The questionnaire can be divided into three main parts:—

1. General conditions including statements regarding meals, spare time, family strength, debt, etc.
2. Income of the family, including income from all other sources.
3. Expenditure, including all items of expense such as food, rent, clothing, miscellaneous, firewood, etc.

COLLECTION OF BUDGETS

During our investigation we experienced all the difficulties pointed out by the Royal Commission on Labour in connection with the collection of family budgets. The work was undertaken with the help of prominent persons in each of the places we chose for investigation. Workmen were directly approached and attempts were made to gain their confidence. The men were assured that the work was purely non-official and that the results of the investigation would not be communicated to their masters. In spite of these cautions however, the difficulties were many. We give them below:—

1. In the first place, the workers objected to our taking down every detail connected with either their offices or families, lest we should bring them into trouble by reporting particular cases to their masters. In

such cases, the respective local leaders were of great help in impressing on the workmen, the absolute harmlessness of our enquiry. It was indeed a matter of considerable difficulty.

2. In the second place, the ignorance of the workmen was so great that it appeared rather an impossible task to get any reliable information from them. Usually they do not calculate and spend in such a way as to get the maximum amount of satisfaction out of the limited means at their disposal. Hence there is a general tendency among the workers to exaggerate certain items of expenditure. This difficulty was overcome by us through the help rendered by persons intimately known to them. It was indeed astonishing that, once they took us into their confidence, the workers were prepared to be cross-examined in any manner and for any length of time. The results we were able to obtain have in no small measure been due to the willing help rendered to us by local leaders.

3. Thirdly most of the workmen did not return home before night-fall and after a hard day's work, they were too exhausted to face critical examination.

4. The fourth difficulty was in regard to finding out the total number of members in each family. Many were unwilling to give a reply to this question if their families were large, lest they should become the victims of the evil eye. In view of the fact that often even educated people are unwilling to give out the truth in this matter the difficulty in the case of the workmen may very well be imagined. But here also we were able to get accurate figures since persons who knew the workers' ins and outs accompanied us.

5. In the fifth place, many were unable to give us the causes of their debts in detail though we have been able to get accurate figures with regard to the actual monetary estimates. Inadequate wages, marriages, funerals, excessive use of toddy, were some of the causes given by the workmen.

It is very difficult to collect family budgets even in the case of educated middle-class people, since not many maintain strict and accurate accounts. In the case of workers, who in addition to taking no interest in accounts-keeping, are also illiterate, cent per cent accuracy is practically impossible. But this much we can say with regard to the budgets we have collected—they give a fair indication of the conditions of our workers.

AN EXPLANATION OF THE TABLES

We have on the whole collected 196 budgets, 82 being from Nellikuppam, 84 from Coimbatore and 30 from Madras. To give a clear

idea of the real state of affairs, we have divided the budgets of each place into tabular statements. A mere glance at each of the statements would easily acquaint the observer with the real economic position of our workmen. Nine tabular statements have been prepared for each place. Table 2 is a class-war analysis of the budgets collected. Table 3 gives the number of family budgets in each income group (we have divided the budgets into 7 sections each group denoting the income range of the workers in it), which gives us a fairly good idea with regard to the average income each man can normally aspire to. The table represents fairly accurately, the general estimate of the income groups into which budgets may be divided even if the budgets of all the workers in a place are collected. Table 4 gives the number of persons in the families by income groups, while the next gives the number of wage-earners in each family according to income groups. This table helps one to ascertain easily the average income per head, taking into consideration all the persons dependent on the incomes. Tables 6 and 7 show the average family income and expenditure, according to income groups. The next table gives the group percentage of expenditure by income groups. That is to say, the average expenditure of a family in each group on the various items, such as, food, clothing, rent, fuel and lighting, interest on debts, and miscellaneous items is calculated from the budgets. Also, the corresponding figures for the whole, taking into consideration all the income groups, have been given. Lastly, table 9 indicates the extent of indebtedness in terms of months' pay according to income groups. We shall now proceed to give an account of the conditions in each of the places we have visited.

AN EXAMINATION OF THE TABLES: NELLIKUPPAM

We have collected 82 budgets from the workers, of Messrs. Parry & Co., and we give below the nine tables we have prepared relating to these budgets:—

1. *Mill-War analysis.*

Messrs. Parry & Co.	}	.. 82
East India Distilleries and		
Sugar Factory		

2. *Class-War analysis.*

	Families.	Percentage.
Muhammadans	1	1 $\frac{9}{41}$
Harijans	6	7 $\frac{13}{41}$
Caste Hindus	75	91 $\frac{19}{41}$
	—	—
	82	100
	—	—

Table 3. Number of family budgets by income groups.

Groups.	Families.	Percentage.
1. Below Rs. 10 P.M.	6	7 ¹³ / ₄₁
2. Between Rs. 10 and Rs. 15	26	31 ²⁰ / ₄₁
3. " " 15 " " 20	21	25 ²⁵ / ₄₁
4. " " 20 " " 25	16	19 ²¹ / ₄₁
5. " " 25 " " 30	3	3 ²⁷ / ₄₁
6. " " 30 " " 35	6	7 ¹³ / ₄₁
7. Above Rs. 35 P.M.	4	4 ⁸⁰ / ₄₁
	82	100

Table 4. Number of persons in the family by income groups.

Income groups.	Persons living in the family.				
	Men.	Women.	Children.	Dependents.	Total.
1	1	1	1.66	0.17	3.83
2	1.27	1.58	1.38	..	4.23
3	..	..	..	..	4.47
4	..	..	..	..	5.37
5	2	2	3	..	7.00
6	1.83	2.67	1.5	..	6.00
7	2.5	1.75	2.25	..	6.50
All groups.					37.40

Table 5. Wage Earners.

Income groups.	Number of families with wage earners.			
	1	2	3	Total.
1	6			6
2	26			26
3	21			21
4	11	5		16
5	2	1		3
6	2	3	1	6
7	1	1	2	4
	69	10	3	82

Tables 6 and 7.

Income groups.	Families.	Total income.	Average income.	Total expenditure.	Average expenditure.
1	6	598 14 0	99 13 0	664 8 0	110 12 0
2	26	3,383 0 0	149 5 7	3,969 8 0	158 12 2
3	21	4,210 4 0	200 7 9	4,578 0 0	218 0 0
4	16	4,350 0 0	271 14 0	4,521 0 0	282 9 0
5	3	1,008 0 0	336 0 0	1,040 8 0	346 13 0
6	6	2,260 0 0	376 10 8	2,391 0 0	398 8 8
7	4	2,004 0 0	501 0 0	1,896 0 0	474 0 0
Total	82	17,814 2 0	217 3 11	19,060 8 0	232 7 1

Table 8. Group percentage of expenditure by income groups.

Number of budgets.	Gr. 1.	Gr. 2.	Gr. 3.	Gr. 4.	Gr. 5.	Gr. 6.	Gr. 7.	All groups.
	6	26	21	16	3	6	4	82
Food	.. 56.9	55.3	51.0	49.5	53.1	50.3	46.9	51.40
Clothing	.. 9.3	11.6	8.1	8.2	6.4	7.2	9.5	9.0
Rent	.. 1.8	3.5	4.2	1.8	2.3	3.0	2.5	3.0
Fuel and lighting	.. 9.0	8.6	8.8	7.8	6.9	6.5	8.8	7.6
Interest on debts	.. 3.0	4.9	10.7	7.4	12.9	12.5	6.3	9.2
Miscellaneous	.. 13.7	4.6	5.0	6.5	6.9	6.7	6.9	5.9
Others	.. 6.3	11.5	12.2	18.8	11.5	13.8	19.1	13.9

Table 9. Extent of indebtedness in terms of months' pay.

Income groups.	Not indebted.	Below 3 months' pay.	3 to 6 months' pay.	6 to 12 months' pay.	12 to 18 months' pay.	Over 18 months' pay.	Percentage of indebted to total.
1	8	..	3	..	..	1	66.6
2	10	1	4	6	2	2	60.0
3	6	1	3	4	3	4	71.4
4	6	1	1	4	3	1	62.5
5		1	..	1	1	..	100.0
6				4		2	100.0
7	2			1		1	50.0

Tables 1, 2, and 3 require no explanation. Table 4 shows that the number of persons in the family goes on increasing as the family income increases. Increased income with increased dependents is in no way better than low income and less number to be maintained. Tables 6 and 7, give an idea of the total annual income and expenditure of each family. The average income per family in each group varies from Rs. 99-13-0 per annum to Rs. 501 per annum, while the expenditure side shows variations from 110-12-0 per annum to 474-0-0 per annum. Except in the case of families in group 7, we find a surplus of expenditure over income, which fact easily explains the cause of indebtedness. Striking an average for all the 82 families, the average income comes to Rs. 217-3-11 per annum while expenditure comes to Rs. 232-7-1. We again note an excess of expenditure over income. These figures show that workers in a large majority of cases do not earn even the bare minimum which may be taken as the subsistence level. For, when we take into consideration the average number of members in each family to be maintained on the meagre income, we are astonished at the very economical way in which they are forced to live. The average per capita income ranges from Rs. 26-1-0 per annum in group 1 to Rs. 125-5-0 per head in group 7, corresponding figures for expenditure being from Rs. 28 to Rs. 118-8-0 per annum. Even making some allowance for less consumption on the part of children, we find that the figures particularly in the lower income groups stand at a deplorably low level. Table 8 clearly indicates the percentage expenditure of each group under the various items. The figures are self explanatory. When the total available per capita resources are considered, the percentage expenditure on each item is staggeringly low. Table 9 indicates the debt position.

GENERAL CONCLUSIONS: NELLIKUPPAM

On an examination of the figures given, one is tempted to conclude that the state of affairs is far from satisfactory. The standard of living is very low. Most of them live in the so-called-houses of their own, which are veritable dungeons in many cases. Many of them cannot help being debtors for the simple reason they cannot subsist without debts. Happily enough, one noteworthy factor about Nellikuppam is that the drink habit is not markedly prevalent among the industrial workers. Abstinence can prevent many evils; but only a substantial increase in income can preserve the workers from further degradation. Otherwise, debtors will go on raising further loans till no more credit is available, and this will result in semi-starvation and further degeneration.

COIMBATORE

We shall next turn to a study of the budgets of the textile workers at Coimbatore.

Of the mills, the budgets of whose workers have been taken, the Kaleeswarar and the Coimbatore Spinning and Weaving Company alone are situated within the limits of the Municipality so that it would not be far from the truth to say, all town-dwelling workers can be found in these two mills. The mills other than these two are almost all of them situated in pucca villages, except perhaps the Sarda Mills in Podanur.

Workers cannot speak of any leisure at all during working days. Even on holidays, they have a tendency to idle away their leisure. The idea of some hobby or artistic pursuit is entirely unknown to these people. Most of them are illiterates; hence their knowledge of things is so circumscribed that they are practically unable to make use of their leisure. Regarding diet, we find great variations at Coimbatore. There are many who live on *Kanji*, while others live on a frugal and meagre diet of rice twice a day.

As at Nellikuppam, it was in connection with the indebtedness of the worker that the greatest difficulty was experienced in conducting the inquiry. The rates of interest they give out are not quite reliable. As a matter of fact, the effective rate of interest would come to 12% or so, while they have borrowed perhaps at rates varying from 12 to 75 per cent! Default in interest payment is common. But the principal amounts of the loans we have recorded are perfectly reliable.

At Nellikuppam, there is at least some union spirit while at Coimbatore, everything regarding unionism is dormant. It is only on occasions of strikes that the workers join together.

Passing on to the 'Income' section of the questionnaire, it can be safely asserted that at Coimbatore all the adult sons of the workers work in the mills. Although some at least among the female folk are working in the mills or elsewhere the workers do not easily acknowledge it. They generally think it below their dignity to own that their wives or sisters work in the mills. Hence arises the difficulty in collecting the budgets of women workers.

We rarely met with workers earning more than Rs. 30 per mensm. There does not seem to be much of unemployment among the textile workers at Coimbatore. Those who worked temporarily said, they did it of their own accord. Income from other sources is nil in most cases.

We allotted no column for the disposal of the savings of the workmen, because savings are rare, and if there are savings they might be mentioned in the remarks column. But though we have not recorded, we shall now give what little information was gathered in the course of conversation with the workers whose expenditure was below their income.

In some cases, after deducting the expenditure from the income, we told them that they should be saving something and asked them what they did with it or what they proposed to do. The majority of them said that they would build houses of their own or subscribe to the chit funds, and do lending business in a small way. One or two workers said that they maintained fixed deposits in a bank. One man admitted having a Savings Bank account in the post office. We must point out however, that we met these thrifty workers in the villages only.

Coming to the expenditure column, as we have pointed out before, the workers have no definite idea of their own expenditure. In many cases we had to mention the various articles of food and add up the prices item by item. Then we had to find out the total and verify it from the workers' own testimony. Their food is frugal and from the point of view of nutrition meagre. There is absolutely no variety in the food they eat. They use fruits and vegetables only occasionally and that too only when they get them free.

Buttermilk is used only once; either in the morning before going to the mills or in the night. But we have come across many not using buttermilk at all every day. Betels are extensively used. Together with coffee they account for a pretty large expenditure in many cases. It is a matter of gratification to see, that the drink evil is not prevalent to any great extent among the textile workers at Coimbatore. Perhaps there might have been a certain amount of concealment among the workers examined. On an average, every family among the textile workers spends 8 to 10 annas on firewood every month. Villagers get their firewood mostly free and if at all they spend on firewood it is very little. The town workers, on the other hand, spend more on firewood. The workmen in the villages said that their womenfolk go out in their spare time and bring firewood from the neighbouring forests. As regards clothing and bedding, there seems to be more exaggeration at Coimbatore than at Nellikuppam. On cross-examination of the requirements of some workers, we realised that three pairs of dhoties, three shirts and three angavastrams are the minimum requirements of the least fashionable among them for a year. Bedding of course becomes a permanent investment. They spend very little on medicine. They

try homely remedies for small ailments. Unless the case is very serious, they do not call in the doctor. Moreover every mill has got its own doctor. So far as Coimbatore is concerned, we have to contradict the prevalent belief that workers spend much on religious items. We usually asked them whether they subscribed annually or monthly to temples. In most cases the reply was in the negative. But they spend occasionally something on cocoanuts and fruits when they visit neighbouring temples. House rent absorbs a good portion of the income of the town-dwelling workers, though in the villages, many own houses themselves, while even when a rent has to be paid the amount is very small. Coimbatore being a merry town, the youthful among the workers attend cinemas quite often. But on the whole textile workers, particularly the villagers, spend very little on amusements and recreations—they cannot afford to do so. Very few cases there were among the workers examined, where the workers had to send money to any dependent abroad. The mills at Coimbatore impose fines on the workers pretty heavily. We are given to understand that on an average, every worker is likely to pay at least Rs. 2 to Rs. 3 every year.

We give below our tabular analysis of the position at Coimbatore.

COIMBATORE BUDGETS.

Table 1. Mill-War analysis.

Name of the mill.	Family Budgets.	Percentage.
Stanes 'A' mill ..	21	25.0
Stanes 'B' mill ..	13	15.5
Kaleeswarar mills ..	17	20.0
Ranga Vilas mills ..	16	19.4
Rajalakshmi mills ..	6	7.1
Radha Krishna mills ..	7	8.3
Other mills ..	4	4.7
Total ..	84	100.0

Table 2. Class-War analysis.

Class.	Families.	Percentage.
Untouchables ..	2	2.4
Mussalman ..	1	1.2
Christians ..	4	4.8
Hindus ..	77	91.6
All classes ..	84	100.0

Table 3. Family budgets according to income groups.

Income groups.		Family budgets.	Percentage.
Gr. 1.	Below Rs. 10 P.M.	6	7.14
Gr. 2.	Between Rs. 10 and Rs. 15	34	40.48
Gr. 3.	" " 15 " " 20	17	20.24
Gr. 4.	" " 20 " " 25	9	10.71
Gr. 5.	" " 25 " " 30	8	9.52
Gr. 6.	" " 30 " " 35	7	8.33
Gr. 7.	Above Rs. 35 P.M.	3	3.58
All groups		84	100.00

Table 4. Number of persons in the family by income groups.

Income groups.	1	2	3	4	5	6	7
Persons.	3.83	3.88	4.88	4.22	6.37	7.28	8.33

Table 5. Number of wage earners in the family by income groups.

Income Groups.	Number of families with wage earners.			
	1	2	3	Total.
1	5	1		6
2	26(a)	7(b)	1	34
3	2	12	3	17
4		6	3	9
5	1(c)	5	2	8
6	2(d)	3	2	7
7			3	3
Total	36 (42.86%)	34 (40.47%)	14 (16.67%)	84

Gr. 2(a). 4 families get other incomes through casual work.

Gr. 3(b). 1 family gets sundry incomes.

Gr. 5(c). 1 family gets income from business.

Gr. 6(d). 1 family gets income from land.

Tables 6 and 7. Average family income and expenditure by income groups.

Income groups.	Number of families.	Total income.	Average income.	Total expenditure.	Average expenditure.
1	6	610 8 0	101 12 0	761 0 0	126 13 4
2	34	5,072 0 0	149 12 10	5,455 0 0	160 7 1
3	17	3,408 0 0	200 7 6	3,378 0 0	198 11 3
4	9	2,459 0 0	273 3 7	1,960 0 0	217 12 5
5	8	2,565 0 0	320 10 0	2,312 0 0	289 0 0
6	7	2,668 0 0	380 13 9	2,259 0 0	322 11 5
7	3	1,300 0 0	433 5 4	1,155 0 0	385 0 0
Total	84	18,080 8 0	215 3 11	17,280 0 0	205 11 5

Table 8. Percentage expenditure of families by income groups.

Number of Budgets.	Gr. 1.	Gr. 2.	Gr. 3.	Gr. 4.	Gr. 5.	Gr. 6.	Gr. 7.	Total
	6	34	17	9	8	7	3	84
Food	53.65	48.94	48.99	44.10	39.96	44.62	43.63	47.10
Clothing	8.13	9.74	8.90	10.20	10.68	12.18	12.55	9.70
Rent	5.13	9.08	5.96	3.62	4.93	..	..	4.70
Fuel and lighting	10.04	8.83	8.94	11.32	11.67	11.59	9.34	9.30
Miscellaneous	10.63	6.62	12.91	14.69	15.10	15.94	9.34	12.40
Interest on debt	6.90	7.90	5.08	5.35	8.56	9.48	12.46	7.80
Others	5.52	8.89	9.22	10.72	9.10	6.19	12.68	9.00

Table 9. Extent of indebtedness in terms of months' pay according to income groups.

Income groups.	Not indebted.	Below 3 months' pay.	3 to 6 months' pay.	6 to 12 months' pay.	12 to 18 months' pay.	Over 18 months' pay.	Percentage of indebted to total.
1	1	2	1	1	1	..	85.33
2	11	4	4	8	3	4	67.64
3	6	1	4	2	3	1	64.70
4	5	1	1	1	1	..	80.00
5	1	2	2	1	..	2	87.50
6	2	..	1	3	..	1	71.43
7	1	1	..	1	..	..	66.66

Taking group 1, for a family of 3.83 members on an average, there is an average income of Rs. 101-12-0 per annum while the average expenditure for the same family comes to Rs. 126-13-4. Allowing for the fact that in almost all the groups payment under interest charges is not regularly made, the figures yet show that even for the poorest standard imaginable, the income is not sufficient. Moreover the fact that the figures under expenditure appear normal indicates that as far as possible restraint is practised and that with the limited means at their disposal honest efforts are made to make both ends meet.

Similarly, for an average family of 3.88 members in group 2, the average income comes to Rs. 149-2-10, while the average expenditure comes to Rs. 160-7-1. Borrowing is thus limited by their capacity to earn. Groups 5, 6, and 7 show a satisfactory balance, probably because all these happen to be village workers.

From tables 7 and 8, we find that the amounts spent on food articles alone for all the families would come to nearly 47.1 per cent. That is to say, for an average family of 4.79 members, actual food items alone take only a little over Rs. 100 per annum. If we include other necessary items that contribute to keep up the physique of the workmen, the figures would rise to about Rs. 150 per annum for an average family of 4.79 members. The figures show a grave state of affairs.

Thus with low incomes and consequently low expenditure, inadequate nourishment, inconvenient and bad houses, absolute dearth of spare time and recreation, wide illiteracy, and oppressive indebtedness, the family budgets clearly show, that we cannot speak of a standard of living of the workers because there is no standard at all.

MADRAS BUDGETS

The total number of family budgets we have collected in Madras is only 30, those drawing over Rs. 20 per mensem being most represented.

The same criticisms offered regarding conditions at Coimbatore are applicable here also. In regard to the use of spare time, education, trade unions, etc., the interest taken by the workers is almost similar. They do not seem to be much interested in their union. They are even indifferent towards it. The workers say that unions ought to pay more attention to welfare problems, especially housing, sanitation, education, provision of cheap credit and so on, if workers are to take any interest in the union.

The drink habit is certainly more prevalent here but coffee is consumed as a necessity by at least the principal earning member of the family in many cases. Some families use both toddy and coffee, others

neither. If there is money on hand they appear to have an inclination for toddy.

There is no supplementary income of any kind in many cases. In the case of the thirty families, whose budgets we have collected, all are indebted. The average debt per worker comes to Rs. 193 which is heavier than that at Coimbatore or Nellikuppam.

House rent takes away a much larger proportion of the workmen's income at Madras than in the other two places. Interest on debts is equally heavy. But evasions in the lower groups might be more common in Madras. Similarly fuel and lighting absorb a greater amount in Madras than in the other two places.

We give below the tables we have prepared with regard to the conditions of the workers at Madras.

Table 1.

Name of the Mill.	Budgets.	Percentage.
The United Spinning and Weaving Mills, Ltd.	17	56.66
The Buckingham Mill	6	20.0
The Carnatic Mill	7	23.34
All Mills	30	100.00

Table 2. Class-War analysis.

Christians	1
Mussalmans	1
Hindus	28
	30

Table 3. Number of family budgets by income groups.

Income groups.	Number of Budgets.	Percentage.
Gr. 1. Below Rs. 10 P.M.	3	10.0
Gr. 2. Between Rs. 10 and Rs. 15	3	10.0
Gr. 3. " " 15 " " 20	1	3.33
Gr. 4. " " 20 " " 25	8	26.67
Gr. 5. " " 25 " " 30	6	20.0
Gr. 6. " " 30 " " 35	4	13.33
Gr. 7. Over Rs. 35 P.M.	5	16.67
All groups	30	100.00

Tables 6 and 7. Average family income and expenditure according to income groups.

Income groups.	Number of families.	Total income.	Average income.	Total expenditure.	Average expenditure.
1	3	294 0 0	98 0 0	319 0 0	106 5 4
2	3	384 0 0	128 0 0	392 0 0	130 10 8
3	1	195 0 0	195 0 0	236 0 0	236 0 0
4	8	2,052 0 0	256 8 0	2,074 0 0	259 4 0
5	6	1,800 0 0	300 0 0	1,883 0 0	313 13 4
6	4	1,497 0 0	374 4 0	1,513 0 0	378 4 0
7	5	2,534 12 0	506 15 3	2,615 0 0	523 0 0
All	30	8,756 12 0	291 14 3	9,032 0 0	301 1 1

Table 8. Average percentage family expenditure by income groups.

Number of budgets.	Gr. 1.	Gr. 2.	Gr. 3.	Gr. 4.	Gr. 5.	Gr. 6.	Gr. 7.	All groups.
	3	3		8	6	4	5	29
Food	.. 42.6	48.9		44.8	45.3	43.7	46.8	46.0
Clothing	.. 4.4	6.8		5.0	5.7	4.6	5.1	5.2
Rent	.. 22.6	18.4		10.6	10.2	9.5	10.8	11.3
Fuel and lighting	.. 10.6	9.1		10.9	8.6	9.5	7.1	9.1
Miscellaneous	.. 11.3	10.9		13.1	10.2	13.1	5.6	9.9
Interest on debts	..			9.8	12.7	11.6	14.1	11.2
Others	.. 8.5	5.9		5.8	7.3	8.0	10.5	7.3

Table 9. Extent of indebtedness in terms of months' pay.

Income groups.	Number of families indebted to					Percentage of indebted to total.
	Below 3 months' pay.	3 to 6 months' pay.	6 to 12 months' pay.	12 to 18 months' pay.	Over 18 months' pay.	
1	..	..	2	..	1	100
2	..	2	1	..	..	100
3	..	..	1	..	..	100
4	2	3	3	..	..	100
5	..	..	5	1	..	100
6	1	1	1	1	..	100
7	3	..	..	1	1	100
All	6	6	13	3	2	100

COIMBATORE, MADRAS, AND NELLIKUPPAM—
A COMPARATIVE STUDY

We have in the foregoing pages, dealt with the family budgets relating to each of the three places noted above. We shall now try to effect a comparative study.

Though the average income of a family at Nellikuppam is Rs. 223-5-6 as against 215-3-11 of a family at Coimbatore, the average expenditure at Nellikuppam comes to Rs. 232-7-1, as against Rs. 205-11-5 at Coimbatore. When we take into consideration the indebtedness of the workers in the two places, some interesting conclusions can be drawn. At Nellikuppam, out of the 82 budgets we have collected, 11 families are indebted to more than 18 months' pay, 20 families to the extent of 6 to 12 months' pay, 9 families to the extent of 12 to 18 months' pay, and 11 families to the extent of 3 to 6 months' pay and 4 families to the extent of less than three months' pay. The number of families not indebted stands at 28. The corresponding figures for Coimbatore are 9, 7, 17, 13, 11, and 27 respectively. The figures under payment of interest shows a larger percentage at Nellikuppam than at Coimbatore.

In round figures, the total debt of all the 82 families at Nellikuppam comes to Rs. 14,490 while at Coimbatore the total debt of all the 84 families comes to Rs. 9899. The average debt per family at Nelli-

kuppam is Rs. 176·7 as against Rs. 117·84 at Coimbatore. Thus the debt position accounts in a large measure for the increased expenditure of a family at Nellikuppam compared with one at Coimbatore.

Taking into consideration the expenditure under food items figures show that the labourers at Nellikuppam spend more on articles of consumption than those at Coimbatore. In house rent, firewood and lighting, the workers at Coimbatore spend more.

A careful scrutiny of the budgets shows and this was corroborated by our conversations with the workmen, that though devoid of many conveniences of a town, the workers at Nellikuppam have a slightly higher standard of life than the workers at Coimbatore. Perhaps if the workers of Nellikuppam were to adopt the diet of those at Coimbatore their debt position might be redeemed to some extent at least. The cost of living at Nellikuppam is certainly not higher than that at Coimbatore taking the prices of all the articles of consumption into consideration. Due allowance being made for the increased indebtedness of the workers at Nellikuppam, we are tempted to conclude, they are at least to a small degree better off than the workers at Coimbatore.

Since the budgets we have collected in Madras are small in number, we fear they might not be quite representative. One thing, however, is clear. Whereas at Coimbatore or Nellikuppam it is very difficult to see workers drawing more than Rs. 30 p.m., and the percentage of workers drawing more than Rs. 20 p.m., would be very low, in Madras the position appears to be different. The general wage level is higher in Madras than in the other places. But the cost of living in Madras is higher than that at either Coimbatore or Nellikuppam. Certainly the standard of living is not higher. Both Coimbatore and Madras appear to be sailing in the same boat, though Nellikuppam seems to be better than either of these two places.

The figures collected and tabulated clearly show that the average income of about Rs. 219 for an average family of nearly 5 persons is very inadequate. Their average expenditure with slight variations in these three places only shows that many of the workers have become reconciled to the inevitable. They borrow but only to a limited extent. Even the maximum borrowing that lies in their power unless repeatable every year with no necessity of repayment, cannot make them improve their standard of living. Borrowing can only help persons to tide over temporary emergencies. It is never a permanent antidote to the workers' sufferings.

ANNAMALAI UNIVERSITY

THE TEXTILE WORKERS' STANDARD OF LIVING

Prepared by

Dr. B. V. NARAYANASWAMI NAIDU, M.A., Ph.D.,

and

V. SIVARAMAN, B.A., (Hons.).

1. Name of the Mill.
2. Name of the worker.
3. Serial number of the family.
4. Caste.
5. Occupation.

GENERAL CONDITIONS

1. Use of spare time.
2. Number and nature of meals taken.
3. Nature of education.
4. Indebtedness.
5. Member of any trade union organisation.

MEMBERS AND INCOME

Total number of members in the family.	Earning members.	Sex.	Age	Rate of wages or income.	Days in the year employed.	Annual Income.	Income from other sources.	Total Income.	Turnover.	REMARKS.
--	------------------	------	-----	--------------------------	----------------------------	----------------	----------------------------	---------------	-----------	----------

EXPENDITURE

ITEMS.	Amount spent.	REMARKS
1. Food		
2. Miscellaneous		
3. Drinks and drugs		
4. Fuel and lighting		
5. Clothing, bedding, etc.		
6. Medical charges		
7. Religious observances		
8. House rent		
9. Amusement and recreation		
10. Remittance abroad		
11. Interest on debts		
12. Other expenses		

Sikhara

By

K. R. PISHAROTT

(Annamalai University)

In the whole range of the literature on Indian architecture there is no term more consistently and persistently misunderstood and misused than the term *Sikhara*. It is found equated with spire,¹ tower,² temple,³ steeple,⁴ and absurdly enough with *vimāna*⁵ and *ratha*.⁶ This equation is something that could not be accepted either by a layman or by an expert. Of these the English terms are not found used in any technical sense,⁸ and, if we may be guided by lexicons, we have to conclude that they refer to entirely different things.

A tower is explained as 'a building lofty in proportion to the size of its base either isolated or forming part of a castle.'⁹ This would give us the idea of a tall structure in a group of buildings, or a tall structure standing by itself. This term cannot, therefore, be used with reference to *Sikhara*.

Spire is an equally unhappy term to render *Sikhara* by. It means a 'tall structure rising from a tower or roof, etc., and terminating in a

1. HIA : p. 266; also SOMTK : p. 25; also HIEA : I-p. 436; also EB : XII—p. 222; also IA : p. 17; also AIG : pp. 131, 137; also Rupam (24) : p. 3; also DHA : p. 588, 589-90; also H-IA : p. 27; but evidently Havell does not approve equating spire with *Sikhara*; and elsewhere he equates it with the main portion of the dome; also IAMS : p. 196; also R-IA : p. 58, though it must be pointed out that the author does not use the term *Sikhara*; also MTD pp. 60, 85.

2. HIA : p. 266; HIEA : I-p. 322; also IA : pp. 17, 18, 19, 25, 30-31. In this latter work there is a sad mixing up of tower and spire.

3. HIEA : I-pp. 322, 325, 407. Cf. the expression 'the *Sikhara* temple' in IA : p. 17.

4. HFAIC : pp. 18, 25; also IAMS : pp. 17, 18, 255; also R-IA : p. 59; also HIA : p. 57.

5. HIEA : I-pp. 322, 325.

6. HIEA : I-p. 330.

7. Other terms used to refer to *Sikhara* are 'summit of tower' and 'tall dome.' Vide DHA : p. 591.

8. Compare for instance Stratton: *Orders of Architecture*; Fullerton makes mention of these terms, but, so far as I can make out, they do not correspond to *Sikhara*.

9. NED : X-Pt. I-p. 198.

der point, especially the tapering portion of the steeple of a cathedral or church, usually carried to a great height and constituting one of the chief architectural features of a building'.¹⁰ This term may apparently be used with reference to *Sikhara* with some sense of appropriateness but then it should clearly have been defined as such. This has never been done. Again, this term cannot be scientifically used for more reasons than one. In the first place, *Sikhara* does not rise from the roof; secondly, it does not terminate in a slender point; and thirdly, it does not form the chief architectural feature of the building, though undoubtedly it forms an essential part of a building. Since the spire is said to surmount the tower¹¹ and since *Stūpi* surmounts *Sikhara*, we may with some amount of justice use spire with reference to *Stūpi*, though even here we must point out it is not very happy, because *Stūpi* is neither particularly tall nor tapering.

Equally unscientific is the use of the term steeple. This term is found used in three different senses.¹² It means 'a tall tower or building of great altitude in proportion to its length and breadth'. In this sense it cannot be equated with *Sikhara*, for this is only a part of building, as we shall make clear, and not the whole itself. It may also refer to 'a lofty tower forming part of a church or temple, or such a tower together with the spire or other superstructure by which it is surmounted'. In this sense it may refer to *Sikhara*, but with it something more, and hence it is not quite correct, unless the term is clearly defined. In a third sense also the term steeple is used, and that is with reference to 'the topmost portion of the tower or roof of a church'. In this sense it closely approximates to *Stūpi*. Thus we find that this term also cannot be correctly used with reference to *Sikhara*.

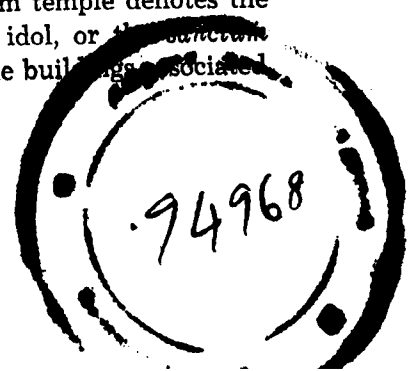
It is clear from what has been said that none of these terms can be used with reference to *Sikhara* with any degree of appropriateness. The question arises whether or not we have the right to use a particular term in a specific sense. No doubt we have; only we must then define the term we choose and use it consistently; and this has not so far been done. Such usage cannot, therefore, be said to have any scientific precision.

Still more unfortunate is the rendering of the term *Sikhara* by such expressions as temple, *vimāna* and *ratha*. The term temple denotes the whole building in which is enshrined the sacred idol, or the *sanctum sanctorum*, and sometimes, loosely no doubt, also the buildings associated

10. NED ix-pt. 1-p. 615.

11. Ibid : p. 900.

12. Ibid : p. 900.



with the *sanctum sanctorum*; but it is never used with reference to any part of the temple itself, that is to say, the whole is never put for the part. The absurdity will be manifest, for in that case we have to translate the expression '*Sikhara* of a temple' by the expression 'temple of a temple', as this rendering will no doubt necessitate. The terms *vimāna*¹³ and *ratha*¹⁴ also involve the same absurdity as before. For, these terms also mean the temple, and not merely a part of it. Both these have their own *Sikharas*, and, therefore, these also cannot be used in the sense of *Sikhara*.¹⁵

No one of the five terms, constantly used with reference to *Sikhara*, can, therefore, be said to be correct or scientific. And their promiscuous usage at the hands of not merely writers on architecture, but also translators of inscriptions,¹⁶ leads to only one conclusion that the writers and translators who used them had apparently no clear idea of *Sikhara*. Such wrong and loose usage may be excusable as regards foreign exponents of the subject, since they may not have had direct access to original Sanskrit texts, in which alone *Sikhara* is fully expounded. But, when the same term is wrongly used by writers¹⁷ who betray their familiarity with Sanskrit texts on the subject at every turn, it is time to tell them that they are wrong, for in the first place the word means neither a spire nor a tower nor a steeple nor a temple nor a *vimāna* nor a *ratha*, but something else, and in the second place, even if it did mean any one of these, it certainly could not then mean any other of the rest.

13. This is again another term very loosely used by writers on Indian architecture. The authors of *Silpasāstras* understood by this term merely *Prāsada*, the temple or *sanctum sanctorum*. The term is derived as follows: *nānamānavimānat-vādvimānaḥ*. The author of *Mayamata* treats it as a synonym of *Prāsada*:

vimānaṁ bhavanaṁ haryaṁ saudhaṁ dhāma niketanam

Chapter XIX, Verse 10.

This idea is well supported by the authors of *Mānasāra*, *Kāśyapaśilpa*, *Silparatna*, etc. It is regrettable that an attempt has been made to interpret it in a different way: Cf. TMSTA: p. 2. Equally wrong is the statement that 'the name *vimāna* thus came to be applied to the tower of inner shrine or *sanctum* of the temple' (*Rupam* 22: p. 55). Fergusson, on the other hand, correctly understands it, when he speaks of 'the principal part, the actual temple itself which is called the *Vimāna*' but he is evidently wrong, when he equates it with *Sikhara* (HIEA: I pp. 407, 442). Smith also understands it as the central sanctuary (Cf. ASIAR-GI: p. 216).

14. This also means a temple. Though it primarily means a wheeled temple, it is also found used with reference to a stationary temple. Cf. for instance the *Rathas* of *Māmalla*puram.

15. It is equally absurd to speak of '*vimāna* and *Sikhara* of a temple.' HO: II-p. 343.

16. DHA: pp. 589-90.

17. Such writers, as for instance, Coomaraswamy, Gangoly, etc.; also TMSTA; also DHA: under *Sikhara*.

It is always in the best interests of a scientific study of any subject to define clearly the technical terms occurring therein, and this is particularly so in the subject of Indian architecture. If the writers had only taken care to investigate and understand the exact significance of the term *Sikhara*, much of the confusion and the consequent wrong theorisings and speculations could have been avoided. The authors of the *Three Main Styles of Temple Architecture*¹⁸ have no doubt felt the confusion underlying the idea of *Sikhara* and they have defined what they understand by the term *Sikhara*. This is no doubt a great step forward, as the procedure is scientific. The present writer, however, differs from them in their idea of *Sikhara*: according to them a shrine has a *vimāna* or tower over it and this latter is surmounted by *Sikhara*, which bears a *Stūpi*. This point of view is obviously wrong, as it is not supported by any Sanskrit text.

Not only is this term so loosely used with reference to itself, but it is used equally loosely as a distinguishing feature of different styles of Indian architecture. The expression '*Sikhara shrines*' has been popularised by that distinguished exponent of Indian architecture, Fergusson, with reference to, and as the characteristic feature of, the Indo-aryan type of buildings.¹⁹ This nomenclature would have been significant, in case *Sikhara* was the characteristic feature of such shrines alone. But unfortunately it is a feature of every shrine. Gangoly says that *Dravidian* shrines also have their *Sikharas*, but he would exclude *Vesara* shrines.²⁰ Coomaraswamy accepts *Sikharas* for all the three types of structures, *Nāgara*, *Drāvida* and *Vesara*,²¹ but he would accept the view that shrines of the Gupta temples are characterised by the absence of any kind of *Sikharas* and that *Sikhara* was a later day development, as he speaks of some shrines which 'have either never possessed *Sikharas* or did not originally possess *Sikharas*'.²² Equally out of place is the statement of Bannerji that *Sikhara* formed a regular feature of Indian temples only from the beginning of the seventh century²³ A.D., that 'the Gupta temples did not possess any *Sikhara*',²⁴ and that the

18. TMSTA: p. 2.

19. HIIA: p. 75. Equally misleading is the expression *Aryavarta Sikhara*, used by Coomaraswamy (HIIA: p. 96) and '*Sikhara temple*' used by Havell (HIA: p. 57) and Bhandarkar (*Rupam*: '20: p. 12).

20. IA: p. 16.

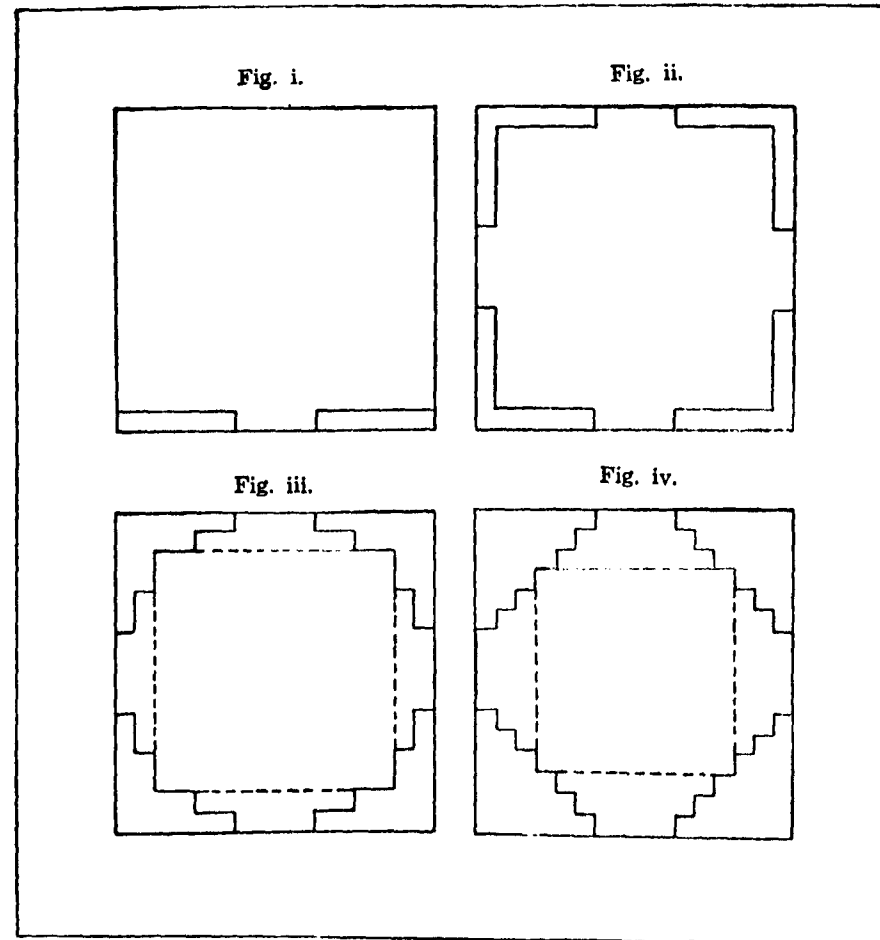
21. HIIA: p. 107.

22. HIIA: pp. 78, 79; also notice the statement 'it is possible that their *Sikharas* are later day additions'; also *Rupam* '22: p. 51; this writer would have it that 'the Indo-Aryan *Sikhara* formed no part of the original temples which were flat on the roof.'

23. AIG: p. 153.

24. AIG: p. 131; Gurudas Sarkar says that 'it has not been possible to trace

architect who built the Gupta temples 'did not intend to build a *Sikhara* above the shrine'.²⁵ Again *Sikhara* is said to be 'the peculiarity of Hindu and Jaina architecture of Northern India'.²⁶ The confusion is further enhanced, because some writers are also found speaking of dif-



Figures i—iv: These figures show how a square base could be modified.

ferent kinds of *Sikhara*s²⁷ and of 'the different elements constituting *Sikhara*',²⁸ and others make such statements as 'temples without *Sikhara*s',²⁹ '*Sikhara*s never have utilitarian purpose',³⁰ *Sikhara*s are

back beyond the 5th or 6th century the authentic existence of *Sikhara* form in this country' (Rupam 22-p. 51).

25. AIG : p. 137.

26. HIEA : I-p. 322.

27. HIA : pp. 79, 80, 95, 96, 107; also HIEA : I-pp. 322-323; also HFAIC : p. 25; also SOMTK : p. 44; also EB : XII-p. 222.

28. SOMTK : p. 62.

29. HIA : pp. 78, 79.

30. HIEA : I-p. 324.

rather 'an accessory than an essential' part of a temple,³¹ 'Gupta temples did not possess a *Sikhara*',³² etc

It will be clear from the foregoing that writers on Indian architecture, beginning with Fergusson and ending with the latest, Prof. P. K. Acharya,³³ have failed to clearly understand the true significance of *Sikhara*. As a result of this, possibly, the term has been wrongly rendered; and this certainly has led to a large amount of confusion which prevents the average reader from understanding what the term means in the writings on the subject in English. And what is worse, this has resulted in a gross misunderstanding of the exact nature and function of *Sikhara* in the scheme of Indian Architecture.

It may be argued that the term *Sikhara*, like any other term in language, may have undergone change in its exact connotation in course of centuries and therefore it is unscientific to say, that the rendering given by well-known writers is wrong, for it proceeds on the assumption that the word could not have undergone any metamorphosis in meaning, an assumption that is evidently unscientific. In reply to such an argument we have only to say that we are here dealing with a technical term which finds constant mention in all treatises on Indian architecture in Samskrit and which is always assigned the same sense. It is clearly defined and clearly understood by all writers who have used this term, and nowhere is there any indication that the term has undergone any change in meaning. It can, therefore, be safely asserted that this term always meant and has always been meaning only one thing in Samskrit technical literature. Such is the conclusion that strikes one on reading through the varied original Samskrit texts on architecture,³⁴ describing *Sikhara*.³⁵

31. HIA : p. 80.

32. AIG : p. 131. The earlier writers whose views he was controverting were right as far as we could see. Like every other temple, the Gupta temples also possessed *Sikhara*s, though not always the curvilinear type of *Sikhara*s: Cf. also p. 137, where the author categorically states that 'the architect did not intend to build a *Sikhara*.' This statement is based on the same wrong assumption.

33. Cf. DHA : under *Sikhara*. The word cannot certainly have all the meanings ascribed to it. We are afraid that Prof. Acharya was guided in his translation by the rendering given by the editors of inscriptions. Cf. also TMSTA.

34. Cf. for instance MM., KS., MS., TS., SR., etc.

35. Compare DHA. under *Sikhara*. One cannot help giving expression to a sense of surprise that Prof. Acharya should have left the term in the midst of this confusion.

Śikhara 'invariably surmounts the cells in which the images are placed'³⁶ and it helps to indicate 'externally the presence and position of the cells'.³⁷ 'Both *Nāgara* and *Drāviḍa Śikhara*s'—and we would add to it *Vesara Śikhara* also—'are towers rising above the *Garbhagrha* of a temple'.³⁸ In these statements we have the exact position of *Śikhara* set forth for us, and these are in perfect agreement with the Samskrit texts. The parts of a temple according to all authorities on Indian architecture are six in number: beginning from the base they are: (i) *Adhiṣṭhana*—basement; (ii) *Pāda*—cella; (ii) *Prastara*—entablature; (iv) *Gala*—neck; (v) *Śikhara*—head;³⁹ and (vi) *Stūpi*⁴⁰—finial. These various parts, it may also be mentioned, have to bear a fixed proportion to one another so far as their heights are concerned. The simplest of these proportions is as follows: the height of the building is twice its breadth. This height is to be divided into eight parts; and of these eight parts, one part will be the basement, two parts cella, one part entablature, one part neck, two parts head and one part finial.⁴¹ Coming to the shape of *Śikhara*, it may be *Caturasra* (square), *Ṣaḍasra* (hexa-

36. SOMTK: also HIEA: The description of *Śikhara* as that 'which forms the termination of the upper portion of the body or *Vimāna* of the temple' (Rupam: '22: p. 42) is certainly wrong. This describes correctly the location of *Stūpi*

37. HIEA: I-p.322.

38. HIIA: p. 83. Compare this statement with his description of the Surya Deol temple at Konark (HIIA: p. 116). He makes a strange distinction between roof and *Śikhara*, but does not make clear the respective position of each. This is rather confusing to say the least.

39. I purposely use the term *head* in preference to any other, and in this usage I have the authority of KS.; (See Chapter XIX-19); also TMSTA: p. 2, where the meaning of the term is correctly given; also the extract given in DHA. page 539 *śikharam śiraḥ mūrdhā*; also MM: p. 100; also Rupam 23 p. 29, '*Śikhara* is merely an exaggerated form of the human headgear': this identification is no doubt wrong.

40. I prefer this term, because it suggests also the fact that it is the final element in the structure. Cf. DHA: p. 588, where a very surprising statement is found made; 'above the dome (*stūpi*) are built in order *Śikhara*, *Śikhā*, *Śikhānta* and *Śikhāmaṇi*.' One needs scarcely say that this statement is obviously wrong. Cf. also HIIA: p. 115; Coomaraswamy is certainly right when he says that *Śikhara* is crowned by *Āmalaka* and this latter by *stūpi*.

Kāmikāgama does not accept this order of the parts of a temple. This reads *Gala* after *Śikhara* and adds *Āmalaka* after it. This would be truly descriptive of the north Indian temples—the so-called *Śikhara* shrines.

41. Cf. EAH: p. 52. This proportion is based on MS. Notice Ram Raz translates *Śikhara* by the term *cupola*. The proportion is also accepted by Gurudeva. Compare TS. Chapter II, verse 52, and the commentary thereon.

[The illustrations are from photographs secured by the author when he witnessed the staging of Act III of this drama at the temple theatre at Irinjalakuda, Cochin State; and these, it is hoped, will help to give some idea of the costume and make up of the characters as they appear in what is called *Kūṭiyāṭṭam*.]

PLATE I.



Fig. i A general view of the temple theatre.

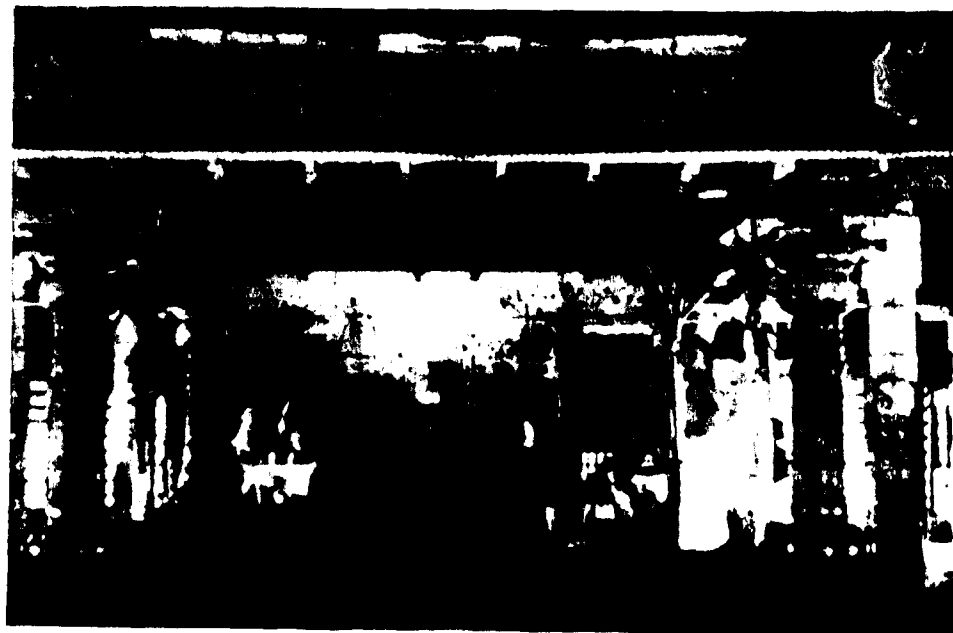


Fig. ii. A general view of the interior of the theatre.

PLATE II.



Fig. iv. Ravana.

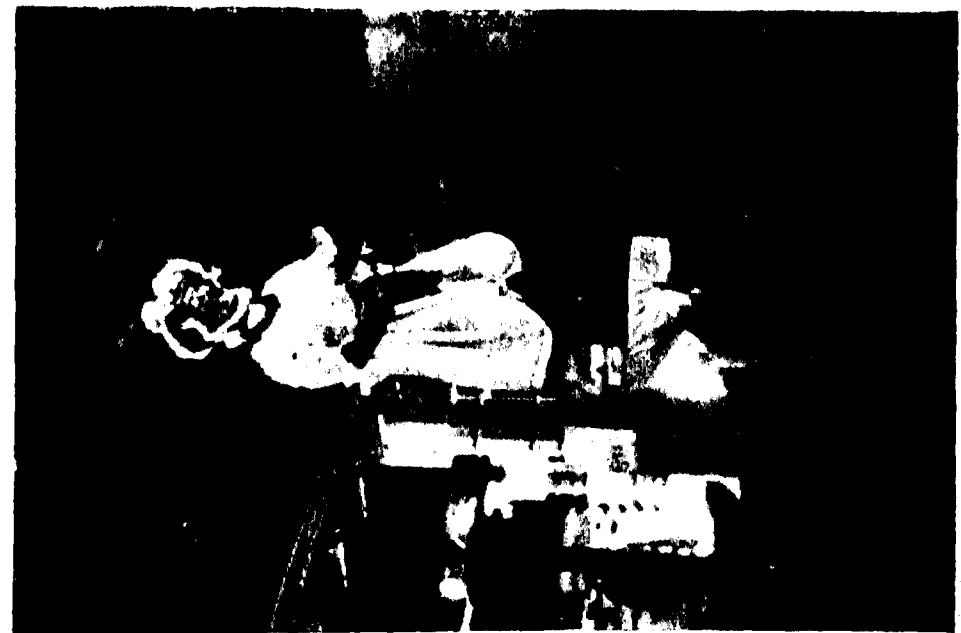


Fig. iii. Hanuman.



Fig. v. Sankukarna.



Fig. vi. Ravana, as he first appears on the scene.

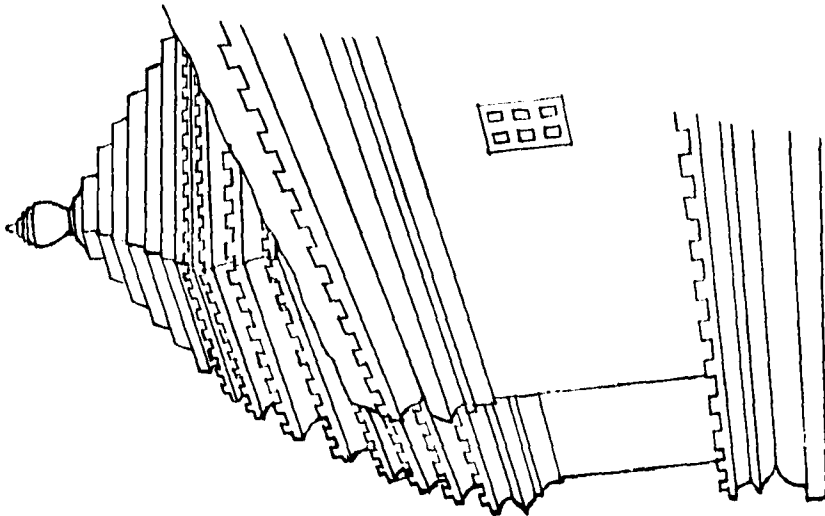


Fig. v.

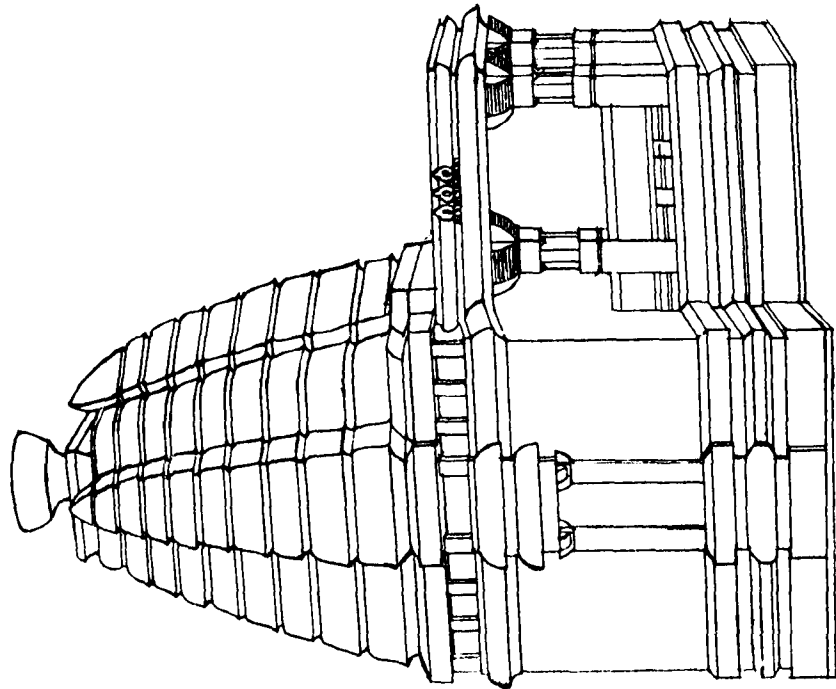


Fig. vi.

Figs. v—vi: These are copied from TMSTA. Figure v is there, described as a Kadamba temple, having 'simple form without *Śikhara* and without gable in front of the *Vimāna*.' The *Śikhara* however is very clear and it is surmounted by the *Stūpi*. Figure vi shows one of the Mahākutesvara shrines—a pure type of *Nāgara* shrine, where the square aspect of the base is very clear.

For the sketches v—ix I am indebted to the staff of the Engineering section of the University.

gonal) or *Aṣṭāsra* (octagonal) and *Vṛtta* (circular),⁴² though, as a general rule, it may be said that the shape of *Sikhara* will agree with the shape of the structure. Here, however, it may be mentioned that the shape of *Sikhara* is not to be understood in the sense of the shape of the whole *Sikhara*, but in the sense that a horizontal section of it will have the shape mentioned, that is to say, it will be a pyramid or dome over a square or octagonal base or a cone over a circular base. This shape has further been utilised to classify temples into broadly three classes, *Nāgara*, *Drāviḍa* and *Vesara*.⁴³ Both the height and the shape of *Sikhara* have been subject to modification, as is only natural, in the course of the development of architecture and this also has been noticed by Sanskrit writers⁴⁴: but, so far as the shape is concerned, all the variations,⁴⁵ such for instance, as rectangular, apsidal, elliptical, etc., are directly associated with, and derived from, the primary shapes mentioned above and these, therefore, do not necessitate, much less indicate, any change in the fundamentals of the conception and function of *Sikhara*.

From the foregoing it will be clear what *Sikhara* is: it corresponds to the roof of the temple.⁴⁶ This roof is to be constructed with the same materials as that of the cella: it may be built of bricks or stone or of wood⁴⁷ and, according to Nārāyaṇa, the same is to be covered with sheets of metal or plaited leaves to protect it from the inclemencies of weather.⁴⁸

The roofing which is the last item in the construction of *Sikhara* becomes an important piece of work, particularly in those areas which are subject to heavy seasonal rainfalls.⁴⁹ Thus in Kerala its heavy

42. TS. Chapter II, Verse 71.

43. Ibid; compare also KS. XIX-19:

nāgare caturasraṁ tadvasvasraṁ drāviḍe śiraḥ |
vṛttaṁ vesaraharmye tu śirasō vartanaṁ kramāt ||

44. Compare the relevant sections in MS., KS., MM., etc.

45. TS. Verses 65-70. The shapes other than those mentioned above are *dirghā-caturasra*, *gajaprsthā*, and *vṛttāyata*. MS. (Chapter XVIII—lines 90-100) adds to these *dirghaṣaṣṭasra* and *dirghaṣṭasra*.

46. This idea is made clear in the SR(M) as well as in the TS. and its commentary. Also DHA: p. 588. It need not be a spherical roof.

47. EAH: p. 49. Materials prescribed for the structure are three, wood, brick and stone. When it is made of the same material, it is called *Sudhā*, when two, *Miśra* and when three *Samikīrṇa*. A general convention requires that the cella and *Sikhara* must be of the same material.

48. TS. II-50:

varṣātapavāraṇakalyāṇiḥ śulbādikalpitaiḥ phalakaiḥ
sāreṣṭakābhīrvā vimānasikharaṁ tataḥ supidadhātu

49. Ibid.

seasonal rains twice a year make it very necessary that there should be good roofing for her temples.⁵⁰ Such a necessity does not exist so far as the east coast temples are concerned. Thus, wherever heavy rains do not exist, proper roofing is not necessary and consequently *Sikhara* is found ornamented in varied ways. It will hence be found that climatic conditions play a great part in determining the nature of *Sikhara* whether it is roofed or ornamented⁵¹ and not the type of building with which it is associated. Thus we have in Kerala all the three types of structures, *Nāgara* (see figures xii and xiii), *Drāviḍa*, and *Vesara* (see figures xiv and xv)—we are using these terms in the sense in which Sanskrit writers use them—and yet in spite of that, *Sikhara* square or octagonal or circular, is left unadorned, but covered with copper sheets or tiles and not rarely in some cases with plaited leaf or straw, to make it safe from the inclemencies of climate, particularly rains. This, then, is a point of view that deserves to be seriously emphasised in the consideration of *Sikhara*, that it is influenced in its construction by climatic considerations, a fact that no writer has so far touched upon.⁵²

Sikharas may accordingly be of four different kinds: it may be plain or ornamented, roofed or unroofed. In other words we can have (i) plain roofed *Sikharas*, (ii) ornate roofed *Sikharas*, (iii) unroofed plain *Sikharas* and (iv) unroofed ornate *Sikharas*. All the four varieties we find existing in different parts of India. The first two varieties we find in plenty in Kerala (cf. figures xiii and xiv). The third practically the simplest of the type we find at Pattadakal and in the early Gupta and Gupta shrines, while the last variety—in its common curvilinear form—we meet with in plenty in North India (see figures vi and vii).

50. One is inclined to smile merely when one reads through what looks like an authoritative pronouncement on Malabar temples. (Cf. AIG: pp. 139-140). The writer must confess he has not heard of the important discovery in large numbers of 'square shrines surrounded by one or more covered paths of circumambulation' with 'no *sikhara* over the sanctum.' One who is familiar with that part of the country must necessarily say that the author is writing on things with which he is quite unfamiliar and that his description conveys a totally wrong idea of Malabar temples. Now with reference to *Sikhara*, it is very doubtful if any one of the practising architects—and there are even now many, clever and well-versed, who earn their daily bread by this profession—would accept the view that the square shrines existing there have no *Sikharas*. This description certainly does no credit either to the author or to the temples. Compare figures xii-xv.

51. DA: p. 9. Rightly has it been said that 'architectural species adapt themselves to materials, to societies and to climates.' The other factors that enter into the determination of this are the materials used in the construction. Thus wooden structures need the protection of a roof, but not structures of stone.

52. See DA: page 9.

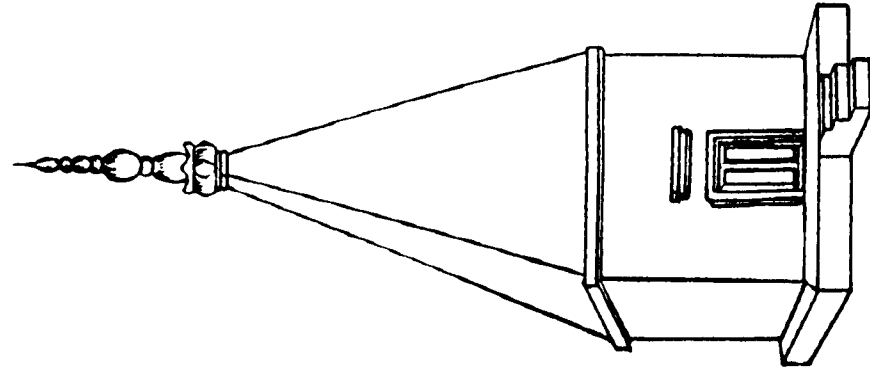


Fig. vii.

PRIMITIVE BENARES TEMPLE

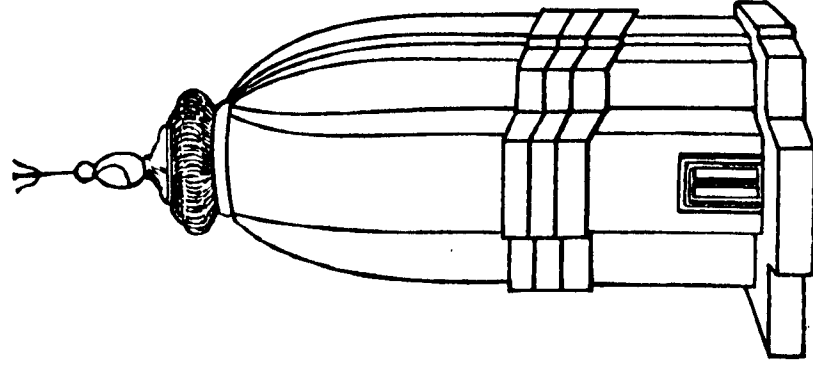


Fig. viii.

TYPICAL BENARES TEMPLE

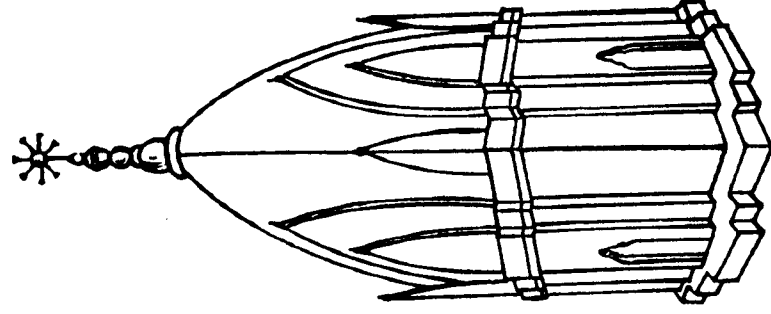


Fig. ix.

TYPICAL ORISSAN TEMPLE

Figs. vii—ix: These are copied from Mitra's *Indo-Aryans*, Volume II. These explain the variations of a square base. Figure vii represents the primitive shrine at Benares, while viii and ix are typical of Orissan and Benares shrines.

PLATE I.

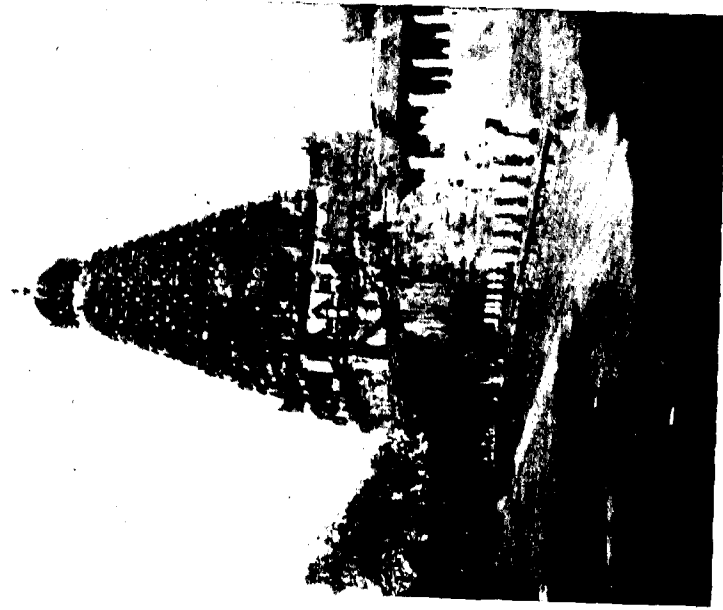


Fig. x.

Fig. x: Photo by the author of the famous temple at Tanjore and forms a typical instance of a *Drāviḍa* shrine.



Fig. xi.

Fig. xi: Photo for the author of the shrine at Chidambaram, the square character of which is perfectly clear. It is a typical *Nāgara* shrine.



Fig. xii.

Fig. xii : Photo for the author of the Kitholli temple at Cranganore, Cochin State, a Saivite shrine. Here we have a square *Śikhara* tiled without any adornment.

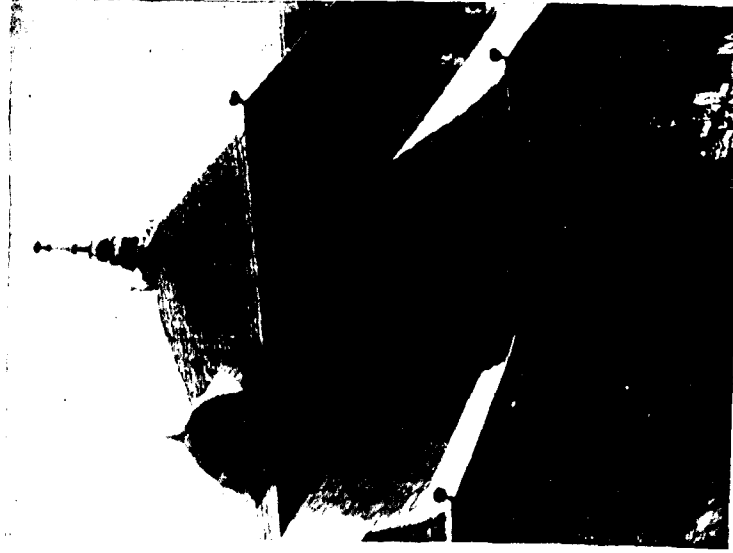


Fig. xiii.

Fig. xiii : Photo for the author of the shrine at Trichur, Cochin State. Here is a copper sheeted *Nagara* shrine with its square *Śikhara* adorned.

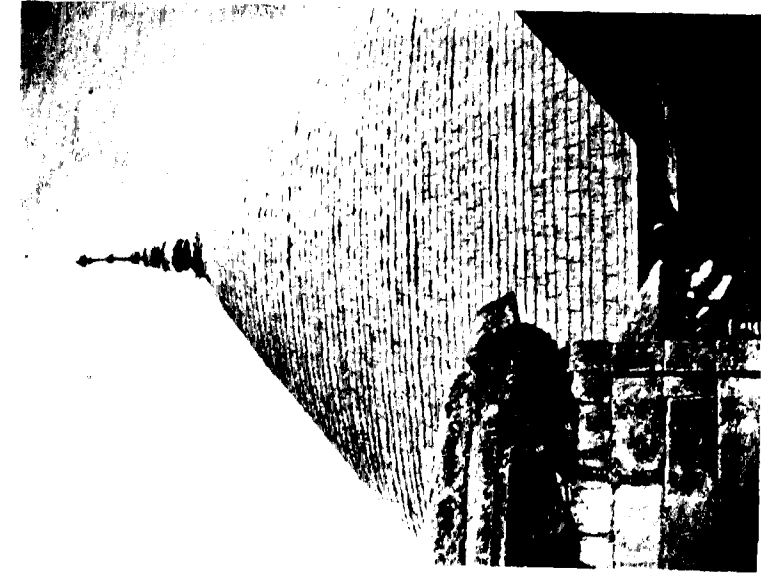


Fig. xiv.

Fig. xiv : Photo for the author of the central shrine at Trichur ; a typical *Vesara* shrine : a simple copper sheeted *Śikhara*.



Fig. xv.

Fig. xv : Photo by the author of the shrine at Irinjalakuda—a *Vesara* shrine with its *Śikhara* copper sheeted and plain.



Fig. xvi.

Fig. xvi: Photo supplied by Mr. Rajendra Shankar of the temples at Mamallapuram. Notice the *Dirghacaturasra*, *Aṣṭāsra* and *Caturasra* types of shrines.

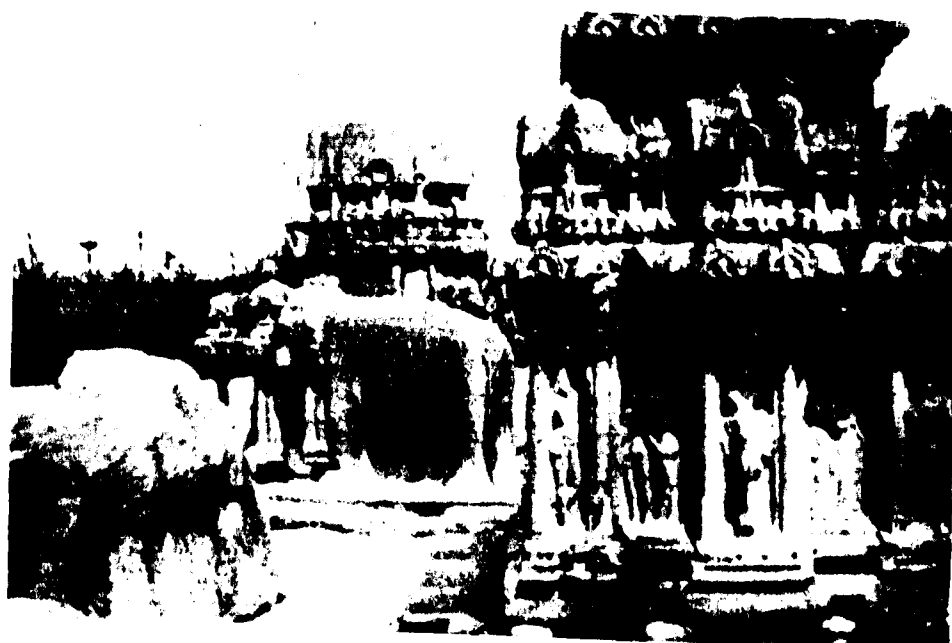


Fig. xvii.

Fig. xvii: Photo supplied by Mr. Rajendra Shankar of the temples at Mamallapuram. Here is a typical instance of the *Gajaprsthā* type of temple.

Sikhara, then, is an essential part of Indian structures and it discharges an essential architectural function; at the same time its exact shape, roofed or ornamented, is decided with reference to its having, or not having, to discharge the functions of an ordinary roofing. This important aspect cannot be forgotten in the consideration of *Sikhara*. It will also be clear that the English terms such for instance as tower, or spire or steeple or Sanskrit terms like *vimāna* or *ratha* cannot with scientific precision be used to denote *Sikhara*.⁵³

Now that we have tried to understand very generally what *Sikhara* is in its simplest form, we may here briefly notice some of the interesting discussions associated with *Nāgara Sikhara*. The most authoritative statement on the subject of the shapes of *Sikhara*, as affording a basis for the classification of types of Indian temples is, so far as we know, that of Coomaraswamy⁵⁴: *Nāgara* shrines are characterised by the curvilinear *Sikharas*; *Drāviḍa* shrines, by terraced pyramidal towers of which the dome is called *Sikhara*; and the *Vesara* type, by a combination of both. This statement of the learned writer is very much open to question, if we may regard it from the point of view of the statements of various Samskritic authorities on the subject.⁵⁵

All authorities are agreed that *Nāgara* shrines are characterised by a square *Sikhara*: in other words it will be a pyramid on a square base, ending in a point.⁵⁶ That this is the approved shape for *Nāgara* shrines is not merely a matter of theory, but is also something actually borne out in practice as is seen in the extant architectural remains of the earliest as well as the latest structures.⁵⁷ When it is said that the *Nāgara Sikhara* is a square, the idea is that any horizontal section of the same must be a square. This primary aspect being satisfied, it may have manifold shapes, (see figs. i-ix) and even the bulging curvilinear *Sikhara* can have a square base.⁵⁸ Hence it has to be borne in mind that because a *Sikhara* has a bulging curvilinear outline, this particular

53. It deserves to be mentioned that the criticism we have here made does not apply to the hybrid nomenclature of *Indo-aryan Sikharas* and *Sikhara shrines*: for it is open to any writer to use a related expression to refer to the bulging curvilinear type of *Nāgara Sikhara*.

54. HIA: p. 107; also EB-XII: p. 223.

55. Cf. MM. MS., KS., SR., KA., TS., etc.

56. Compare the chapter on architecture in HIA, AIG, etc.

57. See the illustrations in HIA, Rupam 1924 etc.

58. R. L. Mitra suggests that the earliest structures in India and outside, such as Egypt, Assyria and Babylon, were square or rectangular. He says that the 'rectangular plan is the most prevalent, even though apparently the shapes may seem to be different' and later on adds that 'generally speaking temples in northern India are not merely rectangular in form, but cubical in the form of their body.' If then this is the earliest shape utilised for temple construction, it may reasonably

feature need not be against the view of the traditional theorists. This essential aspect does not seem to have attracted the attention of the writers of the subject, including the earliest as well as the latest, Fergusson on one side and Coomaraswamy and Bannerji and Ramaprasada Chanda on the other.⁶⁰ Now with this basic conception that every *Nāgara* shrine must have a square section, the variations in actual form may be manifold, based on a straight line or a convex line or a concave line; and every genuine *Nāgara* shrine, brought under the category of Indo-Aryan or *Āryavarta*, or *Sikhara* shrine—if it may be rightly termed *Nāgara* shrine—must have this square section, whatever else it may or may not have. From this point of view the *Mahābodhi* temple at Gaya has to be characterised as a *Nāgara* shrine, the square aspect of which is very clear in every photograph published.⁶¹ We may not here say that the Buddhists preferred the stern straight line, while the Hindus had their partiality for the more graceful curvilinear line.⁶² We may not here see, as Coomaraswamy rightly says, a distinction between Buddhist and Hindu architecture,⁶³ but only the basic feature of the Indian architecture of the *Nāgara* type. When once this aspect is correctly grasped, the discussion⁶³ of the origins of the curvilinear *Sikhara* and other allied topics come to have no value as regards the origin of *Sik-*

be assumed that the other forms, hexagonal, octagonal, circular, apsidal, and oval are all derivatives from the original square shape. This view would gain additional strength when it is also remembered that even the circular and octagonal forms, i.e., *Vesara* and *Drāviḍa* types of Malabar temples have a square shape inside—a piece of information given me by my friend Mr. Varma, Maramattu Parisodhakan, Cochin State. Coomaraswamy gives a different explanation for the origin of *Nāgara* and *Drāviḍa* types from the same prototypes (Cf. HIA: p. 98) which may be original, but is certainly not very elucidatory.

59. Compare the chapter on architecture in AIG. Also Rupam 1924: pp. 2-3; also AIG: p. 132;

60. Compare the photographs in the IA, HIA, Rupam.

61. HIEA.

62. HIA: Rightly does Dr. Bhandarkar say that 'it is an absurd solecism to characterise any style as Buddhist or Jaina or Hindu merely from the accident of its employment under the service of any of these creeds' and that, 'the main current of Indian craft tradition is non-sectarian in character.' (Rupam 20: p. 11).

63. See the relevant sections in HIA, HIEA, Rupam 1922-24 EB: XII-p. 222. Havell suggests (HIA: pp. 58-59) that the 'curvilinear *Sikhara* may be the technical modification of the conical hut' and this may or may not be true. We agree with him however when he says that 'the bamboo frame-work of the temple car cannot be the prototype of the temple itself,' but we cannot agree with him when he says that its source was in Mesopotamia or Persia and it was introduced into India by Aryan conquerors. (ibid: p. 60). Both in theory and practice the basic idea is so simple that one need not seek a foreign source for the square *Sikhara*, particularly because we get this form in primitive architectural remains as well as in the huts of the primitive hill tribes.

hara of the *Nāgara* type is concerned, but only as regards the bulging nature of the *Nāgara Sikhara*. These are essentially different questions and the solution of the one—and even here no final solution is yet arrived at—is no solution of the other. Unfortunately the writers themselves were under the impression that they were discussing the general question of the origin of *Sikhara* and not a sub-variety of it, because no one of them has cared to discuss the concave variety of the same which also is possible on a square base and for which instances are not rare. And from the general point of view there is no question to be solved, if *Sikhara* is understood in the way in which it has to be understood in the statements of Indian architectural authorities. Naturally, therefore, this discussion has not elucidated, and indeed cannot elucidate, the point the writers wish to elucidate. The square *Sikhara* may have straight line or concave or convex edge and the development from the first to the second or third is only a natural process, the result of evolution,⁶⁴ which necessarily happens whenever the practice of architecture is in a flourishing condition.⁶⁵ It deserves to be pointed here that fully developed concavity is a rare feature in Indian structures, though partial concavity is not rarely found in the temples on the West Coast.

Now *Nāgara Sikhara* may have a straight line or convex line. If the temple stands in a place where climatic conditions require a complete protection of *Sikhara*, it will be tiled or roofed with metal sheets or tiles or plaited leaves; where, however, such protection is not necessary, it may be left as it is. In this case *Sikhara* will be bare and such a condition is against the aesthetic ideas of the Hindus and naturally, therefore, a lavish wealth of ornamentation is expended on it, which consists, as is usually the case in Indian architecture, in the reproduction in

64. There seems to be a general consensus of opinion that our ancient shrines, vestiges of which are not now available, must originally have been made of wood. (Cf. H. FAIC: p. 23). We do subscribe to this view, for a partiality for wood probably originating from the ancient convention, is still found in Kerala. And in the use of this material we may find the main reason why available remains of ancient shrines point to the fact that originally we had only straight-edged pyramidal roofs, for, according to Prof. H. Kishida, 'the straight line is the most rational when the material used is wood' (Cf. JA: p. 26). The bulging curvilinear nature of the north Indian shrines came in, when stone or brick came to replace wood in construction; and this naturally appears at a later stage in Indian architecture.

65. Compare R-IA: pp. 62-63. The author suggests the idea, though it is not clear. Naturally therefore the bulging curvilinear type of *Nāgara Sikhara* is a later day development: Cf. Coomaraswamy, Bannerji, etc. We cannot, however, agree with Coomaraswamy when he says that in modern temples of *Nāgara* type 'there is a tendency for form of the *Sikhara* to become smooth and straight sided,' if indeed he means by this that the straight line is a development from the curvilinear line. Cf. HIA: pp. 116-17.

part, or whole, of the temple itself⁶⁶ and sometimes in other ornamentation, such for instance as the sculptured figures of an 'explicitly erotic character' in the temple at Konarak,⁶⁷ 'or a series of arches which are not exactly *Caitya* windows'.⁶⁸

We may here mention that we have not been able to understand the significance of the statement made by Coomaraswamy that 'the square *Śikhara* consists of clearly defined storeys each of considerable elevation'.⁶⁹ Apparently he seems to differentiate it from the curvilinear *Śikhara*. If so, he is evidently wrong, for a square *Śikhara* is always a *Nāgara* shrine, whatever our modern critics may say, and conversely every *Nāgara* shrine must have a square *Śikhara*.⁷⁰ Possibly the reference here is to a *Nāgara Śikhara* surmounting an edifice, having more than one floor or *Tala*.

Enough now has been said to show that *Śikhara* is not a later day addition in *Nāgara* shrines, as some great writers seem to hold,⁷¹ but that it is as old as Indian shrines themselves. Secondly, its bulging or curvilinear nature⁷² is not the essential character of *Nāgara Śikharas*, variously called the Indo-Aryan or *Āryavarta* shrines: it is a subsidiary feature built into the square *Śikhara* as a matter of ornamentation in the course of the development of Indian architecture, and this explains the absence of the same in earlier structures of the *Nāgara* type in North India as also the later day shrines in other parts of India. The statement of Coomaraswamy that *Nāgara Śikhara* is 'an accessory rather than an essential' and that 'it begins to appear in the later Gupta period',⁷³ is perfectly clear and rational, if by the term *Nāgara Śikhara* we understand the curvilinear type of *Nāgara Śikhara* and not *Nāgara Śikhara*.

66. HIA : p. 109 ; also EB : Vol. XII—p. 223 ; also HIEA : II : pp. 137, 147.

67. HIA : p. 116

68. AIG : p. 134.

69. HIA : p. 95.

70. It is clear from what has been said that the identification of *Nāgara* shrines as set forth in the TMSTA, is evidently wrong.

71. Such for instance as Coomaraswamy, Gangoly, Bannerji, Rama Prasada Chanda, etc.

72. All writers on Indian architecture have correctly understood the bulging curvilinear portion as the *Śikhara*. In striking contrast to this stands the view of the authors of TMSTA, who take *Amalaka* as *Śikhara*! This view is obviously wrong for *Amalaka* cannot be identified with *Śikhara*. See the writer's paper on *Amalaka*, Volume I of COJ. pp. 189-196.

73. HIA : p. 96 ; also AIG : p. 153 ; '*Śikhara* becomes a regular feature of Indian temples from the beginning of the 7th century A.D.' Compare also page 137. 'The origin of the *Śikhara* or spire in Indian temple architecture is much later than the domination of the early Gupta Emperors in North India.'

in general.⁷⁴ Similarly, we can easily follow him when he says that the Indo-Aryan *Śikhara*—he means the bulging curvilinear *Śikhara*—'is not directly derived from the primitive type of bamboo construction'⁷⁵ and that it is 'a later development'⁷⁶ of the original square *Śikhara*, as we would have it, and not as he says 'produced by the reduplication of the vertically compressed storeys'⁷⁷ the true significance of which we are unable to grasp. It will also be seen from what has been said that the various theories advanced by scholars to explain the origin of *Śikhara*⁷⁸ of the curvilinear type of *Nāgara Śikhara*⁷⁹ have no direct bearing on the subject of the origin of *Śikharas*.⁸⁰

74. See note 64.

75. HIA : p. 83.

76. Ibid.

77. Ibid.

78. Cf. Rupam 22 ; also HIA : p. 83.

79. Rightly has it been said that 'each genuine phase of architecture is indissolubly connected with the architecture before and after it.' (EAWA : p. iv). And in the bulging curvilinear variety of *Nāgara Śikhara* which, it is said, is not found outside India, we have an indigenous development of the original square pyramidal *Śikhara*.

80. *Nāgara, Drāvida and Vesara Shrines* is the subject of a paper in preparation by the writer in collaboration with his friend and colleague, T. B. Nayar, M.A. (Lond.), Lecturer in History and Archaeology.

BIBLIOGRAPHY.

1. Ananda Coomaraswamy : *History of Indian and Indonesian Art* (HIIA).
2. Fergusson : *History of Indian and Eastern Architecture*, revised by Burgess (HIEA).
3. *Encyclopaedia Britannica* (EB).
4. Cousens : *Somanath and other Medieval Temples in Kathiavad* (SOMTK).
5. Cousens : *Medieval Temples in Deccan* (MTD).
6. Havell : *Hand-book of Indian Art* (HIA).
7. Havell : *Indian Architecture* (H-IA).
8. Gangoly : *Indian Architecture* (IA).
9. Smith : *History of Fine Arts in India and Ceylon* (HFAIC).
10. Rajendra Lal Mitra : *Indo-Aryans*, Vol. II (R-IA).
11. Ram Raz : *Essay on the Architecture of the Hindus* (EAH).
12. Rupam : 1920, 1922, 1923 and 1924.
13. Bannerji : *The Age of the Imperial Guptas* (AIG).
14. Bannerji : *History of Orissa* (HO).
15. Gravelly & Ramachandran : *The Three Main Styles of Temple Architecture* (TMSTA).
16. *The New English Dictionary* : (NED).
17. E. Bell : *Early Architecture in Western Asia* (EAWA).
18. Fullerton : *Architectural Examples*.
19. Prof. H. Kishida : *Japanese Architecture* (JA).
20. Prof. P. K. Acharya : *Dictionary of Hindu Architecture* (DHA).
21. Prof. P. K. Acharya : *Indian Architecture according to Manasara* (IAMS).
22. G. J. Dubreuil : *Dravidian Architecture* (1917) (DA).
23. *Mānasāra* : Ed. by Prof. Acharya (MS).
24. *Mayamata* : Ed. by Mm. T. G. Sastry (MM).
25. *Śilparatna* : Ed. by Mm. T. G. Sastry (SR).
26. *Tantrasamuccaya* : Ed. Mm. T. G. Sastry (TS).
27. *Kāśyapaśilpa* : Anandasrama Series : (KS).
28. *Kāmikāgama* : an extract supplied from the GOML, Madras (KA).
29. *Suprabhedāgama* : quoted TMSTA (SA).
30. *Śilparatna*—A Malayalam Rendering : published by Reddiar, Quilon (SR-M).

தொல்காப்பிய ஆராய்ச்சி.

(முன் தொடர்ச்சி)

By

S. S. BHARATI

(Annamalai University)

தொல்—பொருள்—சூத். 427. (செய். சூத். 115)

“ஒத்தாழிசையு மண்டிலயாப்பும்
குட்டமும் நேரடிக்கொட்டினவென்ப”

இதற்குப் பேராசிரியர், நச்சினர்க்கினியர், இளம்பூரணராகிய மூவரும் ஒன்றோடொன்றேவாத மூன்று உரைகள் எழுதுகிறார்கள். முரணுடைய மூன்றுரைகளும் பொருந்துமாறு கருதி ஆசிரியர் ஒரு சூத்திர மமைத்திருக்கமாட்டார். ஆகவே இதன் மெய்ப்பொருள் காணமுயலுதல் முறையாகும். இவற்றுள் பேராசிரியர் கூறும் உரையாவது :—

“ஒத்தாழிசைக் கலியின்கண்ணும் மண்டிலயாப்பின்கண்ணும் குட்டம்வருங்கால், அளவடிக்குப் பொருந்திவரும் தத்தம் பாக்கள்.”

இச்சூத்திரத்துக்கு இவ்வாறு பொருள் கொள்ளுதலில்வரும் முரண்பாடுகளுக்குச் சமாதானம் காணலரிது.

(i) முதலில், ‘ஒத்தாழிசை’, ‘மண்டிலம்’, ‘குட்டம்’ என்ற மூன்றனோடும் ஆசிரியர் தனித்தனியே எண்ணும்மை கொடுத்து, ஒரங்கே இம்மூன்றும் ‘நேரடிக்கொட்டின’ என ஒருபடியாகக் கூறுவதால், இவை தம்முள் ஒத்து நேரடிக்குப் பொருந்தும் என்பதே ஆசிரியர் கருத்தாகும். இதற்கு மாறாக, இவற்றுள் ‘குட்டத்தை’ மட்டும் வேறுபிரித்து, “அஃது ‘ஒத்தாழிசை, மண்டிலயாப்பு’ என மிரண்டின்கண்ணும் வருங்கால்” என்றுரைப்பது எப்படிப் பொருந்தும்? குட்டத்தோடு ஆசிரியர் கூட்டிவைத்த உம்மையை வாளா உண்டு விழுங்கி ஒழிப்பது முறையா? அன்றியும், ஒத்தாழிசை, மண்டிலயாப்பு என்ற இரண்டும் குட்டத்தோடு ஒரு நிலையவாய்க் கூட்டி எண்ணப்பட்டு, எல்லாம் எழுவாயாக ‘ஒட்டின’ எனும் பயனிலை கொள்ளநிற்கவும், பேராசிரியர் முதலிரண்டையும் ஏழாம் வேற்றுமையாக்கி, இறுதிநின்ற குட்டத்தைமட்டும் எழுவாய்ப் பொருளதாகக் கொண்டு அவ்வெழுவாய்க்குச் சூத்திரத்தில் எங்குமில்லாத ‘வருங்கால்’ எனும் முடியாததோர் எச்சப்பயனிலை படைத்துக் கூட்டுதற்கவசியமும் ஆதாரமும் காட்டி

விளக்கினாலில்லை. இன்னும் ‘ஒட்டின’ என்னும் பன்மைவினை, எண்ணும் மைகளா வினைக்கப்பெற்ற ஒத்தாழிசை மண்டிலயாப்பு குட்டம் என்ற மூன்று எழுவாய்ச் சொற்களுக்கும் ஒத்த ஒரு பொதுப் பயனிலையாகப் பொருந்தி நிற்பவும், முன்னிரண்டை ஏழாம் வேற்றுமை யுருபுதந்து விலக்கிவிட்டு, அவ்விரண்டின் கண்ணும் குட்டம்வரின் அக்குட்டம் நேரடிக் கொட்டும் என ஒருமை எழுவாய்க்குப் பன்மைப் பயனிலை காட்டுவது தவறாகுமே! இனி ஈரிடத்தும் வருங் குட்டங்கள் என்று எழுவாய்க்கும் பன்மைகொள்ள அமையுமென்பார்க்குப் பல இடங்களில் வருதலால்மட்டும் ஒரு பொருள் பன்மையாகமாட்டாது; இரண்டிலும் வருவது குட்ட மென்ற தொன்றேயாகையால், அஃதென யாதெனக்காட்டி மறுக்கிடுக. இவ்விடர்ப்பாடு பலவும் பேராசிரியர் உரையில் விலக்கற்கில்லை. இவை தம்மளவி லேயே இச்சூத்திரத்திற்கு இவ்வுரை பொருந்தாமையை இனிதுகாட்டும். எனில், இப்பொருளிலேழும் முரண்பாடுகளிம்மட்டிலமையா.

(ii) இடையடி குறைந்தமை குட்டமெனத் தம் சிறப்புரைப் பகுதியிலிவரே குட்டத்தின் இலக்கணஞ்சுட்டியுள்ளார். எனவே, நேரடியிற் குறைந்துவரும் குட்டம் நேரடிக்கொட்டும் என்பது முற்றும் பொருந்தாக் குற்றமாவதன்றிச் சொல்லோடு பொருந்தும் நல்லுரையாகாது.

(iii) இனி, நேரடியைத் தமக்குரிமை கொண்ட பாக்களும் இடையடி குறைந்து வருதலையும் கொள்ளுமென்பதையே இச்சூத்திரம் கூறவந்ததென்றின், அதுவுமாமையாமை காட்டுவன். இது கூறுவதே ஆசிரியர் கருத்தாயின் “நேரடிப்பாக்களில் குட்டமுத்தோன்றும்” எனச் சுருங்க வமையாமல், ஒத்தாழிசை முதலிய பாவகை எண்ணிப் பின்னும் நேரடிக்கு என விடுத்து கூறல் மிகையாகும். ஒத்தாழிசையும் மண்டிலமாகிய ஆசிரியமும் நேரடியே கொள்ளுமாகலான், அவற் றின்கண் குட்டமும் வரும் என்று கூறுவதே போதும்; மீட்டும் “நேரடிக்கு” என்று கூட்டியுரைத்தல் வேண்டா.

(iv) ‘ஒத்தாழிசையும், மண்டிலமும், கலியுமாசிரியமுமான பாவகைகளும் குட்டம் எவ்வகைப்பாலிலும் வரத்தரும் சீர்குறைந்த அடியும் என இவர்தம் உரையிற் கூறுவதால் இவற்றை ஆசிரியர் ஒருபடியாக வைத்தெண்ணினாரென்பது அமைவுடைத்தன்று. எல்லாப் பாக்களிலும் வரும் ஒருவித அடியைக் கலி, ஆசிரிய முதலிய பாவகைகளோடு ஒத்து ஒரு சேர நிறுத்தி எண்ணுவது இயையும் இலக்கண முறையுமாகாது. சீர்குறைந்த அடியான் ‘குட்டம்’ இன்னின்ன பாக்களில் வருமென லொன்று; அன்றி நேரடியான நாற்சீரடிகளோடு கூடி இடையிடையே வந்து பொருந்துவது முண்டு எனல் ஒன்று; இவ்விரண்டி லொரு இயல் முறையை விடுத்து, நாற்சீரடியாரும் பாவகைகளாயும் கூறி, அவற்றோடு அப்பாக்களில் அருகி வந்தமையுமொரு சீர்குறைந்த அடிவிசேடத்தையும் உடனொருங்கு நிறுத்திக் கூறு தற்கு எவ்வகை அமைவும் முறையும் இன்றியமையாமையும் காணலரிது. ஆகவே அக்கருத்தால் ஆசிரியர் சூத்திரம் யாத்திருக்க மாட்டாரென்ப தொருதலை.

(v) அன்றியும், ஆசிரியமும் கலியும் நேரடியையே யன்றி அளவு குறைந்த அடிகளையுங் கொண்டு வருதலுண்டு என்று ஆசிரியர் முன்னரே பாக்களினடிபற் றிக் கூறும் உரிய இடத்தில் தக்க தனிச் சூத்திரங்களால் விளக்கிவிட்ட பிறகு மீட்டும் அச்செய்தியை இங்கு வறிதே மிகைபடக் கூறாரன்றோ? ‘நற்றயலடி’ ‘இடையும் வரையார்’ என்ற செய்யுளியல் 68, 69, ஆவது சூத்திரங்களில் ஆசிரியத்துக்கும் ‘முச்சீர் முரற்கை’ என்ற இவ்வியல் 70 ஆவது சூத்திரத்தில் கலிப்பாவிற்கும் குறைந்த அடிகள் வந்தமையுமென விளக்கப்பட்டுளது. ஆகவே இச்சூத்திரம் முன் கூறியதையே மீண்டுங் கூறவந்ததெனின், மிகையால் ஆசிரியர்க்குப் பிழைப் பூட்டும். அதனுலமிப்பொருளிறுக்குப் பொருந்தாமை யறியப்படும்.

(vi) இன்னும், இங்கு மண்டில மென்பது ஆசிரியமென்றுரைகாரர் கூறு வது சரியானால், இதற்குப் பின்வரும் “மண்டிலம் குட்டம் என்றிவை யிரண்டும் செந்தூக்கியல்.....” எனும் சூத்திரம் நகைத்தற்கிடனாம். ‘ஆசிரியமும் குட்டமும் ஆசிரிய இயல்’ என ஆசிரியர் ஓர் இலக்கணம் கூறுவரா? எனவே “மண்டில யாப்பு” என்பதால் ஆசிரியமல்லாத பிறிதொன்றையே ஆசிரியர் இங்குக்கூறக் கரு ளினார் என்பது தெளியக்கிடக்கிறது.

(vii) மேலும், ஆசிரிய முதலிய பாவகைகள்பற்றி முன் பலபட விளக்கி முடித்து, இச்சூத்திரமுதல் பின் ‘கூற்று மாற்றமும்’ என்னும் இச்செய்யுளியல் 156 ஆவது சூத்திரம் வரை முறையே கலியிலக்கணம் கூறுவதால், இச்சூத்திரத்தில் கலியோடு ஆசிரியத்தை மீட்டு மிழுத்துக் கூட்டிக் கூறக் காரணமில்லை. இச்சூத் திரம் கலியிலக்கணம் கூற எழுந்த தென்னாமல், ‘பாவிலக்கணமே கூறுகின்றது’ என்று உரைத்தொடக்கத்தில் பேராசிரியர் காட்டியதும், தாமிதற்குக் கொண்ட பொருளுக்குப் பொருந்த வேண்டிப் புனைந்து கூறியதன்றி வேறில்லை. எனவே இங்கு இனைய பலதடைமுரண்களுக்கிடமான இவ்வுரை பொருந்தாமைதெளித லெளிது.

இனி, நச்சினார்க்கினியரும் இளம்பூரணரும் இச்சூத்திரத்தில், பேராசிரிய ரைப் போலக் ‘குட்டமும்’ என்பதனும்மையைக் கழித்தொதுக்காமல், எண்ணும்மையாகவே கொண்டனர். எனினும் நச்சினார்க்கினியர் குட்டத்தைக் குறைந்து வருமடியெனவே கொண்டு, ஒத்தாழிசை, மண்டிலயாப்பு, சீர்குறைந்து வரும் குட்டம் ஆகிய மூன்றும் நேரடியான நாற்சீரடிக்குப் பொருத்தின’ என்று பொருள் கூறினர்.

பேராசிரியர் மண்டில யாப்பை ஆசிரியமாகமட்டுங் கொள்ள, நச்சினார்க் கினியர் அதை மண்டலித்து வரும் ஆசிரியமும் வெண்பாவுமாகக் கூறினர். எனவே ‘குட்டமும்’ என்பதில் உம்மையை யொழிக்காமல் அதனை எண்ணும்மையாக வைத்து, அதையும் மற்ற முன்னிரண்டினோடு கூட்டி எண்ணியதும், மண்டிலயாப் பில் ஆசிரியத்தோடு வெண்பாவையும் சேர்த்தெண்ணியதுமான இரண்டுவேற் றுமை தவிர, பிறவாற்றால் பேராசிரியர்போலவே இச்சூத்திரத்துக்கு இவரும்

பொருளமைத்து, ஒத்தாழிசைமுதல் சீர்குறைந்தகுட்டமீறாக மூன்றும் நாத்ரேடிக் குப் பொருந்திவருமெனவே பொருள் கூறுவதால்மேலே காட்டிய பேராசிரியர் உரையைமறுக்கும் தடைமுரண்களில் முதலது நீங்கப் பிறவினையும் இவருரையை யும் மறுப்பனவாகும்.

இனி, இளம்பூரணர் இச்சூத்திரத்திற்குக் கூறும் உரை மற்றிருவர் உரையிற் கண்ட பல தவறுகளைக் கொள்ளாமல் நடக்கின்றது; குட்டமும் என்பதில் உள்ள உம்மையைப் பேராசிரியர் உரைபோல ஒழித்தொதுக்காமல் உள்ளபடிக் கொள்ளு கிறது. பேராசிரியர் நச்சினர்க்கினியர் உரைகளிற் போலக் குட்டத்தைச் சீர் குறைந்த அடியென்று கொண்டு, குறைந்த அடி நேரடிக்குப் பொருந்துமென ஒவ்வாவுரை கூறி நல்ல சூத்திரத்தை யல்லதாகச் செய்யாமற் குட்டத்தைக் கலி யுறுப்பான தரவெனக்காட்டிச் செவ்வமைதி பேணுகின்றது. எனில், மண்டிலத்தை மற்றிருவர் போலவே, இவரும் ஆசிரியமெனக் கூறுவதுமட்டும் அமைவுடைத் தாகாது.

மேலே பேராசிரியர் உரையை யாராயுங்கால் காட்டிய (v)-(vi) ஆவது முரண்பாடுகள் இவருரைக்கும் தடையாக நிற்கும். ஆசிரியத்திற்கு வரும் அடிவகைகளெல்லாம் முன்செய்யுளியல் 52, 53, 67, 68, 69 ஆவது சூத்திரங் களில் உலப்பக்கூறி விளக்கி விட்டதால் அதற்கு நேரடி பொருந்து மென்று இங்கு ஆசிரியர் மீட்டும் கூறுவதாகக் கொள்ளுதல் பொருந்தாது. மேலுமிச்சூத்திரம் கலியிலக்கணப்பகுதியின் முதற் சூத்திரமாதலானும் இதில் கலியன்றி ஆசிரிய உறுப்பை இங்குக் கூறற்கில்லை. இவருரையிற் குறைவு இவ்வளவே. மற்றிருவர் போலாது இச்சூத்திரம் சீர்குறைந்த அடியைக் குடியாமல் நேரடியிலும் பாவுறுப் புக்களையே சுட்டும் நோக்குடையதென இளம்பூரணர்கண்டு கூறினது பாராட் டத் தக்கது.

இனி, இச்சூத்திரம் முதலும் நேரிய பொருள் தெளிதலெனினாகும். இதற்கு முன்னெல்லாம் பிறபாவகை யிலக்கணங்கூறி முடித்து ஆசிரியர் இது முதல் 156 ஆவது சூத்திரம்வரை கலியிலக்கணம் வகுத்துச் செல்லுவதால், இதில் வரும் பகுதி யெல்லாம் கலியுறுப்புக்களாகவே கருதப்படல் வேண்டும்; முதலு மிறுதியுமான ஒத்தாழிசையும் குட்டமும் (தரவும்) கலியுறுப்புக்களாகலான், இடை நிற்கும் மண்டிலயாப்புமட்டும் கலியல்லாத ஆசிரியமாகக் கருதுதல் பொருந்தாது. அதுவும் கலியுறுப்பாதலே அமைவுடைத்தாம்.

(i) இச்சூத்திரம் கூறு மூன்றனுள் முதல் நிற்கும் 'ஒத்தாழிசை' 'கலி நால் வகை' யுளொன்றான கலிப்பாவன்று; கலிப்பாவகைகளில் வரும் ஒத்து மூன்றிய லும் தாழிசையுறுப்பேயாகும். (செய். கு-142). இவ்வாறன்றி, ஒத்தாழிசைக் கலிப்பாவையே குறிப்பதாகக் கொள்ளின் அப்பா முழுதும் அப்பாவுறுப்புக்களைத் தாம் நேரடி கொள்ளுமென்ற ரியதியில்லாமையால், நாத்ரேடி கொண்டு நடக்கும் தாழிசையுறுப்புமட்டுமே இங்குச் சுட்டப்பட்ட தென்பதே பொருந்துவதாம்.

(ii) இறுதி நிற்கும் 'குட்டம்' என்பது கலியுறுப்பான தரவாகும். "குட்டம் எனினும் தரவெனினும் ஒக்கும்" என்று இளம்பூரணர் இச்சூத்திரவுரையில் கூறு தல் கவனிக்கத்தக்கது.

(iii) இனி இவற்றினிடை நிற்கும் மண்டிலயாப்பும் அடைவே 'அராக' மென்னும் கலியுறுப்பே யாதல் வேண்டும்.

“அராகம்” என்பது “அருதுகடுகிச்சேறல்” என்று பேராசிரியர் 'எருத்தே கொச்சக' மென்னும் செய்யுளியல் 152 ஆவது சூத்திர உரையில் விளக்கியுள்ளார்.

உருண்டோடும் நடைபுடைமை அராக வியல்பு.

“உருட்டுவண்ண மராகந் தொடுக்கும்” என்பர் ஆசிரியர் தொல்காப்பிய னாரும் (செய். 232).

இனி, 'மண்டிலம்' என்பது 'வட்டமாயோடல்' அல்லது 'உருண்டோடல்' எனும் பொருட்டாம். (2, 3 பிங்கலம் 3019) (மதுரைத்தமிழ்ச்சங்க அகராதி 3 ஆம் தொகுதி பக்கம் 1601) புறநானூற்றுச் செய்யுள். 30ல் 'பரிப்புச் சூழ்ந்த மண்டி லம்' என்றும், புறப் பொருள் வெண்பாமாலை, வென்றிப்படலத்தில் “செலவொடு மண்டிலம் சென்று” என்றும், வருதலுங்காண்க, ஆகவே, மண்டலித்து அருது உருண்டோடும் இயல்புடைய அராகமே மண்டிலயாப்பெனச் சுட்டப் பெறுவது அமைவுடைத்தாகும்.

இனி, இச்சூத்திரப்பொருள் வருமாறு:—

ஒத்தாழிசை, அராகம், தரவு என்ற மூன்றுகலியுறுப்புக்களும் நாத்ரேடி யான நேரடி பொருந்தி வருவனவாம் என்று புலவர் கூறுவர்.

இனி இப்பொருளே இதையடுத்து வரும் இரண்டு செய்யுளியற் சூத்திரங் களுக்கு மியைபுடையதாகும் என்பதை அவ்வச்சூத்திரப் பொருளாராய்வுழிக் காட் டுவன்.

செய்-கு. 116

‘குட்டம் எருத்தடி புடைத்துமாகும்’

“தரவில் ஈற்றயலடி குறைந்து வரும்” என்பதே இதன் பொருளென உரை யாசிரியரும் பேராசிரியரும் கூறுவர்.

இனி, நச்சினர்க்கினியரோ இதில் 'எருத்தை'த் தரவென்றும் குட்டத்தைக் குறைந்த அடியென்றும் தாம் மேற் சூத்திரத்தில் கொண்டபடியே ஈண்டும் கூறித் “தரவினது ஈற்றடி குறைந்து வருதலை புடைத்தாம்” என்று இங்குப் பொருள் கூறினர். 'எருத்து' எனுஞ் சொல் ஈற்றயலடிக்காதல்; தரவுக்காதல் பெயராகும். நச்சினர்க்கினியர் இங்கு “எருத்தை”த் தரவெனக்கொண்ட நிலையில், இச்சூத்திரத்

தில், அவர் தரும் பொருளுக்கு அவசியமான சுற்றடிசட்டுஞ் சொல் வேறின்மையால், இவர் பொருளுக்குச் சூத்திரம் இடந்தராம வெளிப்படல்.

இதில் ‘குட்டத்தை’யே உரையாசிரியர் கூறியபடித் தரவெனக் கொள்ளின் ‘குட்டம்’ எனும் பெயரெழுவாய்க்குப் பயனிலையடையாய் நிற்கும் ‘எருத்தடி’ என்பது ‘சுற்றயலடி’ எனும் பொருள் தருவது இனிது விளங்குவதாகும். இதனால், மேற்சூத்திரத்தில் நேரடிகொள்ளுமென்ற தரவின் சுற்றயலடி ஒரோவழிச் சீர் குறைந்த அடியுமேற்கு மென்பதைத் தெரிவிக்கவே இச்சூத்திரம் எழுந்ததாகும். இப்படி சுற்றயலடி குறைந்துவருதல் சிறுவரவிற்பென்று சுட்டற்கே, ‘உடைத்துமாகும்’ என இதில் ஆசிரியர் உம்மை கூட்டியுரைத்துள்ளார்.

பேராசிரியர் ‘குட்டம் எருத்தடியின் கண்ணும்வரும்’ என்று இதற்குப் பொருள்கூறி, “குட்டம் இடைவருவதன்றி ஒருபாட்டின் சுற்றயலடிக் கண்ணே வந்தொழிதலும் உண்டு” எனச் சிறப்புரையானும் அப்பொருளை வலியுறுத்தினார். எருத்தடியை “சுற்றயலடி” என்றிவர் கொண்டது பொருந்தும். குட்டம் குறைந்த வடியென்றால் இவர் கருத்தின்படி முந்திய சூத்திரத்தானே இவ்விலக்கண மடங்குமே. மீட்டொரு சூத்திரமிங்கு வேண்டா. நாத்ரேடிப்பாக்களில் எங்கும் குறைந்தவடி வருமென்று அதற்கிவர் பொருள்கூறினதாலேயே சுற்றயலில் குட்டம் வரலாமென்பது போதருமே.

இனி, இவர்கருத்தின்படி இச்சூத்திரமே பொதுவாக எப்பாவினும் சுற்றயலடி குட்டமாக (குறைந்ததாக) வரும் என விதிப்பதாகும். ‘சுற்றயலடியே ஆசிரியமருங் கிறேற்ற முச்சீர்த்தாகுமென்ப’ (செய்-சூ. 68) என்று முன் தெளிவாகக் கூறிவிட்டாராகையால் இங்கு அவ்வாசிரியமல்லாத வேறு இன்னபாவினீற்றயலினும் குறைந்த குட்டம் வருமென விளக்காமல் வாளா கூறினாசிரியர். ஆகவே அவ்வாறு குற்றப் பட வரும் பொருளை இச்சூத்திரத்திற்குரியதாக ஆசிரியர் கருதியிராரென்பது ஒருதலை.

செய்-சூ. 117

‘மண்டிலம் குட்டம் என்றிவையிரண்டும்

செந்தூக் கியல வென்மனார் புலவர்’

இதற்குப் பேராசிரியர் கூறும் பொருளாவது :—

“மேற்கூறிய மூன்றனையும் இன்னபாவென்பது உணர்த்தினான். அவற்றுள் இறுதிரின்ற மண்டிலமும் குட்டமும் ஆசிரியப்பாவை உறுப்பாக உடைய” என்றவாறு.

இனி, நச்சினூக்கினியரும், ‘மண்டிலம்’, ‘குட்ட’ மென்று முற்கூறியவை யிரண்டும் ஆசிரியப்பாவின் கண்ணே பயில நடக்கும் என்று கூறுவாபுலவர்’ என்றே இதற்குப்பொருள் கூறினார்.

இவ்விருவருரையிலுங் காணப்படும் முரண்பாடுகள் பலவாம். மண்டிலம், குட்டம் என்பவற்றிற்குரிய பொருளை இவ்வுரைகார ரிருவரும் இச்சூத்திரத்திற்குத் தாம் கூறும் உரையில் விளக்கவில்லை. முந்திய சூத்திரத்தில் ‘மண்டிலத்தை’ ஆசிரியமெனவும், குட்டத்தைக் குறைந்த அடியெனவும் இவர்கள் கூறியதால், அதுவே போதும்; அப்பொருளை இச்சூத்திரத்திலுமச்சொற்களுக்கு இவர் கொண்டா ரென்பதமையுமெனில், அது பொருந்தாமை காண்போம்.

முதலில் ‘மண்டிலம்’ என்பதே ஆசிரியப் பாவாமானால், அதனைச் செந்தூக் கியல என ஆசிரியர் கூறுவது எவ்வாறு இயையும்? செந்தூக்கு என்பதும் ஆசிரியத்தையே குறிப்பதாம். ‘செந்தூக்கென்பது ஆசிரியப்பா என்றவாறு’ என்று பேராசிரியர் இச்சூத்திரத்தின் கீழ், சிறப்புரையில் வற்புறுத்தினார். முன், ‘வஞ்சித் தூக்கே செந்தூக்கியற்றே’ எனும் 71 ஆவது சூத்திரத்தின் கீழ் உரையிலும், செந்தூக்கென்பதை இவ்வுரைகாரரும் ஆசிரியமெனவே கூறியமைத்தது மிங்குச் சிந்திக் கத்தக்கது. எனவே ‘ஆசிரியம் ஆசிரியத்தி னியல்புடையது’ என இதில் ஆசிரியர் கூறினார் என்பது நகைக்கிடனாவதன்றி நல்ல பொருளெதுவும் தருவதில்லை.

(2) இனி “ஆசிரியமும் குட்டமும் ஆசிரியப்பாவினை யுறுப்பாக உடைய” எனும் பேராசிரியர் கூற்றுப் பெரிதும் பிழைபடுவதாகும். ஆசிரியமாகிய ‘மண்டிலம்’ ஆசிரியப்பாவினையே தனக்கு உறுப்பாகக் கொள்ளுமா நெங்ஙனம் ஆகும்? ஒரு கால் ‘மண்டிலம்’ என்பது ஆசிரியப்பாவகைகளுள் சிலவாகிய ‘நிலை மண்டலம்’ ‘அடிமறி மண்டல’ மென்ற மண்டலித்துவரு மிரண்டனையே குறிக்குமெனினும், ஆசிரியப்பாவினுள் அதன் சிலவகையாடங்கு மிவ்விரண்டும் தம்மினும் விரிந்த செந்தூக்கா மாசிரியப்பாவினைத் தமக்கு உறுப்பாயுடைய என்பதும் பொருந்தாது.

இதுவே போல, “ஒத்தாழிசையாகிற் கலிப்பாவினை உறுப்பாகவுடைய” என இவர் கூறுவதும் பழுவேயாகும். ‘ஒத்தாழிசைக்கலி’ கலிப்பாவகை நான்கனுள் ஒன்றாகும். “ஒத்தாழிசை” கலிப்பாக்களில் வரும் பலவுறுப்புக்களில் ஒருறுப்பே யாகும். எதுவாயினும் கலிப்பாவினை யுறுப்பியாகவும், ஒத்தாழிசையை யுறுப்பாக வும் கூறலாமன்றிக் கலிப்பாவினை ஒத்தாழிசைக்கு உறுப்பெனல் ஒருவகையானும் பொருந்தாது. அன்றியும்

(3) “குட்டத்தை” முன் ‘ஒத்தாழிசையும்’ எனவரும் சூத்திரத்தில் சீர் குறைந்துவரும் அடியென்று கூறிவைத்து, இச்சூத்திரத்தின் கீழ்ச் சிறப்புரையில் பேராசிரியர், “இணைக்குறள், நேரிசை” என்ற ‘இரண்டு ஆசிரியப்பாவகைகளே இரு வகைக் ‘குட்டமாம்’ என்று குறிப்பது, முன்னுக்குப் பின் முரண்படக் கூறும் குற்றமாகும். ‘குட்டம்’, சீர்குறைந்த அடியையாதல், நேரிசை முதலிய ஆசிரியப் பாவகையையாதல் குறித்தல்வேண்டும். இரண்டில் யாதானு மொன்றையே இச்சூத்திரங்களில் வரும் குட்டத்திற்குப் பொருளாகத் துணிவதைவிட்டு, முன் சூத்திரத்தில் ஈரைந்தஅடி எனவும், இச்சூத்திரத்திலதையே ஆசிரியப்பாவகை எனவும் கொள்ளு

தல் இலக்கண அமைவுடைத்தன்றாகும். பல வேறு பொருளில் ஒரே சொல்லு இலக்கண விதிகளில் ஆசிரியர் கூறி மயங்கவைப்பாரல்லர்.

(4) மேலும் 'குட்டத்தை' ஆசிரியப்பாவகை எனக் கொள்ளின், அப்பொருள் இங்கு ஆசிரியரின் இரு சூத்திரங்களையும் அலமரச்செய்யும். முன்னைச் சூத்திரத்தில், ஆசிரியப்பாவகை நான்கினையும் குறிப்பது ஆசிரியர் கருத்தாயின், 'ஒத்தாழிசையும் ஆசிரியப்பாவும்' என்று தெளிவாகக் கூறுவதை விட்டுத் தாம் எங்கும் பொருளை அல்லது இலக்கணத்தை விளக்கிக்காட்டாத "மண்டிலம், குட்டம்" என இரண்டு சொற்கள் பெய்து, ஆசிரியமொன்றைச் சுட்டமாட்டார். அதுவுமன்றி, பேராசிரிய ரிற்குக் கூறுமாறு, மண்டிலம், நாத்சீரடியே யாத்துவரும் நிலைமண்டில அடிமறிமண்டில ஆசிரியப்பாவகைகளை மட்டுஞ்சுட்டி, குட்டம், குறைந்த அடிகளை இடையிடையிடையிடையாத்த இணைக்குறள் நேரிசை ஆசிரியப்பாவகைகளையே குறிப்பதாயின் "மண்டிலத்தின்கண் குட்டம் வருங்கால்" என்று முன்கூத்திரத்தின் கீழ்ப் பேராசிரியர் கூறியது பொருந்தாக் கூற்றுகிமுடியும். மண்டில ஆசிரியப்பாக்களில், குட்டம் வருமாறில்லை. குட்டமாவன, மண்டிலப் பாவாகா. எனென்று வகையானும் இவர் தம் கூற்றுக்கள் இடர்ப்பட்டழியும்.

இனி, முன் சூத்திரத்தில், 'நாத்சீரடியான மண்டலித்து வரும் ஆசிரியமும் வெண்பாவும் "மண்டிலத்துளடங்குமென விளக்கிய நச்சினார்க்கினியர், அதை மறந்தோ அல்லது அதற்கு மாறாகவோ, இச்சூத்திரவுரையில், அவ்விருபாக்களையு மடக்கிய மண்டிலம் அவற்றொன்றையான 'ஆசிரியப்பாவின் கண் பயில நடக்கும் தன்மையை யுடைய' எனக் கூறுவதும் வியப்பையே விளைப்பதாகும். இவை பலவற்றினும் இச்சூத்திரத்திற்கு இவ்விருவர் தரும் உரையும் தக்கதன்று எனத் தெளியலாகும்.

இனி இதற்கு இளம்பூரணர் கூறும் உரையாவது :—"மண்டிலமாகக் கூறப் படும் பாவும் குட்டமெனக் கூறப்படும் பாவும் அகவலோசையியல்பின்", இவர் மண்டிலத்தை ஆசிரியமெனவும், குட்டத்தைத் தரவெனவும் முன் சூத்திரத்திற் கூறினதால், அப்பொருளே இங்குங் கருதினரென்பதே பொருத்தமாகும். அவ் வாறு கொள்ளுவதில் மற்றையுரைகாரருக்குக்காட்டிய தடைமுரண்களில் சில இவ்வுரையமைவின்மையை வலியுறுத்தும். ஆகையால், இதில் 'மண்டி லத்தை' அடிமண்டிலித்துவரும் அராகமாகவும், 'குட்டத்'தை யிவர் கூறியவாறே தரவெனவும் கொள்ளுவதே இச்சூத்திரத்திற்கு அல்லலற்ற நல்ல பொருளமைவு அளிப்பதாகும்.

முன் 115 ஆவது சூத்திரத்தால் தாழிசை, அராகம், தரவு எனும் மூன்று கலியுறுப்புக்களும் அளவடிபயின்று வருமென விளக்கி, அதையடுத்து 116 ஆவது சூத்திரத்தில், அம்மூன்றனு னொன்றான தரவு பெரும்பாலும் நேரடி பெறுவதில் பாயினும், ஒரோவழி அதன் சுற்றயலடி குறைந்து வருவதுமுண்டு எனத் தெரித்த

இச்சூத்திரத்தால் அத்தரவொழிய, தாழிசை, அராகமெனும் கலியுறுப்பிரண்டும் செந்துக்கியல் பெற்று நடக்கும் என்று ஆசிரியர் விளக்கினார் எனக் கொள்வதே இம்மூன்று சூத்திரங்களுக்கும் ஒத்து முரணற்று ஏற்புடைய பொருட்பொருத்தம் தருவதாகும். எனவே "அராகம், தரவு என்ற இவ்விரண்டு கலியுறுப்புக்களும் ஆசிரியத்துக்கினியல் பெற்று நடக்குந் தன்மையன, என்று புலவர் கூறுப" என்பதே இச்சூத்திரத்துக்குப் பொருந்தும் பொருளாகும்.

தொல். பொருள். சூத்-62. (புறத்திணை சூத்-7)

"எஞ்சாமண்ணசை வேந்தனை வேந்தன்
அஞ்சுதகத் தலைச் சென்றடல் குறித்தன்று"

இது, முல்லைக்குப்புறமென்ற வஞ்சித்திணையியல்பை விளக்கும் சூத்திரம். இதற்கு நச்சினார்க்கினியர் கூறும்பொருளாவது :—

"எஞ்சாமண்ணசை = இருபெருவேந்தர்க்கும் இடையீடாகிய மண்ணிடத்து வேட்கையானே, அஞ்சுதகத்தலைச்சென்று = ஆண்டு வாழ்வோர்க்கு அஞ்சுதல் உண்டாக அந்நாட்டிடத்தே சென்று, அடல்குறித்தன்று = ஒருவேந்தனை ஒருவேந்தன் கொற்றங்கோடல் மாத்திரைத்து வஞ்சித்திணை-என்றவாறு" இவ்வுரையை விளக்கி நச்சினார்க்கினியர் தரும் சிறப்புரை வருமாறு :—

"ஒருவன் மண்ணசையானே மேற்சென்றால், அவனும் அம்மண் அழியாமற் காத்தற்கு எதிரே வருதலின், இருவர்க்கும் மண்ணசையான் மேற்சேரலுளதாகலின், அவ்விருவரும் வஞ்சிவேந்தராவ ரென்றுணர்க"

இவ்வுரை, சூத்திரச்சொல்லமைப்புக்குப் பொருந்தாமையோடு, வஞ்சியிலக் கணத்தை இழிதகுபழிமேற் கொள்ளும் பிழையாகவும் பண்ணுகிறது. "எஞ்சா மண்ணசை" என்ற தொடரை அதை அடுத்து நிற்கும் "வேந்தனை" என்ற இரண்டாம் வேற்றுமைச் சொல்லுக்கு மட்டும் அடையாக்கியமையால், அதற்கும், பின்னிற் கும் "வேந்தன்" என்ற எழுவாய்ச் சொல்லுக்குமேற்றி, அவ்வேந்தன் படையெடுத்து மேற்செல்லுதற்குக் காரணமே அயல் மன்னர் மண்ணிடத்து வேட்கையாகும், என்றார் நச்சினார்க்கினியர். "மேற்செல்லும் வஞ்சி வேந்தன் போர்கருதிப் படையெடுக்கும் நோக்கமே பிறவேந்தன் மண்ணைக்கவரும் வேட்கைதான்" என்று கூறுவதால், நாகரிக உலகம் மதிக்கும் போரறம் பிழைத்துத், தக்க காமணயின்றித் தவறெதுவுமில்லாத பிற மன்னர் நாட்டை வலியுடையான் தணியாத மண்ணசையாலே படையெடுத்துச் சென்று வென்றுகோடலே 'வஞ்சி' எனக் காட்டி அவ்வொழுக்கத்தைப் பழிக்கத்தகும் பிழையாக்கி முடிப்பதொன்றே பலனாகும்.

இவ்வாறு வலிச்செருக்கால் தவறற்ற பிறர் நாட்டைப் பறிப்பதுலகியலில் உண்டெனினும், அவ்வியலை வெறுத்து விளக்குவதை விட்டு, அறநாற்றி மூத்த

அறிவுடைய தொல்காப்பியர் போன்ற ஆசிரியர் அதை வேந்தர் கையாண்டதும் போரறமாக்கி “வஞ்சித்திணை” என்று சிறப்பித்துக் கூறியிருக்க மாட்டார். நச்சினூர்க் கினியர் கொல்கை தொல்காப்பியர் கருத்தன்மென்பதை அவர் சூத்திரச்சொல் லமைப்பே தெற்றெனத் தெளிப்பதாகும். “எஞ்சாமண்ணசையா லிருவேந்தர்” என்பது போலக் கூறாமல் “எஞ்சாமண்ணசை வேந்தனை” என்றே சூத்திரிப்ப தாலேயே, ஆசிரியர் கருத்து அஃதன்மென்பது வெளிப்படை. படைகொண்டு மேற்செல்லுதற்குப் போதியகாரணம் தனக்குரிய நாடு போதாமல் பிறர்நாட்டில் தணியாதவேட்கையுடைய அறமற்ற அயன்மன்னரைப் பொருதடக்கும் ஆண்மையறமேயாகும். அவ்வாறடக்காவிடின் எஞ்சாமண்ணசை யுடையார் வஞ்சுத்தால் வலிமிக வளர்த்து வலிகுறைந்த பிறர் நாட்டைக் கவருவ ராகையால், காலத்தே சென்று அத்தகையாரை வென்றடக்கி யாண்மை யறமாற்றுவதல் போற்றத்தகும் போரறமாகும். அவ்வறமே தமிழ் மக்கள் கையாண்ட வஞ்சித்திணை எனத் தொல் காப்பியர் இச்சூத்திரத்தினிது விளக்கியுள்ளார். எனவே இச்சூத்திரத்துக்குரிய பொருள்தவையாகும்.

பொருள் :—“தணியாத மண்ணுசையுடைய வொரு வேந்தனை, வீரமுடைய வேறு வேந்தன் முன்னவனின் தவறெண்ண நிறைவேறுதபடி, அவன் குற்ற நெஞ்சம் அஞ்சுமாறு படைகொண்டு அவனைப் பொருதடக்க மேற் செல்லுதலையே வஞ்சித்திணை குறிப்பதாகும்” இளம்பூரணரும் இதுவே ஆசிரியர் கருத்தாகக் கொண்டு உரை கூறுகின்றார். “ஒழியாத மண்ணை நச்சுதலையுடைய வேந்தனை மற்றொரு வேந்தன் அஞ்சுதகத்தலைச் சென்றடல் குறித்தது” என்பது அவருரை. இப்பொருள் இச்சூத்திரச் சொற்கிடக்கையாற் நெளிவாகவும், அதை விலக்கி “எஞ்சாமண்ணசை”யை மேற்செல்லும் வஞ்சிவேந்தனுக்கு ஏற்றிக் கூறினது, அறங்கருகா மறம்பேணி அயலார் மண்ணிலாகை கூர்ந்து போர்மேற்கொள்ளுவதைப் போற்றத்தகும் வேந்தரொழுக்க மெனப் பேசும் ஒரு சில வடநூலார் கூற்றை இங்கு இத்தமிழரின் தவறற்ற போரறம் விளக்கும் இப்புறத்திணைச் சூத்திரத்துப் பொரு ளாகக் காட்டமுயலும் விருப்பமேயாகும். இம்முயற்சி காரணமாக நச்சினூர்க்கினியர் படைத்துக் கூறும் சிறப்புரையில் இன்னும் சில தவறு காணப் பெறுவதுமியல் பாகும். அல்லதனை நல்லதெனச் சொல்லவரும் அல்லல்களுக் கெல்லையில்லை யென்பதன் உண்மையை இங்கிவர் சிறப்புரைச்செய்திகள் வலியுறுத்துகின்றன. “எஞ்சாமண்ணசை” அக்குற்றமுடையான் நாட்டின்மேல், அதை வெறுக்கும் வேந்தனைப் படையெடுக்கச் செய்யும் என விளக்குமாசிரியர் கருத்தை விடுத்து, மண்ணசையே போர்விரும்பி மேற்செல்லும் வஞ்சியொழுக்கத்துக்குப் போதிய நன்னோக்கமாகும்-எனக் காட்டப்புகுந்து, அதை விளக்கச் சிறப்புரை கூறுமிடத்து, நச்சினூர்க்கினியரைத் தொடரும் இடர்ப்பாடுகள் பல.

(I) முதலில் படையெடுத்து மேற்செல்லும் வேந்தனை, எஞ்சாமண்ணசை யால் அவ்வாறு சென்றெனென்று கூறி அவனைத் தவறுடையனாகிய குற்றம் மேலே காட்டப்பட்டது.

(II) இனி அவர் சிறப்புரையில் காணும் வேறு தவறுகளை இங்குக் காட்டு வன். பிறர் மண் உண்ணும் தணியாத தன் வேட்கை தன்னாட்டின்மேல் அயல் வேந்தன் படையெடையை உண்டு பண்ணியதெனும் நேரிய பொருளை விலக்கி மண்ணசையால் வந்த மாற்றானைத் தானும் தன்மண் காத்தல் காரணமாய் எதிர்த்து வருவானென்று சூத்திரத்தில் இரண்டாம் வேற்றுமையில் வரும், “வேந்தனை” நச்சி னூர்க்கினியர் சுட்டலானார். எனில் மூலத்தில் “எஞ்சாமண்ணசை வேந்தனை” என்றிருப்பதால், மண்ணசையை அறவே தனக்கு இல்லாமல் விலக்குமாறில்லை. அதனால், தன்னாட்டின்மேற் படையெடுப்பை விளக்கத் தான் கொண்டிருந்த மண் வேட்கையே மூலகாரணமென்று கொள்வதற்கு மாறாக, இவன் மண்ணைவேட்டு வந்த பிறவேந்தனை இவன் தன் மண்காக்கும் நோக்கொடு எதிர்வந்துதாக்குவன் என உரைகூறி அப்படித் தற்காப்பதும் மண்ணசை காரணமான வஞ்சியாகுமெனச் சிறப்புரையில் வற்புறுத்தலானார். இதிலெழும் ஏதங்களை அவர் கருதினரில்லை போலும். முதலில் மண்ணைசைக் குற்றமிலனாகில் படையெடுத்து வந்த பகை வேந்தனை எதிர்த்துவருவது தன்மண் அழியாமற்காக்கும் அறமென்று கூறும் இவரே அத்தற்காப்புப் போர்விருப்பை, “மண்ணசையான் மேற்சேறல்” என்று கூறுவ தெவ்வாறு பொருந்தும்? தன்மண்ணைக் கவரவரும் பகைவனை எதிர்ப்பது ஆண்மையறமாகுமென்று மண்ணைசைக் குற்றமாகாதே! மண்ணசையைக்குற்ற மென்று கொள்ளாமல் மன்னருக்கு நல்லறமென்று கூறப்புகுவதால், இவ்வாறு தன்னாடழியாமற் செய்யும் காப்புப்போரையும் மண்ணசைப்போரெனக் கூறிப் போரறத்திறம்பிப் பிழைக்கவைத்தார்.

(III) இதுவும் போதாமல், தற்காப்பின் பொருட்டுத் தன்னாடு கவர வந்தானை எதிர்த்துத் தகைத்தலையும் வஞ்சியென வைத்து, வந்தானையும் எதிர்த்தா னையும் ஒருசேர வஞ்சியராக்கி முடித்தார். இது, “வஞ்சி மேற்செலவு” என்று தெளிந்த தமிழிலக்கணத்தையே அலமரச் செய்யும் தவறாகும். வலிகருதிவந்த மாற்றானை எதிர்த்து மலைதல் தும்பைத் திணையாகுமெனத் தொல்காப்பியர் தெளிய வைத்திருப்பதை இவரின்கு மறந்து கூறினார்.

“தும்பைதானே,

பைந்து பொருளாக வந்த வேந்தனைச்

சென்று தலையழிக்குஞ் சிறப்பிற் நென்ப”

என்பது தொல்காப்பியர்தரும் தும்பைத்திணை யிலக்கணம். எனவே பிறர் நாட்டின்மேற் படையெடுத்துச் செல்லுதலே “வஞ்சித்திணை” என்பதும் அவ்வாறு வரும் மாற்றானை எதிர்த்து மலைதலே “தும்பைத்திணை” என்பதும் தமிழ்புறத்திணை யறமென்று ஆசிரியர் ஐயத்திரிபின்றி விளக்கிச் சூத்திரித்துள்ளார். இத்த கைய பண்டைத் தமிழர் போரறச் சிறப்பைப் போக்கிப் பொருந்தாப் புத்துரை கூறி நச்சினூர்க்கினியர் பிழையுடன் பிழையுந்தருவது வருந்தத்தக்கதே.

இன்னும் இத்தும்பைச் சூத்திரமும் வஞ்சி யிலக்கணத்தை விளக்குதற் கொருவாறு உதவக் காண்போம். வஞ்சிவேந்தன் மேற்செல்வுக்கு மண்ணைக் காரணமில்லை; மண்ணை யுடையானைப் பொருதடக்கும் வலியுடைமையே தகவுடைக் காரணமாகும் என்பதை வலியுறுத்து முகமாகவே, “மைத்து பொருளாக வந்த வேந்தனை” என்று படை யெடுத்துவரும் வஞ்சிவேந்தனின் பழுதற்ற போர் நோக்கம் இத்தும்பைத்துணைச் சூத்திரத்தில் தெளிக்கப்படுகிறது. நச்சினார்க்கினியர் கூறுமாறு, வஞ்சிக்கு மண்ணையே காரணமாகக் காட்டுவது ஆசிரியர் கருத்தா மேல், மேலே வஞ்சிச்சூத்திரத்தில் மேற்செல்லும் வேந்தனுக்கு அவ்வடை கூறாமல் விடுத்ததோடு மீண்டும் இத்தும்பைச் சூத்திரத்திலும் அதையறவே மறைத்து வேறு கூறியிராரன்றே. இவ்வீரிடத்தும் ஆசிரியர் மேற்செல்லும் வேந்தனின் நோக்கை விளக்கத் தந்த சூத்திரங்களின் போக்கை, மண்ணையை மன்னர் போரறமாகக் கொள்ளுதலை மறுத்து நல்ல ஆண்மையறம்பேணும் கடனை வலியுறுத்திப்போவது மிகவும் பாராட்டத்தக்கதாம். எனவே இவ்வஞ்சித்திணைச் சூத்திரத்துக்கு நச்சினார்க்கினியர் கூறிய பொருள், அறவொழுக் கோடொன்றது, ஆசிரியர் கருத்துக்கு மாறாகும் என்பது எளிதிற்மெளியலாவ தோருண்மையாகும்.

தொல். பொருள் சூத்-192 (கற்பியல் சூத்-51)

“காமஞ்சான்ற கடைக்கோட்காலை
யேமஞ்சான்ற மக்களொடுதுவன்றி
அறம்புரி சுற்றமொடு கிழவனுங் கிழத்தியுஞ்
சிறந்தது பயிற்ற லிறந்ததன் பயனே”

இதற்கு இளம்பூரணர், ‘உரைகூறல் மிகையெனவும் சூத்திரத்தால் பொருள் விளக்குமெனவும்’ கூறியமைந்தார். நச்சினார்க்கினியர் இச்சூத்திரத்துக்குத் தமது வழக்கம்போற் புத்துரை கூறமுயன்று பெரிதும் இடர்ப்படுவாராயினர். நின்றங் கமையும் நேரிய பொருள் தராது தொடர்தொறுஞ் சொற்களைப் பிய்த்து இஷ்டம் போல் இடம் மாற்றி வைத்துப் புதுவதோர் சூத்திரமாகத் தைத்து மருள் வரும் பொருள் தருவாரானர்.

‘கிழவனுங் கிழத்தியும், சுற்றமொடுதுவன்றி, அறம்புரிமக்களோடு, சான்ற காமங் கடைக்கோட்காலை, சிறந்தது ஏமஞ்சான்ற பயிற்றல், இறந்ததன் பயனே’ என்பது இவர் கொண்டு கூட்டிக் கண்ட புதிய சூத்திரமாம்.

இதற்கு அவர் தரும் பொருளாவது. —

‘தலைவனுந்தலைவியும், உரிமைச் சுற்றத்தோடே கூடி நின்று, இல்லறஞ் செய்தலை விரும்பிய மக்களோடே தமக்கு முன்னரமைத்த காமத்தினையும் தீதாக உட்கொண்ட காலத்திலே, அறம்பொருள் இன்பத்திற் சிறந்த வீட்டின்பம் பெறு

தற்கு ஏமஞ்சான்றவற்றையடிப்படுத்தல், யான் முற்கூறிய இல்லறத்தின் பயன் என்றவாறு” என்பதாம். இதன்மேல் அவர் தரும் விசேட வுரை வருமாறு :—

“சான்ற காமமென்றார், நுகர்ச்சி யெல்லாம் முடிந்தமை தோன்ற; இது கடையாயினார் நிற்குநிலை யென்மணர்த்தற்குக் கடையென்றார்; ஏமஞ்சான்ற வாவன, வானப்பிரத்தமும் சந்தியாசமும்; எனவே இல்லறத்தின் பின்னர் இவற் றின்கண்ணே நின்று, பின்னர் மெய்யுணர்ந்து வீடு பெறுப; என்றார். இவ்வீடு பேற்றினை யின்றியமையாது இல்லற மென்பது இதன்பயன். இது காஞ்சி யாகாதோவெனின், ஆகாது. நிலையின்மை சான்றோர் கூறக் கண்டதெளிதல் காஞ்சி. இஃது அன்னதன்றிச் சிறந்த வீட்டின்ப வேட்கையால் தாமேயெல்லாவற் றையும் பற்றறத்துறத்தலின் அகப்பொருட்பகுதியாம்.” என்பதாகும்.

இதில் காணப் பெறும் விபரீத வெதிரேக விளைவுகள் வியப்பினை விளைப் பனவாம்.

(1) முதலில் மனையறமாண்பு விளக்கும் கற்பியலில் துறவற வீறு கூறல் மாறுபாடாம். கற்பியலில் இல்லற விருப்பை விளைப்பதே முறையாக அதை வெறுத்து விலக்குந்துறவின் சிறப்பை விரிப்பது விர்தையன்றோ!

(2) துறவு கூறுவதே இச்சூத்திர நோக்கமாயின், இதில் அக்கருத்தோடு பொருத்தமற்ற பலசொற்றொடரை ஆசிரியர் அமைத்து வைத்தது வியப்பினும் வியப்பே. ‘பிறப்பறுக்கலுற்றார்க்கு (தம்) உடம்பும் மிகை’ ஆதலால் ‘மற்றுந் தொடர்ப்பாடு’ எதுவும் அவர்க்கு இடர்ப்பாடே யாமெனக் கூறவேண்டா. “சான்றோர் கூறவும் வேண்டாது தாமே எல்லாவற்றையும் பற்றறத்துறக்கும்’ தலைவனுந் தலைவியும், தம்மில் ஒருவரை ஒருவர் துறவாமல் தொடர்வதே “தவமறைந்தல்லவை செய்யும்” தவறாகும். அதனோடும் அமையாமல், துறவுபுகும் கிழவனும் கிழத்தியும் (உரிமைச்) சுற்றத்தோடு துவன்றித், தாம் துறவை விரும்பாமல் இல்லறஞ் செய் தலையே விரும்பிய மக்களோடு கூடிச் ‘சிறந்ததான துறக்கந்தரும் துறவினைப்பயில முயலல் படிற்றொழுக்க மாவதன்றித் தவத் துறவு ஆவதன்றே. துறக்கம் வேண்டித் துறப்பவரிருவர் (கிழவனுங் கிழத்தியும்) அதனை வேண்டாது இல்லறஞ்செய் தலையே விரும்புந் தம்மக்களோடுஞ் சுற்றத்தொடும் துவன்றியது எற்றுக்கோ? இவ்வாறு யாரொடுத் தொடர்பறுக்காமல் எனைவரொடுத் துவன்றித் துறவுபுகும் இருமுது கிழவரும் வேண்டிய வெல்லாம் ஒருங்கு விடுத்துத் “தீர்த்துறந்து தலைப் பட்டாராகார்; மயங்கிவலைப்பட்ட மற்றையவரே” யாகித், தவம் தாம் மேற்கெள்வ தவமாகத் ‘துறந்தார் போல் வஞ்சித்து வாழும் வன்கண்ண’ ராகி முடிவர்.

(3) இன்னும், பொறியெறிந்து ஐந்தன் புலத்தையட்டு ‘நோற்றலின் ஆற் றல் தலைப்படுதலே’ அறத்துறவாகும். அதற்கு மாறாக நுகர்ச்சி யெல்லாமுடிந் தமைந்து, பொறிகளோடு புலனுஞ்செத்து, உளத்தோடு உடலுந்தளர்ந்து, “கடை

யாயினார். நிற்குநிலை” எய்தித்தள்ளாடும் (குடுகுடு) கிழவனும் கிழவியும் தமக்கு இன்னும் பற்றுக்கோடா யுற்றாரெல்லாம் சுற்றத்தொடர் இறுகப்பற்றித் துறவுபுகுவது ‘தெண்ணீரடுபுற்கை’ உப்பு காடி முதலாய துப்புரவு ஏதுமில்லார் பெரு நோன்பு பேசுவதுபோல்வதன்றோ? இனையதொரு துறவின் திறத்தைத் தொல்காப்பியர் இங்குச் சுட்டிச் சூத்திரிக்கும் நோக்கத்தானென்றோ?

(4) இனி “இல்லறத்தின் பின்னர்க் கடைநாள் துறவுநிலை நின்று மெய்யுணர்ந்து வீடுபெறுப; இவ்வீடுபெற்றினை இன்றியமையாது இல்லறம் என்பது இதன் பயன்” எனும் நச்சினார்க்கினியர் முடிபு; சைனர் துணிபா? அன்றி ஆசிரியர் சிலருவக்கும் வைதிகமுடிபா?

இனி ‘துறவின்றித் துறக்கமில்லை; அதனால் வீடுபெற விரும்பும் இவ்வாழ்வாரெல்லார்க்கும் துறவு இன்றியமையாததே’ என்பது சமணர்மதம். சமணசமயமும் அதன் கொள்கைகளும் தமிழகத்தில் மூன்றாம் தமிழ்ச்சங்க முடிந்து சில நூற்றாண்டுகளுக்குப் பின்னரே பரவலாயின. சங்கத் தொகைநூல்கள் அனைத்துக்கும் சில நூற்றாண்டுகளாவது முந்தியது தொல்காப்பியம் என்பது தமிழர் யாவர்க்கும் ஒப்புமுடிவதாகும். தொல்காப்பியத்துக்குப் பிறகே அதை நூலாகக் கொண்டெழுந்த குறளில் இச்சமணக்கொள்கைக்கு மாறான தமிழர் பழுவழக்குமரபறவொழுக்கங்களே கூறப்பெறும். குறள் கூறும் அறம் தமிழர் மரபென்பதில் ஐயமில்லை. வீட்டின்பமாகிய ‘சிறப்பினுமறம்’; ‘அறனைப்பட்டதே யில்வாழ்க்கை’

அவ்வறத்தாற்றி னில்வாழ்க்கையே;

‘வீழ்நாள் படாஅமை நன்றாற்றின்’;

அஃது அவ்வில்வாழ்வார் பிறந்துமூலம் ‘வாழ்நாள் வழியடைத்து’ வீட்டின்பச்சிறப்பினும்.

இவ்வறனிழுக்கா இவ்வாழ்க்கை, வீடுபெற விரும்பித் துறவு மேற்கொண்டு நோற்பாரினோன்மையுடைத்து. ‘ஆற்றினொழுக்கி’ என்ற குறளில் தமிழர் மனையற மரபு மாட்சி வலியுறுத்தப்படுகின்றது. இத்தமிழ் மரபுக்கு முழுதுமாகாத துறவு துறக்கம் பெறுதற்கு இன்றியமையாத துணையெனப் பின்னெழுந்த சமணர் கொள்கையை அறப்பழைய தமிழர் மரபுகூறும் தொல்காப்பியர், தமிழர் மனையறம் கூறும் கற்பியலிறுதியில் தமிழரெல்லார்க்கும் வற்புறுத்த இச்சூத்திரம் செய்தாரென்பது எத்துணையியைபின்மையுடைத்து என்பதை எண்ணுவார்க்கு உண்மைதெளிவாகும். உலகத்தையும் மனையறவாழ்க்கையையும் வெறுக்குத் துறவு துறக்கம் பெறுதற்கின்றியமையாததென்னும் வேததாலக் கொள்கை ஆரியருக்குமுடன்பாடிவலை என்றே தெரிகிறது. எதுவாயினுமாகு. என்னையினும் இது, “அறனைப்பட்டித யில்வாழ்க்கை”; “அறத்தாற்றி னில்வாழ்க்கை யாற்றின் (துறவாகிய) புறத்தாற்றிற் போழும் பெறுவதென” என்று இவ்வாழ்த்து செம்மாக்குத் தமிழர் மரபாகாது. துறவு நிலை என்னாவல் வீடுபெற்றதே வொண்ணுதென்னும் பிரசமயத்தாரோ ஆன்மகனை அஃது அடைபவனாவான், பெண்ணாய்ப் பிரிப்போர்க்கு வீடுபெறென் னாதில்லையென்பார்.

சுண்டுக் கிழவனையும் கிழத்தியையும் ஒருங்கே வீடுபெறவைக்கும் கூட்டுத் துறவொன்று கூறுவது எந்த வேதத்துணியென்பதை நச்சினார்க்கினியர் விளக்காததால் அதை நாம் தெளியொணாது. இஃது எதுவாயினுமாகு. தமிழ்கூறு நல்லுலகில்வழங்கும் மரபும் தமிழ் நூல் இலக்கண இயல்புகளுமே கூறவந்த தொல்காப்பியர், தங்குறிக்கோனை மறந்து சுண்டுத் தமிழரின் அகப்புறப்பகுதிகளில் பிறபிற சமயக்கோட்பாடுகளையும் பேதுறப் பெயர்த்துப் பேசித் தலைதடுமாறினரெனக்கொள்ளப்போதிய காரணமில்லை. அதனால் இவ்வுரை ஆசிரியர் கருத்தாகாமை விளக்கமாம்.

(5) இறுதியாகக் கற்பின் திறம் மலர்ந்த இல்லற இலக்கணமும் இன்பக்கூறும் கூறி முடித்துக் கடைசியில் துறவில் கற்பியலை முடித்துக் காட்டினரெனற்கும் இங்கு இடமில்லை; இது கற்பியலின் கடைசிச் சூத்திரமுமன்று. வீடுபெறுகருதி, அதுதர வன்மையற்ற கற்பறத்தைக் களைந்துவிட்டுச் சிறந்த துறவு புகவைத்த பிறகு, மனையறமாண்புக்கே வேண்டப்படும் வாயில்களையும், பிரிந்து வினைமுடித்துத் தன் தலைவியின் புணர்ச்சிவேட்டுத் தாழாது விரைந்து மீளும் தலைவனின் மரபுகளையும் விளக்கி ஆசிரியர் மீண்டுஞ் சூத்திரிப்பது பொருந்துவதன்றே.

இனைய பிற பின்னைய. சூத்திரங்கள் பேசுவது கற்பாகிய இல்லற இலக்கணமேயாதலால், இவற்றின் முன்னிற்கும் ‘காமஞ்சான்ற’ எனும் இச்சூத்திரம் ‘வானுறையுந் தெய்வத்துள் வைக்கப்படும்’ இவ்வாழ்வாரின் ‘அன்புமறனு’ முடைய மனையறவீறு கூறுதலையே முதலும் அன்பினைத்திணைப் பகுதியாகிய கற்பியலில் மனையறச் சிறப்பே விளக்குவதில்பாகும். இதுவே ஆசிரியர் கருத்தாமென்பது, இச்சூத்திரச் சொற்றொடர்கள் நிரல்பட நின்றாங்குத் தரும் நேரிய செம்பொருளாலும் தெளிவாகும். அம்மெய்ப் பொருளை இங்கு இனிமேல் ஆராய்வோம்:—

காமஞ்சான்ற கடைக்கோட்கால—முன் அம்பல் அலர்க்கிடனாய், அவை தரும் அச்சத்தாலும் பிறபல செறுதுனிகளாலும் சிறவாததாய்ப் பிறகு உழுவலன் புடையாரிருவரும் மணந்து பொருள் படைத்து மாண்டமனையறம் நிகழ்த்திக் கற்புக் கனிந்த அற்புக்கூட்டம் வீறு பெற்றுச் சிறந்த நாளில், ஏமஞ்சான்ற மக்களொடு துவன்றி அறம்புரி சுற்றமொடு-தமக்கு எஞ்ஞான்றும் அன்புறம் இயற்கைத் துணையாகச் சிறந்த தம்மக்களொடும் தம்மனையறத்திற்கு உரிமைச் சுற்றமாகிய பணியாளர் முதலிய பிற செயற்கைத்துணைவர் பலரொடும், கிழவனும் கிழத்தியும் சிறந்தது பயிற்றல்-தம் உழுவலன்பால் மனைமாண்ட கற்புக் கூட்டத்திற்கு உரிமையுடையோரான தலைவனுந் தலைவியும் இவை பல்லாற்றாணும் மாண்புபெற்ற அன்பு கனிந்த கற்புக்கூட்டம் அனுசரித்தல், இறந்ததன்பயனே-முன் உளம் பொய்யாத உழுவலன்பால் தாமே தலைப்பட்டத் தழுவல் வருவாக் களவொழுக்குக் கடைகூட்டி வைத்த பயனன்றிப் பிறிதன்றும்.

சுருக்கச் சொல்லின், நல்வாழ்வெய்தி இவ்வாழ்வார் இருமுதுருவரும் பின் பலவாறு சிறந்த தம் கற்பின் கூட்டமாய் மனைமாட்சிப் பேறெய்தலெல்லாம்,

முன் அவர் பிறர் கூற உற்ற சுற்ற முணர்ந்து உளையச் சாலாத கனவொழுக்கில் அவ்விருவரின் செவ்விய அறனிறவா அன்பொடு புணர்ந்த தூய காமக் கூட்டம் தொடர்ந்து துறைமுற்றிக் கடைகூட்டிய பயனேயாம் என்பதே இச்சூத்திரப் பொருளாகும்.

இஃது, அகப்பகுதியில் இக்கற்பியலில் இச்சூத்திர நிலை, இதன் சொல் அமைதி, தொடர்தொறும் செறிந்த சொல்லாக்கக் குறிப்புக்கள், தமிழ் வழக்கு, தூல் துதலும் ஆசிரியர் குறிக்கோள் ஆகிய எல்லாவற்றோடும் இயையும் இயலழகும் பெற்று முரணெதுவுமின்றிக் கிடைக்கும் நேரிய பொருளாம்.

Jagannātha Paṇḍita

By

V. A. RAMASWAMI SASTRI
(Annamalai University)

(Continued from Page 95, Vol. V, No. 1)

APPAYYA DĪKṢITA vs. JAGANNĀTHA PAṆḌITA (Contd.)

After elucidating the nature and scope of the two *śabdavṛttis*—*abhidhā* and *lakṣaṇā*—on which the operation of *vyañjanā vṛtti* is based, Jagannātha discusses in his *Rasagaṅgādhara* the important subject of *alaṅkāra*. He first lays down the general principle underlying the conception of *alaṅkāra* in *kāvya*, namely, that it is conducive to the development of *ramaṇīyatva* (beauty) of a *kāvya* which has the *vyaṅgya* sense (*Rasa*) as its soul. Abhinavagupta also in his *Locana*¹ explains the term *alaṅkāra* in relation to *śabda* and *artha* as that which creates in them an extraordinary power by which they become the chief means (*vyañjakasūmagrī*) of the suggestion of *Rasa* or of any other sense. Thus an *alaṅkāra*, a figure of speech, ornaments the body of the *kāvya*, viz., *śabda* and *artha*, only when they so ornamented lead to the suggestion of *Rasa* (the soul of poetry); and if there be no element of suggestion it ceases to be an *alaṅkāra*, just as a golden diamond necklace is not called an ornament for a dead body in that it does not contribute any beauty to it.

1. Upamayā yadyapi vācyo rtho f laṅkriyate tathāpi tasya tadevālaṅkaraṇam yadvyaṅgyārthābhivyañjanasāmarthyādhānam iti. vastuto dhvanyātmaivālaṅkāryaḥ. Kaṭakakeyūrādibhirapi hi śarīrasamavāyibhiḥ cetana ātmaiva tattaccittavṛtti-viśeṣaucityasūcanātmatayā alaṅkriyate. tathāhi— acetanam śavaśarīram kuṇḍalā-dyupetamapi na bhāti; alaṅkāryasyābhāvāt . . . na ca dehasya kiñcidanaucityam iti vastuta ātmaivālaṅkāryaḥ; ahamalaṅkṛta ityabhimānāt. (Locana. N. S. Edition, pp. 74-75. 1911).

(a) UPAMĀLAŅKĀRA

Of all *anāṅkāras upamā* (simile) is the most important in that it is the source of many other *alaṅkāras*²; hence it is explained first in most of the *alaṅkāra* treatises.

Jagannātha defines it as—*sādrśyam sundaram vākyaṛthopaskāra-kam upamālaṅkṛtiḥ*—‘similarity which leads to the realisation of aesthetic pleasure by sahrdayas in that it beautifies the chief idea of the *kāvya* (in question).’ He explains it further as similarity becoming the chief source of pleasure only in *upamā* and not in other *alaṅkāras* like *ananvaya* where negation of a second similar object, etc., become the chief elements of literary beauty, though there is *upamā* (similarity) associated with them; so in *vyatireka* the negation, viz., the description of the inability of the *upamāna* to stand along with the *upameya*. In *rūpaka*, *apahnuti*, *pariṇāma*, *bhrāntimat*, *ullekha*, etc., based on the conception of identity between *upamāna* and *upameya* and in *drṣṭānta*, *prativastūpamā*, *dīpaka*, *tulyayogitā*, etc., based on the conception of difference between *upamāna* and *upameya*, the conception of *sādrśya* is only a means of that of *metaphor* and other figures of speech leading to *camatkāra* and as such, is not the chief source of literary charm. In the instance—‘*tvayi kopopamā bhāti cudhāṁśāviva pāvakaḥ*’ where the *upamāna*, viz., fire in the disc of moon is known as the poet’s invention, which leads finally to the realisation of *camatkāra* by sahrdayas. This kind of *upamā* called *kalpitopamā*, some hold, is a new *alaṅkāra*, since it emphasizes the fact that there is no well-known *upamāna* other than the *kavikalpita*; but Jagannātha contends that it is only a variety of *upamā*, since the reality (*satyatva*) of the *upamāna* and *upameya* is not emphasized in the definition of *upamā*. Not only this, *upamālaṅkāra* is explained in instances where *upamāna* and *upameya* do not in reality possess any *sādrśya* but are viewed on the basis of *abhedādhyavasāya* (intro-susception) as possessing common attributes or as identical.

2. Upamāikā śailūṣī saṁprāptā citrabhūmikābhedān |
rañjayati kāvyaraṅge nṛtyanti tadvidāṁ cetah ||
. . . evamuktānekālaṅkāravivartaniyam upamā—
tadidam citram viśvam
brahmajñānādivopamājñānāt |
jñātam bhavattītyādau
nirūpyate nikhilabhedasahitā sā ||.

[Citramīmāṁsā, p. 5, S. N. S. Ed. 1907.]

Jagannātha illustrates *upamālaṅkāra* by the verse—

‘Gurujanabhayamadvilokanāntaḥ
samudayadākulabhāvamāvahantyāḥ |
Daradaladaravindasundaram hā
hariṇadṛśo nayanam na viśmarāmi ||.

Oh! I cannot forget the moving beautiful lotus-eye of the deer-eyed damsel whose mind is agitated by the fear of elders’ (presence) and by (the longing to) look at me!,

According to Jagannātha this verse is a good instance of that kind of *upamālaṅkāra* leading to the suggestion of *vipralambha śṛṅgāra* (*Rasopaskārikopamā*). This *Rasa* has arisen in a fitting manner on the basis of (1) the *ensuant* (*anubhāva*) viz., recollection (*smaraṇa*, conveyed by the two words ‘*na*’ and ‘*viśmarāmi*’) which is mainly beautified by *upamā* contained in the compound—*daradaladaravindasundaram*; (2) the suggestion of *bhāvasandhi*—admixture of two *bhāvas*—*trāsa* (fear) and *atsukya* (anxiety) as given in the first half of the verse; and (3) the mental suffering (*santāpa*) suggested by the word ‘*hā*’.

(5) In his *Citramīmāṁsā*³ Appayya Dikṣita has given two definitions: (1) ‘*upamitikriyāniṣpattimsādrśyavarṇanam aduṣṭam avyāṅgyam upamālaṅkārah*, (2) *svaṇiṣedhāparyavasāyisādrśyavarṇanam tathā*—*Upamā* consists in a description of similarity between objects that stand fit for comparison, and it should be both devoid of any poetic demerits and different from the suggested sense; it is a description of a similarity which never culminates in its own negation.’ These two definitions Jagannātha sets aside as unsatisfactory, as there is no precision either in thought or in language. He asserts that the word ‘*aduṣṭa*’ does not serve any great purpose, though it suggests that sūtras like ‘*kālopasarjane ca tulyam*’ and statements like ‘*yathā gauḥ tathā gavayaḥ*’ containing the description of *sādrśya* are not instances of *upamā*. He finally drags the opponent to accept the great principle, viz., *camatkāra* which by itself (as shown above) is of great importance in estimating the place of figure of speech in poetry. Similarly the word ‘*sādrśya*’ in the definition is without purpose, since the definition may read satisfactory even without it—‘*upamitikriyāniṣpattimad-varṇanam upamā*’. Moreover, this definition (*avyāṅgyam*, etc.) as given by Appayya Dikṣita would be applicable only to instances of *upamā* being a *vācya alaṅkāra*, so that it does not include *pratīyamānopamā* within its scope. In the second definition the phrase

3. Vide *Citramīmāṁsā*, p. 17 and *Rasagaṅgādhara*, p. 161.

'*niṣedhāparyavasāyitvam*' is of no significance, in view of the fact that in the instances of *vyatireka* only—and not in *upamā*—the chief source of literary charm is the negation of similarity between the *upamāna* and the *upameya*, which is to be achieved by the description of *sādrśya*.

To supply the defect in the first definition, Nāgeśabhaṭṭa interprets, however ingeniously, the term *avyaṅgya* by adding to it the word *prādhānyena*,⁴ as different from the chief suggested sense, so that the *pratīyamānopamā* may also be included in the definable *alaṅkāra*, both *vācya*-and-*pratīyamānopamās*.

(6) In the classification of *luptopamā* Appayya Dīkṣita has stated⁵ that 'the varieties of *dharmaluptā* in the *vākya*, *saṁāsa* and *taddhita* are also represented by *reduplication*; in the example '*paṭupaṭuḥ devadattaḥ*', the reduplication is operated on the authority of the rule '*prakāre guṇavacanasya*' in the sense of 'similarity'. Jagannātha considers this view as both incorrect and unconvincing. First, he objects to call instances like '*paṭupaṭuḥ*' *dharmaluptā*, since it involves also the elision of *upamāvācakaśabda* and so it may be termed *vācaka-dharmaluptā*. And the term *dharmaluptā*, he contends, generally means that variety where there is elision of *dharma* (point of similarity) only, or, the separate mention of varieties with the elision of one, two or more would be of no significance. Secondly, the statement that the reduplication of the word *paṭu* conveys similarity goes against the authority of the *Mahābhāṣyakāra* and his celebrated commentator Kaiyaṭa, who have explained the sūtra—*prakāre guṇavacanasya*—as enjoining reduplication of a word denoting quality when similarity is to be indicated (*dyotyā*) only.

Here⁶ again Nāgeśabhaṭṭa skilfully vindicates Appayya Dīkṣita by characterising Jagannātha's criticism as baseless. He argues that the elision of *upamāvācaka* does not take place even when similarity is *dyotyā* by reduplication, as when it is conveyed by the *abhidhā* of a word i.e., *candra iva mukham* and *candrasuhrnmukham*. And it is an admitted fact that ideas are known alike from both the *śabdas*—*vācaka* and *dyotaka*. Hence in cases of *dyotaka śabdas* like *nipātas* and *reduplication* the question of keeping it under the head of *vācaka-luptā* does not arise.

4. Vide R. G. vyākhyā, p. 162.

5. & 6. Vide R. G., p. 170.

(7) In illustrating the *vācaka-luptopamā* Appayya Dīkṣita has cited⁷ the verse—

'Rūpayauvanalāvanyasprhaṇiyatarākṛtiḥ |
purato hariṇākṣiṇām eṣa puṣpāyudhiyati ||'

which Jagannātha has considered as *apaśabdaduṣṭa*—bad example containing ungrammatical expression. The word '*purataḥ*', he contends, means 'from the city' if the word is taken as the *puraśabda* with *taṣil* suffix; but this sense does not suit to the context. The form *puraḥ* as a substitute of the word *pūrva* in the sense 'in front of' may be correct; but the form *purataḥ* is incorrect in that sense. On the basis of this explanation, he has even set aside as *apaśabdas* many popular usages of this word in the sense of 'in front of'.

Nāgeśabhaṭṭa, an eminent authority on grammar, easily defends⁸ Appayya Dīkṣita and other writers as follows:—(1) First he says that some have accepted *purataḥ* as an independent *nipāta*. (2) Other suggestion is that from the word *pura* the suffix *atasuc* is enjoined on the strength of the sūtra—*dakṣiṇottarābhyām atasuc*—which enjoins the suffix even from other stems like *pura* in addition to those two, mentioned in the sūtra. (3) Nāgeśabhaṭṭa's own view is this:—The word is derived from the root *pur*—to go in front; it belongs to the tenth conjugation and when it has no *ṇic* suffix the *ka* suffix is operated and then the *tasi* suffix; hence the form *purataḥ*.

(8) While classifying *upamā* Appayya Dīkṣita has mentioned one variety called *uktārthopapādanaparā*⁹ (i.e.) that which substantiates an idea already described. He has illustrated this variety by the verse of Kālidāsa in his *Kumārasambhava*—

'Anantaratnaprabhavasya yasya
himam na saubhāgyavilopi jātam |
eko hi doṣo guṇasannipāte
nimajjatīndroḥ kiraṇeṣvivaṅkaḥ ||
"Whose countless wealth of natural gems is not
too deeply blemished by the cruel snow;
One fault for many virtues is forgot,
The moon's one stain for beams that endless flow." (Ryder).

7. Vide R. G., p. 171 and 172.

8. Vide R. G. vyākhyā, p. 172.

9. Vide R. G. p. 180 and 181.

where in the latter half it is stated that one defect will dwindle into insignificance in the midst of many good qualities; and to justify this, the poet has woven out the fine simile—*indoḥ kiraṇeṣvivāṅkaḥ*—just like the dark spot on the moon, Jagannātha first points out that Appayya Dikṣita's explanation and illustration of this variety of upamā are not exhaustive, since the instance—

'Nayane śīśirikaṛotu me
śaradindupratimam mukham tava |

May your face like the autumnal moon cool my eyes !'

does not exactly come under the variety described above. He argues that the main theme (*vācyavastu*) described in the verse—*anantarātnaprabhavasya*—that the snow in the Himālaya mountain does not at all diminish his beauty is not substantiated by the simile—*indoḥ kiraṇeṣvivāṅkaḥ*—but the idea in the latter half, viz., that the flaw of a person or thing will not appear as a flaw in the midst of many good qualities, substantiating the main idea, is substantiated by the part—*indoḥ kiraṇeṣvivāṅkaḥ*. In the second instance, however, the simile substantiates the main *vastu*. Hence he suggests another variety—*vācyavastūpaskārikā*—to include this instance, in case this main division of upamā is to be followed.

But Nāgēśabhaṭṭa explains away¹⁰ this difficulty by interpreting the phrase—*uktārthopapādanparā*—as applying to both *vācyavastu* and any other idea described.

Jagannātha however contends that the verse—*anantarātnaprabhavasya*, etc.—is an instance of a separate alaṅkāra *udāharāṇa*. He contends that the general statement that a flaw among many good qualities does not seem to be a flaw, cannot be complete unless it is exemplified in a particular case which is however supplied by the part—*indoḥ kiraṇeṣvivāṅkaḥ*. Hence it is not the citation of an upamāna. The particular is not to be accepted as a different entity from the general. So here there is no idea of difference to make out a clear case of upamā.

Nāgēśabhaṭṭa, however, on the authority of other earlier *Ālaṅkārikas*, explains upamā in the instance—*anantarātnaprabhavasya*. He says that the idea of difference (between upamāna and upameya) is to be understood by taking the different properties, one general and one particular, as it is generally explained in the instance of *abhinnadharmiko-*

10. Vide R. G. vyākhyā., p. 180 and 181.

pamā by the two determining adjuncts of *upamānatā* and *upameyatā*. Thus he goes even to the length of saying that *udāharāṇa* is not a separate alaṅkāra.

(9) While giving the varieties of two main divisions of upamā—*pūrṇā* and *luptā*—Appayya Dikṣita has given¹¹ seven kinds under *pūrṇā* on the basis of different aspects of *sādhāraṇadharmā* (beginning with *sādhāraṇadharmānugāmītā*) and he adds that these seven varieties cannot be explained under *luptā*, in view of the fact that the *sādhāraṇadharmā* is to be *anugāmin* in all cases of *luptā*. Jagannātha, however, fancies that even without the *anugāmidharma*, varieties of *luptā* are found as in the *pūrṇā* on the basis of *bimbapratibimbabhāva*. In the instance—

'Malaya iva jagati pāṇḍuḥ
valmika ivādhidharāṇi dhṛtarāṣṭraḥ |

like the Malaya (shines) Pāṇḍu in the world and like ant-hill (is) Dhṛtarāṣṭra on earth.'

The common attributes between Malaya Mountain and Pāṇḍu and between the ant-hill and Dhṛtarāṣṭra are not known; but on the strength of *ārthabimbapratibimbabhāva* (i.e.) *bimbapratibimbabhāva*¹² based on *arthāpatti* (presumption) the ideas—the sandal-wood and the Pāṇḍavas in one instance, and the serpent and the Kauravas in the other are known as identical. And in addition to the traditional classification of *luptopamā* into seven main varieties (which are further classified into 19 or 26) Jagannātha gives it like *rūpaka* eight separate varieties with illustrations—*kevalaniravayavā*, *mālārūpaniravayavā*, *saṁstāvastuviśayāsāvayavā*, *ekadeśavivartisāvayavā*, *kevalaśliṣṭaparamparitā*, *mālārūpaśliṣṭaparamparitā*, *kevalasuddhaparamparitā* and *mālārūpasuddhaparamparitā*.

(b) UPAMEYOPAMĀLAṅKĀRA

Next to upamā Jagannātha takes up *upameyopamā*¹³ for full elucidation. He considers that it is not a new alaṅkāra but only a variety

11. Vide R. G. 181 and C. M., p. 18.

12. *Bimbapratibimbabhāva* is explained thus—'*vastuto bhinnayoḥ dharmayoḥ parasparasādhāryādabhinnatayā adhyavasitayoḥ dvirūpādānam bimbapratibimbabhāvaḥ*'—*bimbapratibimbabhāva* consists in the separate description of two properties which are in reality different but superimposed as identical on the basis of mutual similarity.

13. Vide R. G., p. 196.

of *upamā*. He however defines it—‘*tr̥tīyasadr̥śavyavacchedabuddhiphalakavarṇanaviṣayābhūtam parasparam upamānopameyabhāvamāpanayoh arthayoh sādṛśyam sundaram upameyopamā*—*upameyopamā* is similarity of two objects standing in the mutual relation of *upamāna* and *upameya*, and this similarity is the main theme of a description resulting in the negation of the third similar object and therefore becomes so beautiful as it would naturally lead a *sahṛdaya* to the realisation of the aesthetic pleasure.’ He illustrates it by the verse—

‘Kaumudīva bhavati vibhāti me
kātarākṣi! bhavati kaumudī |
Ambujena tulitam vilocanam
locanena ca tavāmbujam samam ||

Oh fair-eyed! you shine like moonlight and moonlight like yourself.
Your eye resembles the lotus flower which also resembles your eye.’

In this instance both moonlight and the damsel are described as standing on mutual relation as both *upamāna* and *upameya*; so also the lotus-flower and the damsel’s eye. When one is compared to the other, it goes without saying that the other object resembles the first. The specific effort of comparison, therefore, results chiefly in the negation of the third similar object. Here the common attribute is one and the same thing, viz., *shining*, though the objects described are mutually changed in the process of comparison. In the *Parasparopamā*—

‘*taṭidiva tanvī bhavati bhavativeyam taḍillatā gaurī*

you are as tender as lightning and the creeper-like lightning is as white as yourself,’ both lightning and damsel are described as both *upamāna* and *upameya*, but the common attributes in the two descriptions—tenderness and white colour—are different. This mutual comparison on the basis of different common attributes in the *parasparopamā* is described as *not aiming at the negation of the third similar object*. The *upameyopamā*, however consists in the description of two similar objects, both *upamānas* and *upameyas* on the basis of one common attribute and therefore effects the negation of the third similar object as the chief source of pleasure.

10. Appayya Dikṣita, in his *Citramīmāṃsā*, defines *upameyopamā* thus¹⁴:—

‘anyonyenopamā bodhyā vyaktyā vṛttyantareṇa vā |
ekadharmāśrayā yā syāt sopameyopamā matā ||’

14. Vide R.G. pp. 198—200.

Upameyopamā consists (in the description of) mutual similarity (subsisting between *upamāna* and *upameya*) which is known either by suggestion or by any other significative power of *śabda* on the basis of one common attribute. He explains it further that this *upameyopamā* is to be distinguished from the *Ubhayaviśrāntopamā* thus; in the latter similarity (*upamā*) is to be known from words by *abhidhā* and the relation, *pratiyogitva* or *pratiyogyānuyogibhāva* (i.e.) similarity having the *upameya* as *anuyogin* and *upamāna* as *pratiyogin*, is to be conveyed by words by *vyañjanā vṛtti*, so that both *vṛttis* operate depending upon each other, while in the former both the ideas—similarity and its relation—are known from words either by *abhidhā* or by *vyañjanā* independently. And the phrase—*ekadharmāśrayā*—emphasizes the fact that in the *parasparopamā* the common attributes, while two objects mutually change their *upamānopameyabhāva*, become different and do not therefore aim at the negation of the third similar object; but in the *upameyopamā* it is one and the same and so it results in the *tr̥tīyasadr̥śavyavaccheda*, which is considered by all *Ālaṅkārikas* as the chief source of pleasure in this *alaṅkāra*.

Even this explanation of *upameyopamā* Jagannātha finds fault with and asserts that all adjuncts in the definition—*anyonyena*, *vyaktyā vṛttyantareṇa vā*, *ekadharmāśrayā*—do not exhaust the scope of *upameyopamā*. He says that *ekadharmāśrayatva* may be explained in the instance—

‘Aham latāyāssadr̥śityakharvarm
gaurāṅgi! garvam na kadāpi yāyāh |
Gaveṣaṇenālamihāpareṣām
eṣāpi tulyā tava tāvadasti ||.

Oh fair-limbed! do not ever be puffed up with vanity that you resemble a creeper; enough with the search (of similar objects); among other objects this (creeper) also resembles you.’

Here *tānava* (tenderness) is the common attribute; yet this verse is not accepted as an instance of *upameyopamā* as it does not negate the third similar object though it emphasizes the fact that there are many objects similar to the damsel and the creeper, the search of them, however, being of no avail. It is not, however, possible to assert that both the ideas—*upamā* (similarity) and its relation, *anyonyapratiyogitva*, are known from words by one *śabdavṛtti* (i.e.) *abhidhā* or *vyañjanā*, for, in the well-known instance of *upameyopamā*—‘*khamiva jalam jalamiva kham*—like sky (is) water and like water (is) sky’, the idea of similarity is to be associated with both *kha* (sky) and *jala* (water) and the relation, *pratiyogitva*, is to be

known through *samsargamaryādā* and not from a word by a *vṛtti* it is accepted by all *śāstrakāras* that the relation of *padārthas* (senses of words) conveyed by *śabda vṛttis* is not conveyed by them by a *vṛtti—vṛttivedyānām padārthānām samsargah vṛttyavedya ityabhyupagamāt* (R. G., p. 200).

Nāgesabhaṭṭa, however, tries¹⁵ to vindicate Appayya Dikṣita by his definition in his usual way. He says that by *vyaktyā vṛttyantareṇa vā bodhyā*, Appayya Dikṣita does not mean that *upamā* (similarity) is to be conveyed by a word or words by one *vṛtti only*; he, however, means that it is not to be conveyed by more than one *vṛtti*, so that the relation *pratiyogitva* when known through *samsargamaryādā* is not *vṛttivedya*. Or it may be said that *upamā* and its relation may be known by a *śabda-vṛtti* and by some other means also—*yathākathañcit bhāsamānatvam*. This is only an ingenious device of a later commentator to defend the text from the charge of absurdity.

Abhiṣeka-Nāṭaka

(An English Translation with Notes.)

EDITOR : K. R. PISHAROTI.

15. Vide R. G. vyākhyā, p. 200.

Abhiseka-Nāṭaka

ACT VI.

[Then enter three Vidyādhara¹s]

All. Ha, here we are, here we are.

All. Here we are quickly come from the summit of the Himalayas :

Third. Our minds intent on seeing the duel-

Second of Rāma who stands ready to kill Rāvaṇa,

First. Rāma who is the glorious shining big banner of the *Ikṣvāku* race.² (1)

First. Citraratha ! These, the *Devas*, *Devarṣis*, *Sidhās*, and *Vidyādhara³s*, stand crowded in the skies ! Therefore we shall avoid those hosts, and, standing in a quiet corner, observe the duel between Rāma and Rāvaṇa.³

Both. So be it.

[Doing so]

First. Ah ! Very fearful, indeed, is the field of battle ! Here indeed :⁴

1. As the Trivandrum edition will have it, all the closing incidents constitute a single act, of which the fight and death of Rāvaṇa form the *Viṣkambhaka*. One of the manuscripts utilised for the edition reads *The end of Act VI* in place of *Viṣkambhaka* and the main scene, according to the printed edition, is read as Act VII. This is the reading found in Trippunithura Samskrit College Manuscript ; and this is quite in keeping with the traditional view of the Cākyārs that the Rāmāyaṇa story is in twenty-one acts. See note I, Act I ; and consistently with this, this act has its own name. In view of these we style this *Viṣkambhaka* as Act VI.

2. Notice as before here is one verse recited by three different characters, which is a later day feature in Samskrit Dramas ; and this forms an argument against the assumed antiquity of this series of dramas.

3. This would suggest that the *Vidyādhara³s* are standing on a higher level and are more or less away from the scene of the fight.

4. Notice the interesting way in which the fight is described. The three *Vidyādhara³s* describe the fight and fall of Rāvaṇa. Thus the representation of the fight is avoided. If the same hand which wrote *Pratimānāṭaka*, or *Bāla-carita* or *Urubhaṅga* wrote this drama, it is passing strange that the poet should

Like an ocean shines the battle field, heaving under the rays of the moon of the sword of the noble Rāghava, for it is filled with the waters of the bodies of Rākṣasas, the waves of noble monkeys, and the sharks of swords. (2)

Second. It is even so :

Here in the field of battle are quickly felled down hosts of Rākṣasa heroes like mountains cloven by the thunderbolt, some with their heads broken by rocks and trees, some killed by raining fists, some cut to pieces by the angry Vānara leaders, some strangled (and hence lying) with eyes wide open and some with their lips bitten and fearful. (3)

Third. See these also, my friends !

With wide open mouths do these Rākṣasas rush in from all sides to kill in battle the hosts of Vānaras—Rākṣasas, carrying sharp swords, like dark lowering clouds, their eyes flushed red with anger and their hideous mouths wide open. (4)

First. Ah, indeed⁵—

Arrows are showered upon the Vānaras by the Rākṣasas :

Second. Mountains are thrown upon the Rākṣasas by the Vānaras :

Third. With the striking with fists and with knees

All. Wondrously terrible runs the conflict !

First. See you Rāvaṇa also !

Weilding his Śakti made of gold and driving his chariot, Rāvaṇa, with his jaws set terribly, is angry, like Rāhu, on seeing the full moon of Rāma-at the rising mount. (6)

Second. See you Rāma also !

His left hand holding the bow and his right hand revolving an arrow, standing on the ground and observing his enemy

not have followed the same method. Evidently he is moved by the stage convention which prohibits the depiction of fight and death on the stage. And in this we have again an argument in favour of a late date for this drama, which cuts at the very root of the unity of authorship of the thirteen plays ascribed to Bhāsa.

5. As before, here also different speakers finish the sentence.

seated in the chariot, like the mountain lord Krauñca observing Kārtikeya ! (7)

Third. Here indeed :

By Rāvaṇa is thrown the Śakti similar unto the God of Death and by Rama smiling is it broken into twain. (8)

First.

Seeing his Śakti felled to the ground and with his eyes open wide with anger, Rāvaṇa rains a shower of arrows on Rāma. (9)

Second. Ha ! The glory of Rāma !

The shower of arrows rained on Rāma by the cloud of Rāvaṇa shines like rain on a bull. (10)

Third. He is indeed !

Raising aloft his fearful bow of gold and shaking off the terrible cluster of arrows, he is in the midst of the fray quickly rushing on foot at Rāvaṇa seated in the chariot, like a lion at the elephant. (11)

All. Ha, the whole place is bathed in effulgence ! What can this be ?

First. Ah ! Finding the combat unequal and hence afraid, Indra is sending the chariot driven by Mātali !⁶

Second. Seeing Mātali waiting near, Rāma ascends the chariot.

Third. He is indeed :

Seated in that chariot, the seat of Indra's victory and the source of destruction of the children of Diti, Rāma, the destroyer of Rākṣasas, shines like Śiva fighting against Tripurās. (12)

First. Ah ! The fight is waxing fierce !

Looking at this combat shrouded in a cloud of sharp arrows, between the man and the demon, the Vānara heroes

6. The purpose served by the introduction of Mātali is not very clear. It has no dramatic value, because it is not visualised by the audience. This introduction seems to emphasise the greatness of Rāvaṇa, which indirectly glorifies the greatness of Rama. Or, it may be that divine aid is sent to suggest that the destruction of Rāvaṇa is divinely ordained, for which Rāma is but the chosen instrument. Compare the last verse of the Act.

and *Rakṣasa* leaders have stopped their exchange of weapons. (13)

Second. Ah! Wonderful!

Moved this way and that by chariot protectors, these two, seated in the chariot and exchanging shower of arrows, appear like two Suns wandering in the sky and burning the earth with their rays. (14)

Third. See, friends, *Rāvaṇa* also!

Striking down the horses with the terribly speeding arrows, felling down the banner by sheer force, raining a shower of arrows and roaring and smiling and terrifying the lord of men! (15)

First. Here is *Rāma*:

Shrinking his body to the size of a dwarf, being thus set on in his chariot, he heaved a sigh; looking at the sharp arrow, his eyes become red and glow like the midday Sun; and helped by *Mātali* himself, the heroic king has sent the best of all weapons, the unrivalled *Brahmāstra*. (16)

Second. And that *Astra*,

discharged with all the force of *Rāma*'s arm and fierce like the blazing midday Sun, has killed in battle the best of *Rākṣasas* and has returned quickly back to *Rāma*! (17)

All. Ha, ha, *Rāvaṇa* is killed.

First.

Seeing *Rāvaṇa* killed, a rain of flowers is falling down and the divine trumpets are sounding! (18)

Second. Well, the divine purpose is accomplished.

First. Well, come along; let us also go and congratulate the all beloved *Rāma*.

Both. So be it.

[Exeunt all]
*Viṣkambhaka*⁷
[End of Act VI]

7. See note i. The whole act, it needs scarcely be mentioned, would be impressive on the stage only in case the actors can act very well. Otherwise, it will fall very flat. One could not resist the temptation that the whole drama is written or adapted for the Kerala theatre.

[ACT VII¹]

[Then enter *Rama*]

Rāma.

Piercing now *Rāvaṇa* with the force of my arrows, I have quickly killed him; I have now made the virtuous *Vibhīṣana* the king of *Laṅka*; with my hands thus have I crossed over the ocean of my vow filled with deeds of strength and now in company with my friends, I enter *Laṅka* to console *Sita*.² (1)

[Entering]

Lakṣmaṇa. Hail Victory, my sire! Sire, here comes she unto the presence of my sire.

Rāma. Dear *Lakṣmaṇa*!³

If now I were to see *Vaidehi* who was forced away from me to dwell in the abode of enemies, my sorrow will, indeed, overcome my good sense. (2)

Lakṣmaṇa. As my Lord orders. (Exit).

[Entering]

Vibhīṣana. Victory, my lord!

Your wedded wife, now deprived of her sorrows through the valour of your arms, approaches you, like *Lakṣmī* of yore fallen from the *Daityas*' home, through your grace! (3)

1. According to the printed text, this constitutes the main scene of Act VI. See note i Act VI.

2. Since there is only one character on the stage, this speech is a soliloquy. In this sense alone can the following speech be justified. See note following.

3. This is an interesting verse in as much as apparently it is against the tenor of the speech preceding; and one may even incline to the view that there is some lacunae in the text. It could be justified only by a process of interpretation. *Rāma* seems to say that the sight of *Sita* will force him to give vent to his pent up feelings which will entail his doing something which may go against good sense. He must first prove to the world that *Sita* is pure in thought and deed, before he can accept her as his queen. But if she comes before she proves her innocence, he could not withstand her and that means the world will condemn him and her. Hence the speech, which *Lakṣmaṇa* correctly understands. The speech means that in that state he does not want to see *Sita*. Thus while here *Rāma* confesses his weakness, in his speech to *Vibhīṣana*, he takes a different attitude, quite befitting a public pronouncement. See note following.

Rāma. Vibhīṣaṇa! Even there let her wait, who has lived long a captive in the hands of the lord of *Rakṣasas* and has thus become a stain on the *Ikṣvākū* race. For the good name of my father, King Dasaratha, let her not, O king of Laṅka, come and see me.⁴ Further:

O king, he alone is a friend, who prevents one from plunging into improper things; otherwise, he is an enemy. (4)

Vibhīṣaṇa. Be pleased, my Lord!

Rāma. Sir, be pleased not to press me any further.

[Entering]

Lakṣmaṇa. Victory, Sire! Hearing of your opinion, she awaits your permission to enter fire.⁵

Rāma. Lakṣmaṇa, do as that virtuous woman⁶ desires.

Lakṣmaṇa. As my sire orders. (Walking about) Alas, what a pity!

Knowing the purity of the queen and hearing of the resolve of my sire, my mind is in a flux, being placed between a sense of duty and love.⁷

Who is there? (5)

[Entering]

Hanūmān. Hail, prince!

Lakṣmaṇa. Hanūmān, have you the power?⁸ My sire orders thus.

4. Rāma makes it clear that Sita should not see him then, for she is under a cloud. And so long as she is under the cloud she is a stain on the fair name of his family. One has necessarily to concede that Rāma is unnecessarily cruel to Sita, though it must be admitted it is in the higher interests of *Dharma*, whose great custodian he is.

5. The news that Lakṣmaṇa conveyed to her, regarding the attitude of Rāma was like a thunderbolt to her and she naturally resolves upon the only course left open to her, namely to enter the flames. How she took the message is made clear in verse 6 following.

6. The term *pativṛtā* in this context is particularly significant, for it conveys the idea that if Rāma was cruel, it was not because he doubted her single hearted devotion, but it was only to convince the world.

7. This is an interesting speech, in which we have the key-note of Lakṣmaṇa's character revealed. Implicit obedience to his elder, even when it contravenes personal convictions and traditional *Dharma*, constitutes the guiding note of his character.

Hanūmān. What does my prince think?

Lakṣmaṇa. It is no use my thinking. Or why, we have only to carry out the wishes of the sire.⁹ Let us go.

Hanūmān. As my prince desires.

[Exeunt both]

[Entering]

Lakṣmaṇa. Be pleased my sire! Sire, a wonder, a wonder!¹⁰ The worthy queen:

Beautiful like a full blown lotus wreath, giving up all hopes of life and finding all your work useless, quickly entered the flames, like a swan the forest of lotus. (6)

Rāma. Wonderful, Wonderful! Prevent, Lakṣmaṇa, prevent.

Lakṣmaṇa. As my sire orders. (Going out and entering).

Victory, my sire!¹¹

Like a golden wreath, she shines all the brighter for entering the fire. Unchanged she is in spite of having entered the fire.

Rāma. (Wondering) What's it, what's it?

Lakṣmaṇa. Ah! Wonderful!

[Entering]

Sugrīva. Hail, my lord!

Who can indeed be the bowing figure who carries the daughter of Janaka alive from the blazing fire?

8. As the text stands, the sentence is elliptical. Possibly the idea is that Hanūmān must command all his strength to listen to the message of Rāma.

9. See note 7.

10. The idea of *wonder* is not clear. Sita announced her intention to enter the flames and Rāma gave her permission to do so. If then she does so, there is no scope for wonder, unless it is presumed that the brothers did not take her at her word. This assumption will be doing Sita but meagre justice. The writer inclines to the view that there must be a difference in reading. Both in this as well as in Rāma's speech following, we might better substitute *atyāhitaṁ* instead of *āścaryam*; and such a reading will sit well with the statement of Rāma that it should be prevented.

11. We accept the reading in the Trippunithura Ms. and delete Hanūmān.

Lakṣmaṇa. Ha! Here is approaching the divine Agni, leading the worthy queen before!

Rāma. Ha! Here is the benign god Agni! Let us approach Him.

[All approach him]

[Then enter Agni leading Sītā]¹²

Agni. Here is the benign Lord Nārāyaṇa! Hail Lord!

Rāma. Benign lord, I bow to you!

Agni. Lord of *Devas*, you should not bow down to me!

Receive her, O best of men, the lady who is worshipped by all the worlds, the pure and spotless and sinless daughter of Janaka.

(9)

Further:

Know the daughter of Janaka is Goddess Lakṣmi. She has followed you in human guise.

(10)

Rāma. Blessed am I!

O Smoke-bannered God, I know that Valdehi is pure, but thus have I done to satisfy the world.

(11)

[Divine Gandharvas sing in the postscenium]

Obeisance to Lord Nārāyaṇa, the Cause of all the three worlds!

O Lord of the Universe! Brahma is thy heart; Rudra, thy anger; the Sun and the Moon, thy eyes; and Sarasvatī, thy tongue, O Lord of *Devas*! All the three worlds with Brahma and Indra and Maruts are created by thee! Know, Lord, Sita is Lakṣmi who delights in her abode of waters and thou art Viṣṇu himself. Receive.

(12)

[Again in the postscenium others sing]

This earth, when it went down into the waters, was raised by you in the garb of Boar; by thee was the whole universe conquered by three steps, O lord of *Devas*! The *Devas* are as well pleased with the destruction of Rāvaṇa as thou thyself art with Queen Sita by thy side!

12. Since *agnipraveśa* takes place behind the scenes, Agni has to appear on the stage. The whole scene following is intended to sing the glory of Rāma, as an incarnation of *Mahāviṣṇu*. It must, however, be pointed out that it has but little dramatic interest.

Agni. Noble sir, these, *Devarṣis*, *Sidhās*, *Gandharvas*, *Vidyādharas* and *Apsaras* glorify thee with thy greatness!

Rāma. Blessed am I.

Agni. Noble sir, this way, this way for your coronation!

Rāma. As my Lord orders.

[Exeunt]

[In the postscenium]

Hail! Lord! Hail! Protector! Hail! Noble sir!
Hail! Your Majesty! Hail! Destroyer of Ravana! Hail!
Long life to thee!

Vibhīṣaṇa. Here, here is His Majesty!

Having in battle crossed over the ocean of his vow, having recovered his innocent wife and being now crowned by all the Gods, his Majesty shines like the moon in clear sky.

Lakṣmaṇa. Ha! The *Vaiṣṇavite* splendour of my sire!

Surrounded by Yama, Varuṇa, Kubera, Vāsava, and other gods, he shines after the coronation, as desired by Daśaratha, like the God of *Devas*, the conqueror of *Vṛtra*.

[Then enter the crowned Rāma accompanied by Sita]

Rāma. Dear Lakṣmaṇa!

That revered sire who to please my mother broke off my coronation though all preparations were made and I was seated on the throne, he himself, though long dead, it was gods' will, did crown me in person gladly!

Agni. Noble sir! Here are your subjects, headed by Bharata, and Śatrughna, come to welcome you, as desired by Mahendra.

Rāma. Benign Lord! Content am I.

Agni. Here are Mahendra and other *devas* singing thy greatness!

Rāma. Blessed am I.

Agni. Noble sir! What else dost thou desire?

Rama. If my benign Lord is pleased, what else should I desire?

[Epilogue]

May the earth be freed of sins! May the enemies all perish!
May Rajasimha rule over this our whole earth!

End of Act VII.

End of *Abhisekanāṭaka*.

Preliminary synthetic experiments in the Cytisine group

PART II.

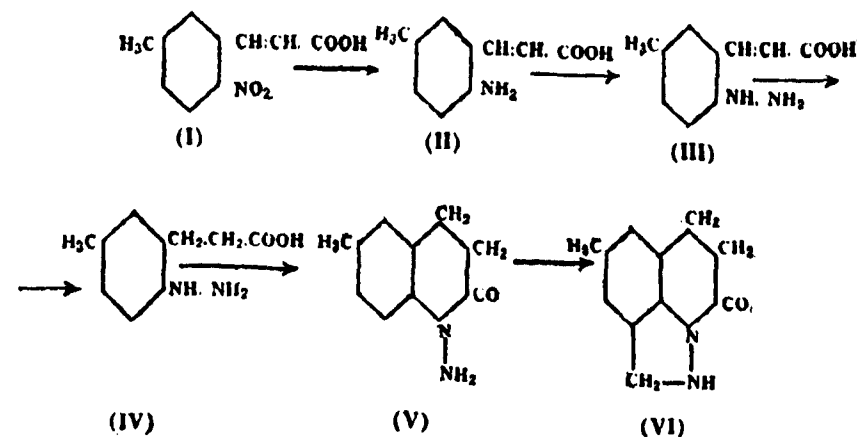
Further experiments on the synthesis of Ewin's structure for Cytisine

By

S. N. CHAKRAVARTI AND P. L. NARASIMHA RAO

(Annamalai University)

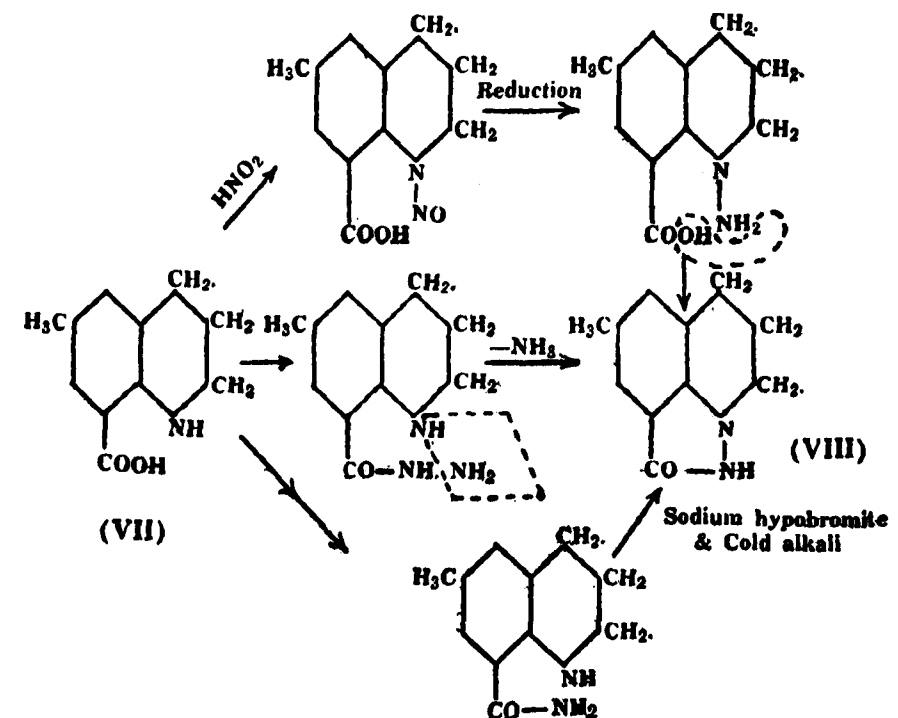
In this paper, we record the results of our attempts to realise some of the schemes outlined in Part I (Chakravarti and Venkatasubban, *J. Annamalai University*, 1933, 11, 227). The first scheme that was tried is indicated below :—



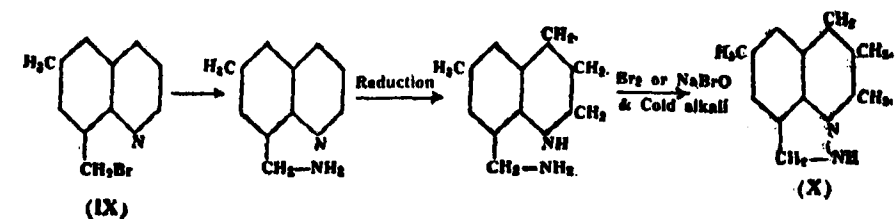
6-Nitro-3-methylcinnamic acid (I) was prepared from 6-nitro-3-methylbenzaldehyde, which in its turn was obtained by a modification of the method of Monnet and Cartier (D. R. P. 113604. Compare F. Mayer, Ber., 1914, 47, 406), and reduced to 6-amino-3-methyl-cinnamic acid (II) m.p. 195° by means of ferrous sulphate and ammonia. The latter was then diazotized and reduced to 3-methyl-6-hydrazino-cinnamic acid (III), and finally (III) was converted into 6-methyl-dihydro-N-aminocarbostyryl (V) m.p. 117°, through (IV) essentially under conditions described by Emil Fischer for the preparation of 1-aminodihydro-carbostyryl (Annalen 1883, 221, 226). The final conversion of (V) into

(VI) has not yet been accomplished, as we have, so far, not been able to obtain (V) in sufficient quantities.

The next projected line of synthesis was by the way of 6-methyl-1:2:3:4-tetrahydroquinoline-8-carboxylic acid (VII). Attempts to prepare 6-methylquinoline-8-carboxylic acid by the oxidation of 6:8-dimethylquinoline met with only partial success, as yields were invariably low. The acid (VII) was eventually prepared by the method previously described (Chakravarti and Venkatasubban, *Loc. cit.* 237) and attempts are being made to convert the acid to (VIII) through the following alternative routes:—



Finally, we directed attention to the synthesis of 6-methyl-8-bromo-methylquinoline (IX), which we hoped to be able to convert into (X) in the following manner :—

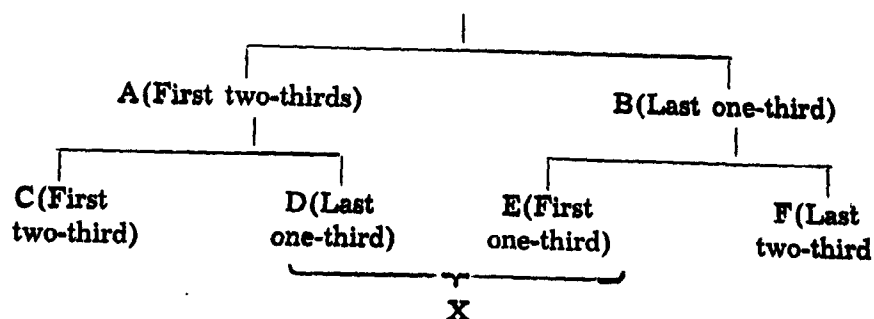


Preliminary attempts to prepare (IX), under conditions similar to those used for the preparation of 8-brom-methyl-quinoline (D. R. P. 98272; Ber., 1906, 39, 2709; compare also J. C. S., 1935, 1421) gave inconsistent results, but this, as well as the synthesis of antimalarials from (IX) is reserved for further studies by one of us (S. N. C.).

We have decided to publish this work in this incomplete state as one of us (P. L. N. R.) is unable to continue this work.

EXPERIMENTAL

6-Nitro-3-methylcinnamic acid (I). m-Tolualdehyde was obtained by the oxidation of m-xylene with chromyl chloride (Bornemann, Ber., 1884, 17, 1464) and nitrated with a mixture of concentrated sulphuric and nitric acids below 0° (Monnet and Cartier, D. R. P. 21683, 113604). The mixture of the nitroaldehydes was isolated in the usual manner and distilled under reduced pressure. The product distilling over between 135-145/2 mm. was collected in two fractions, first two-thirds (A) and the last one-third (B). Each of these fractions were again fractionated in the manner shown below:—



None of the fractions crystallised readily on being cooled to 0° . The fractions C, X (the mixture of D and E), and F were then separately converted into p-toluidide in the usual manner. Each of the fractions first gave a crystalline toluidide, which on purification, melted at 89° , and the mother liquors from the fraction C, on standing gave a toluidide which on purification melted at 76° , and which proved to be the toluidide of 2-Nitro-3-methyl-benzaldehyde (Found N = 11.2%. $C_{15}H_{14}O_2N_2$ requires N = 11.0%).

Fraction F gave mainly the p-toluidide m.p. 89° . The latter on hydrolysis gave 6-Nitro-3-methyl-benzaldehyde, m.p. 44° , which was converted into 6-Nitro-3-methylcinnamic acid, m.p. 224° by the method previously described (Chakravarti and Venkatasubban, Loc. cit.).

6-Amino-3-methyl-cinnamic acid (II) A solution of the nitro-cinnamic acid (1.6 gm.) in dilute ammonia was added to a solution of ferrous sulphate (16 gm.) in water (30 c.c.), which had been heated to 90° . Concentrated ammonia (6 c.c.) was then gradually added to the mixture under vigorous stirring. After all the ammonia had been added, the contents of the flask were heated for a further $\frac{1}{4}$ hour, and filtered. The filtrate was concentrated to one-third its original volume and carefully acidified with concentrated hydrochloric acid, when the amino acid separated as a yellow powder in an yield of over 90%. On recrystallisation from alcohol it was obtained in prismatic needles, m.p. 195° (Found N = 8.1. $C_{10}H_{11}O_2N$ requires N = 7.9%).

The amino acid is readily soluble in alcohol and acetone sparingly soluble in hot water, benzene, and ether, and almost insoluble in petroleum ether.

6-methyl-dihydro-N-aminocarbostyryl (V). The amino acid (10 gm.) was dissolved in dilute hydrochloric acid (14.6 c.c. of 25% in 70 c.c. water), and the solution allowed to cool when the hydrochloride separated in a crystalline form, which was diazotized by addition of the required amount of sodium nitrite. A clear diazo-solution results, from which the diazo-salt soon begins to separate. The solution was treated at once with a cooled solution of sodium sulphite ($2\frac{1}{2}$ mols. 17.9 gm.), and then with hydrochloric acid (1 mol., 8.5 c.c. of 25% HCl) and excess of Zinc dust. In a few minutes, the dark red colour of the solution changed to yellow, when the liquid was filtered from excess of Zinc dust, and the filtrate immediately reduced with sodium amalgam. When the reduction was over, the aqueous solution was separated, treated with large excess of concentrated hydrochloric acid, and heated on the water-bath till the liquid no longer reduced Fehling solution. The solution was then saturated with sodium hydroxide, when crude 6-methyl-dihydro-N-amino-carbostyryl m.p. $96-102^{\circ}$ (contaminated with a little 6-methyl-dihydrocarbostyryl, m.p. $132-133^{\circ}$. Found C = 74.5; H = 7.0; $C_{10}H_{11}ON$ requires C = 74.5; H = 6.8%) separated. On recrystallisation from hot water 6-methyldihydro-N-amino-carbostyryl separated in colourless plates m.p. 117° (Found C = 68.8; H = 7.0. $C_{10}H_{12}ON_2$ requires C = 68.2; H = 6.8%).

6-methyl-1:2:3:4 tetrahydroquinoline-8-carboxylic acid (VII). A number of experiments were made with the object of converting 6,8-dimethylquinoline into 6-methyl-quinoline-8-carboxylic acid by oxidation. Oxidation with chromic acid, selenium dioxide, and dilute nitric acid were tried, but yields obtained were not very satisfactory. Oxidation with large excess of chromic acid, yielded only the dicarboxylic

acid *m p.* above 300°. This substance is only sparingly soluble in water, alcohol and benzene. (Found C = 60.6 H = 3.4 N = 6.7%. $C_{11}H_7O_4N$ requires C = 60.8; H = 3.2; N = 6.4%).

The tetrahydroquinoline carboxylic acid was eventually prepared by the method previously described (Chakravarti and Venkatasubban, *Loc. cit.*).

Bromination of 6:8-dimethylquinoline. 6:8-dimethylquinoline (10 gm.) was dissolved in chloroform (30 c.c.) and the solution saturated with dry hydrogen bromide, when a white precipitate was obtained. Bromine (10.2 gm.) was then added and the mixture carefully warmed on the waterbath till a clear red solution was obtained. The solution on being kept in a desiccator deposited the dibromide hydrobromide in orange red rhombic plates *m.p.* 125-140° (Decomp.). Yield almost quantitative.

When this substance is heated to 160°, it loses hydrogen bromide. In an experiment, when the solution of the substance in chloroform was heated for sometime, white needles were obtained which on decomposition in aqueous solution with alkali gave a colourless substance *m.p.* 58°, which crystallised from petroleum ether in needles and which analysed for a monobromo dimethyl quinoline. (Found: Br. = 33.5%. $C_{11}H_{10}NBr$ requires Br. 33.8%).

When, however, the above experiment was repeated the substance *m.p.* 58° could not be obtained again.

Experiments are in progress to prepare (IX) by various modifications of the method described in D. R. P. 98272.

Preliminary Synthetic Experiments in the cytisine group

PART III

Exploratory experiments on the synthesis of Cytisine,
Sparteine, Lupinine and allied alkaloids

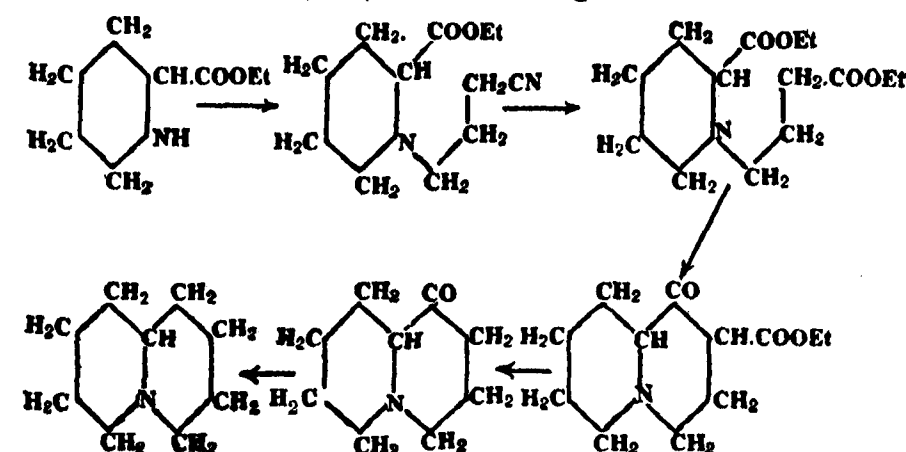
By

S. N. CHAKRAVARTI AND P. L. NARASIMHA RAO

(Annamalai University)

The object of these experiments was to discover methods which could be eventually used for the synthesis of Lupinine, Sparteine, Cytisine and the allied alkaloids. It was realised from the outset that some of the successful experiments might lead to the formation of stereoisomerides of the expected alkaloids (Compare, Chemical Society, Annual Reports, 1933, 232). Attention has so far been directed by various workers to the synthesis of norlupinane (I), the new type of ring system which Karrer first assumed to be present in Lupinine (*Helv. Chim. Acta.*, 1928 11, 1062), and which has since then been shown to be the essential building unit of several alkaloids obtained from plants belonging to Leguminosae (Winterfield and Kneuer, *Ber.*, 1931, 64, 150; Spath and Gallinowski, *Ber.*, 1932, 65, 1526; Clemo and Raper, *J. C. S.*, 1929, 1927; Clemo and Ramage *J. C. S.*, 1931, 437, 3191; Ing., *J. C. S.*, 1932, 2778; 1933, 504; Clemo and Raper, *J. C. S.*, 1933, 644; Kondo, Ochiai, Tsuda and Yoshida, *Ber.*, 1935, 68, 570).

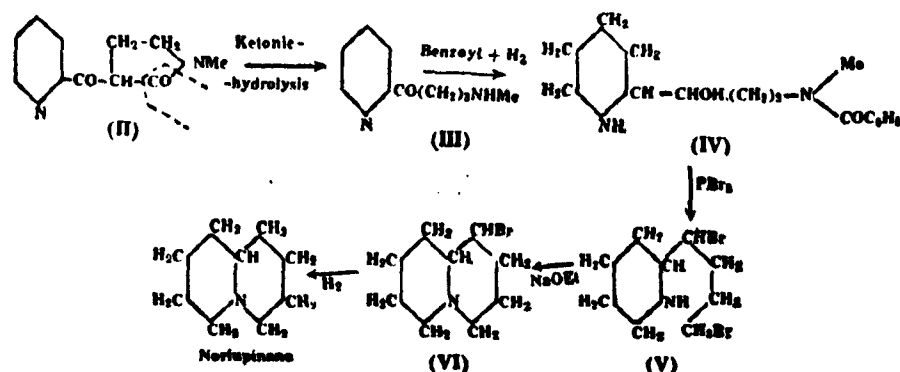
The first attempt to synthesis norlupinane was made by Clemo and Ramage (*J. C. S.*, 1931, 437) in the following manner:—



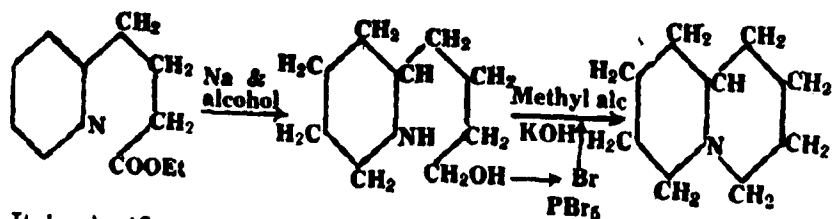
Ethyl piperidine-2-carboxylate was condensed with *n*-bromobutyronitrile, the product hydrolysed, esterified, converted into a cyclic

ketone by means of sodium, and the product again hydrolysed and reduced by Clemensen's method. The final product, octahydropyridocoline, proved to be different from norlupinane and was later regarded as a stereoisomeride of the cis-trans decalin type, with the interesting feature that a tervalent nitrogen is implicated.

A product identical with norlupinane was obtained synthetically by Winterfeld and Holschneider (Annalen., 1932, 499, 109) in the following way. 2-Pyridyl 1-methyl-2-pyrrolidonyl-3 ketone (II), prepared by condensation of α -picolinic ester and 1-methyl-2 pyrrolidone, on ketone hydrolysis gave 2- γ -methylaminobutylpyridine (III), the benzoyl derivative of which was reduced catalytically in presence of platinum oxide to the secondary alcohol of the corresponding piperidine derivative (IV). By the action of phosphorus pentabromide on this substance 2- α - δ -dibromobutylpiperidine (V) was obtained with loss of benzonitrile and methyl bromide. This bromide was cyclised by the action of sodium ethoxide to 1-bromo-octahydro-pyridocoline (VI), which could be reduced catalytically to octahydropyridocoline, identical in all its properties with norlupinane.

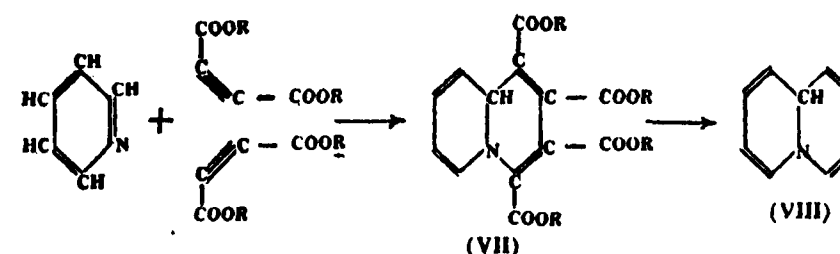


A second, elegant synthesis was effected by Clemo, Ramage and Raper (J. C. S., 1932, 2959) by subjecting ethyl α -2-pyridyl-butyrate to a combined Bouveault and nuclear reduction, followed by halogenation, and cyclisation by withdrawal of hydrogen halide, thus:—

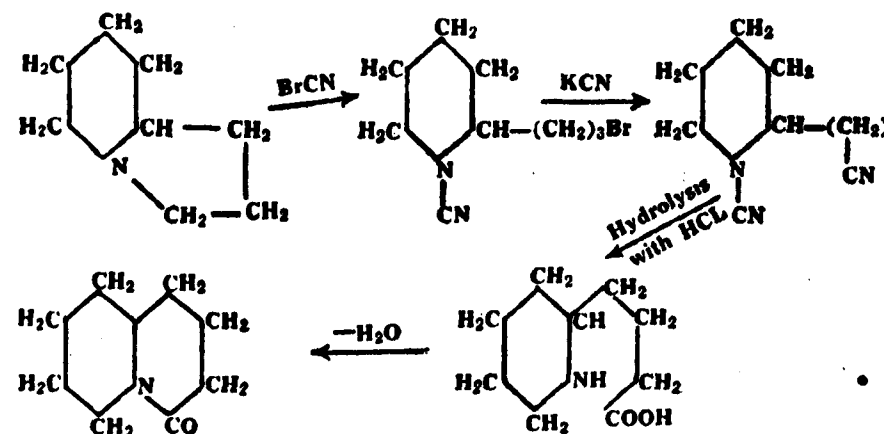


It is significant that both the above methods depended on a final ring closure at the Nitrogen atom.

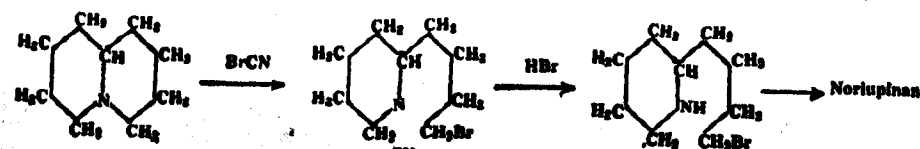
Diels and Alder, probably had obtained norlupinane a little earlier, although the melting points of the picrate and the auri-chloride of their base were slightly lower (Annalen 1932, 498, 16). They found that acetylene dicarboxylic ester and pyridine combine at ordinary temperature to give quinolizine-1:2:3:4-tetracarboxylic ester (VII), which on hydrolysis with aqueous potassium hydroxide furnishes quinolizine dicarboxylic acid, and from this quinolizine (VIII) itself is obtained by heating with lime. The latter on complete reduction gave octahydro-quinolizine.



The only other recorded synthetic work in this field is the synthesis of α -norlupinone, recently effected by Ochiai, Tsuda, and Yokoyama (Ber., 1935, 68, 2291), by the transformation of indolizidine ring in the following manner:—



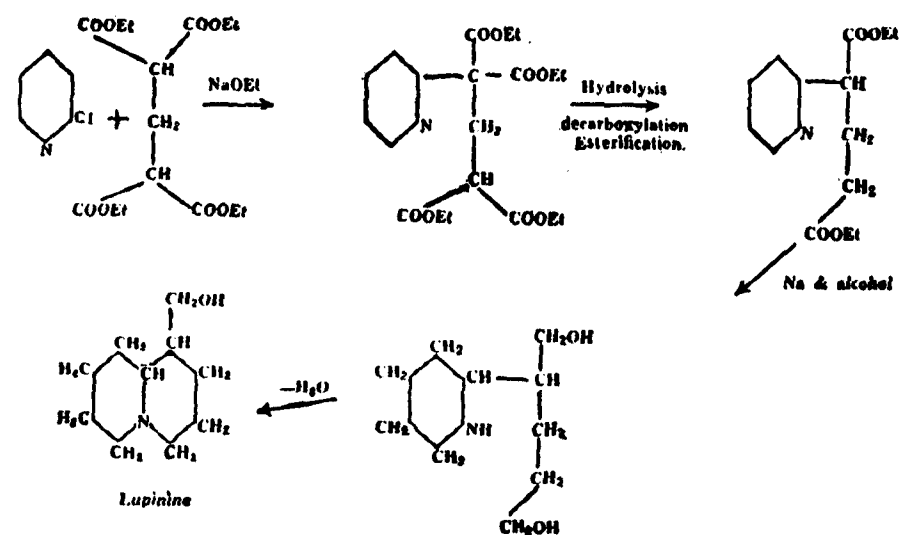
This synthesis should be of particular interest, because by an application of similar reactions it may be possible to convert Clemo's Octahydropyridocoline into norlupinane:—



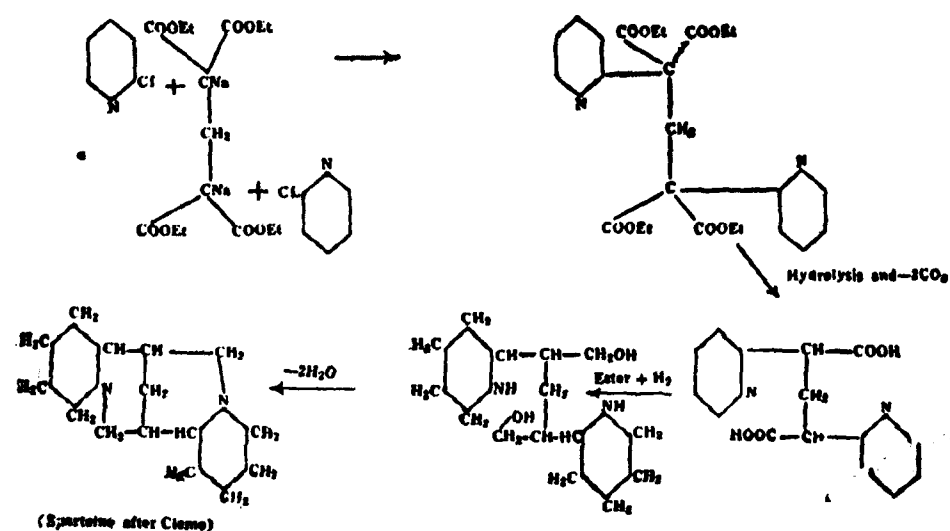
This point is being investigated and an account of these experiments is reserved for a future communication by one of us (S. N. C.).

For the synthesis of the alkaloids themselves, we thought out a number of excellent schemes, but we at first directed our attention to the realisation of the following schemes, as the starting substance for these could be readily obtained:—

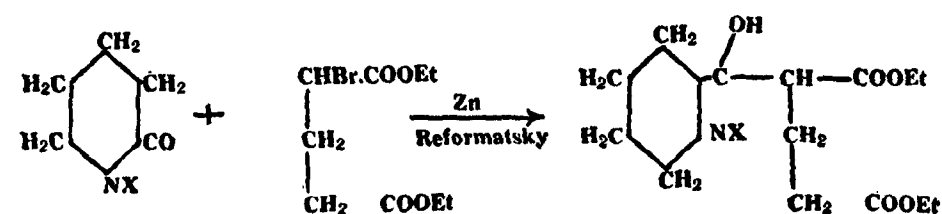
I(a)



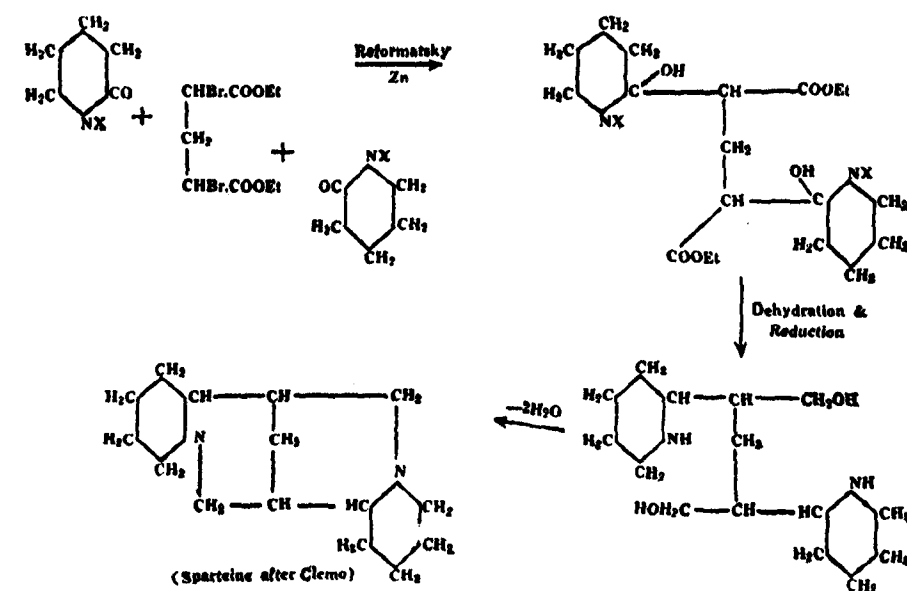
I(b)

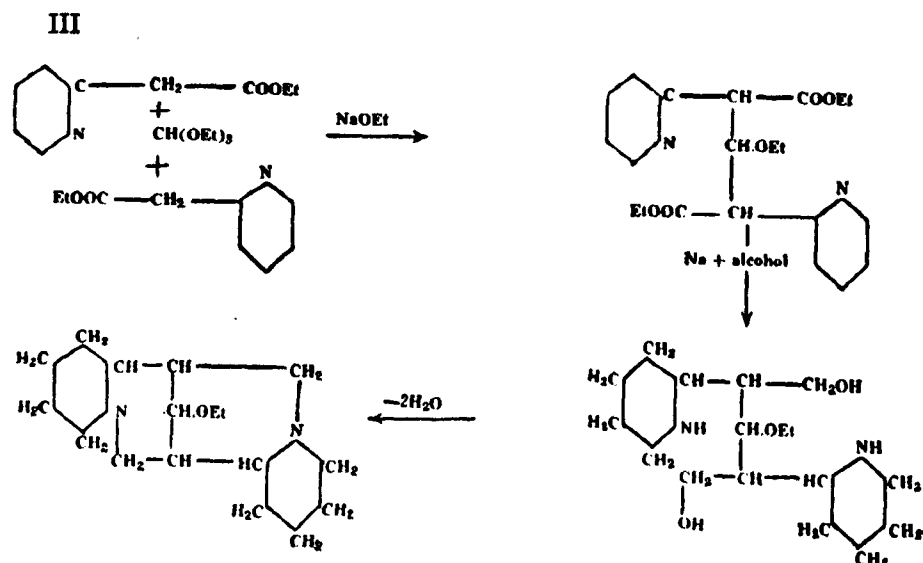


II(a)



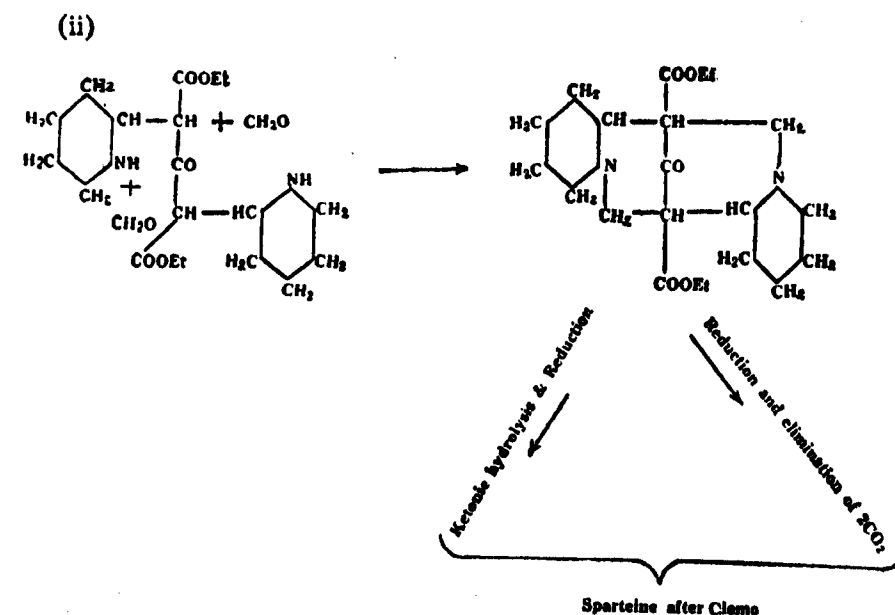
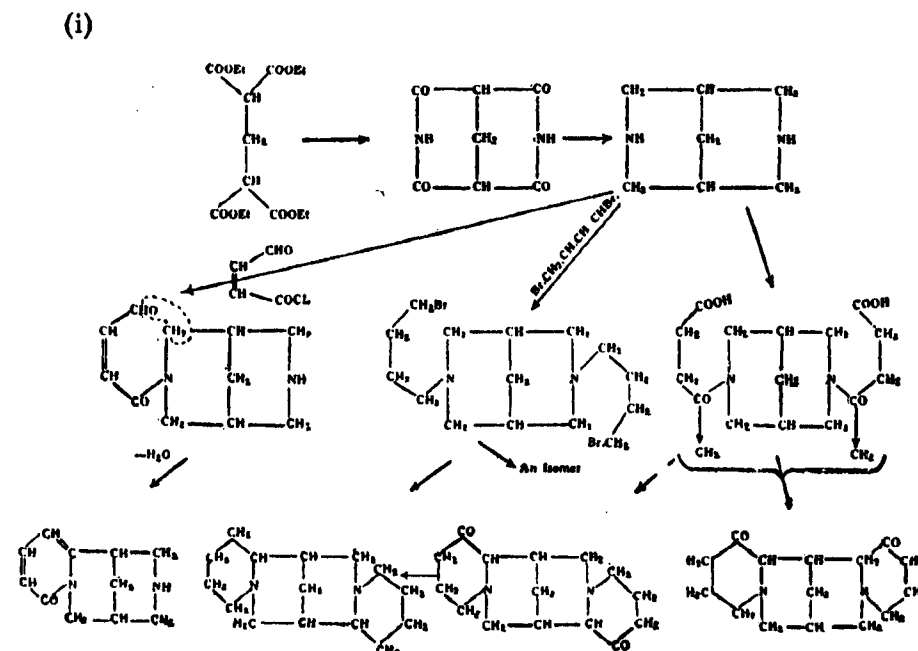
II(b)





Contrary to the statement of Bose and Sen (*J. C. S.*, 1931, 2843) N-methylpyridone and α -chloropyridine were readily obtained in excellent yields by the method of Fargher and Furness (*J. C. S.*, 1915, 107, 690), but attempts to condense α -chloropyridine with sodiummalonic ester and ethyl $\alpha : \alpha : \gamma : \gamma$ -propane tetracarboxylate under a variety of different conditions were unsuccessful. This is rather unexpected for a halogen atom in 2-position in pyridine is fairly reactive and α -chloropyridine readily condenses with anthranilic acid, etc. In this connection it may be mentioned that C. S. Kuhn and Richter have recently reported that they were unable to condense α -bromopyridine with malonic ester (*J. Amer.Chem.*, 1935, 57, 1928). On the other hand, Walter and McElvain have shown that such a reaction can be brought about with sodium ethoxide in absence of alcohol (*J.Amer.Chem.*, 1935, 57, 1891). One of us (S.N.C.) has not the least doubt, that a condensation of the type outlined in Scheme I can be effected and attempts are now being made to condense the more reactive Iodopyridine with the sodiosalts of the above esters (Compare Wibaut and Bastide, *Rec. Trav. Chim.*, 1933, 52, 493-498).

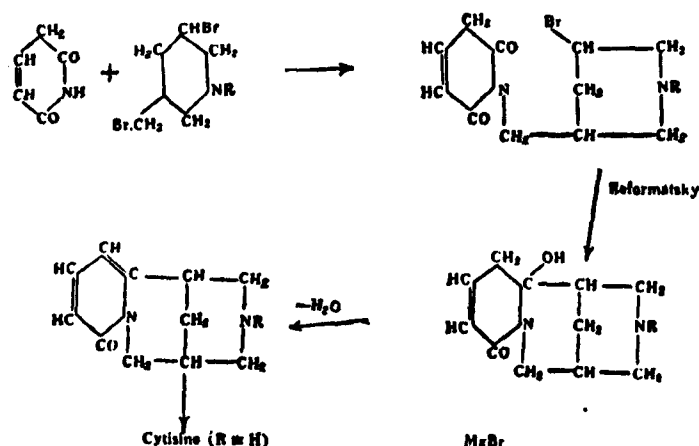
While the above work was in progress experiments were simultaneously instituted to explore the possibilities of the following schemes:—



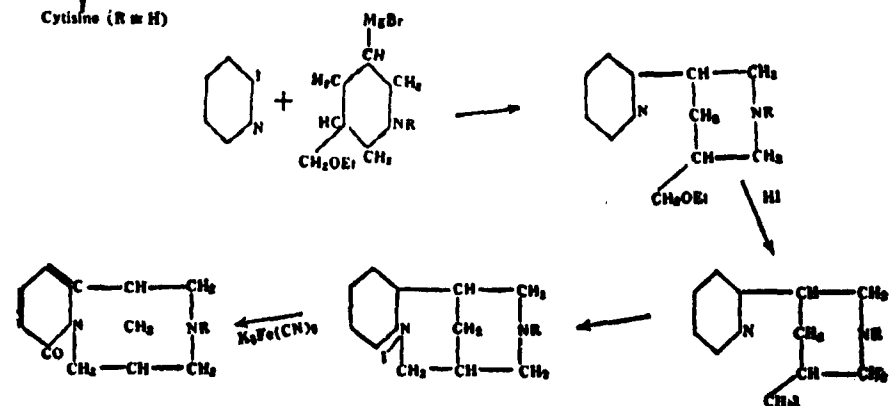
It should be certainly possible to bring about the above conversion as Mannich and Coworkers have shown that compounds containing Bispidine ring can be readily synthesised by similar methods (Ber., 1935, 68, 506; Ber., 1930, 63, 608).

Cytisine itself we are attempting to synthesise in the following manner:—

(i)



(ii)



Some progress has already been made in these directions, and we reserve the synthesis of these alkaloids along these and other lines for a future communication.

We are publishing this work in this incomplete state as one of us (P.L.N.R.) is unable to continue this work further, and as the senior

author (S. N. C.) wishes to reserve the subject for his work for some time.

EXPERIMENTAL

N-Methyl- α -pyridone was prepared under conditions essentially similar to those used by Fargher and Furness (Loc. cit.). It was, also, obtained by the oxidation of pyridine methosulphate with hydrogen peroxide, and by electrolytic oxidation, but the yields of the final compound by these methods were not so good.

For the preparation of α -chloropyridine, Fargher and Furness's condition was followed, but heating with phosphorus pentachloride was continued for 14 hours, instead of nine, till the whole of phosphorus pentachloride had disappeared and a homogeneous solution obtained, when an yield of over 95% of the chlorocompound was obtained.

Condensation Experiments. Attempts to condense α -chloropyridine with malonic ester and propane tetracarboxylic ester under usual conditions with (i) sodium ethoxide in alcoholic solution, (ii) equimolecular quantity of sodium in benzene suspension, were unsuccessful.

Experiments are now being made to obtain the expected condensation product by condensing Iodopyridine with the above esters under above conditions, and also at higher temperatures, e.g. in toluene and mesitylene solutions and with longer heating (30 hrs.).

α -Iodopyridine. α -Aminopyridine was first prepared from pyridine by the method of Tsitschibabin (Journ. Russ. Chem. Ges., 1914, 46, 1216) and then converted into Iodopyridine through the diazonium salt (Wibaut and Bastida, loc. cit.).

Preliminary attempts to condense *N*-methyl α -pyridone with malonic ester through the aid of a little alcoholic potash or piperidine were unsuccessful.

Bispidine ring formation. Ethyl $\alpha : \alpha : \gamma : \gamma$ -propane tetra-carboxylate was prepared by the method of Welch (J. C. S., 1931, 674) and converted into the tetraamide in a quantitative yield under conditions similar to those used by Max Guthzeit and Jahn (J. Pr. 1898, (2), 66, 1-15).

The tetra-amide on being heated at 250° in the manner described by Guthzeit and Jahn gave glutaric di-imide in a poor yield, which on electrolytic reduction gave a basic substance. Attempts are being made to improve the yield of the di-imide, and to materialise the schemes outlined in the introductory part.

Our thanks are due to the Chemical Society, London, for a grant which has defrayed part of the cost of the research materials used above.

Annamalai University,
18th January, 1936.

Chemical Investigation of Indian Medicinal Plants

Preliminary Chemical Examination of *Cryptocryne Spiralis*

PART V

By

S. N. CHAKRAVARTI AND T. S. KUPPUSWAMY
(Annamalai University)

Cryptocryne spiralis (Tamil, Nattu-ati-vadayam) is the country Atis of the Madras Presidency. The root of the plant externally resembles *Ipecacuanha*, and a few years ago it attracted attention through several packages of it appearing in the London Market as 'False *Ipecacuanha*'. It is widely used by the native doctors of the Madras Presidency and Ceylon as a tonic and as a remedy for infantile vomiting, cough and fever.

A reference to the literature showed that no systematic work has been done on the chemical constituents of this plant. A more or less complete analysis of the root has now been made. We found during this investigation that the root does not possess any of the characteristic physiological properties associated with *Ipecacuanha*. It contains neither emetine nor cephaeline. We were, also, unable to detect the presence of any specific (organic) active principle.

EXPERIMENTAL

Preliminary tests for alkaloids and glucosides, gave only negative results. The aqueous extract of the roots gives a colouration with ferric chloride and a precipitate with lead acetate. It immediately reduces Fehling's solution.

100 gm. of finely powdered root were extracted with the following solvents successively in Soxhlet apparatus, and the extracts dried at 100°.

Petroleum ether (B. P. 35-50°) extracted.	1.05 gm.
Ethyl Ether	1 gm.
Chloroform	.82 gm.
Absolute alcohol	1.5 gm.

Petroleum ether extract. The extract was concentrated to a small volume and then extracted with acidified water. The acid extract did not give any precipitate with any of the usual alkaloidal reagents, and it did not give any of the tests of water-soluble glucosides. The concentrated petroleum ether extract was then evaporated to dryness, when a greenish residue was left, which is almost completely soluble in 90% alcohol. The residue is almost completely saponified by boiling with alcoholic Sodium Hydroxide, the unsaponifiable matter forming only a small proportion of the residue.

Ethyl ether extract. The residue obtained by removing the solvent was similar to the residue obtained from Petroleum ether. It did not contain any reducing sugar, tannin, glucoside, alkaloid or an acid. The residue is almost insoluble in petroleum ether and benzene, but dissolves readily in alcohol.

Chloroform extract gave a residue similar to above. In addition it contained some cautchouc like substance.

Absolute alcohol extract. On concentrating the hot extract and allowing it to remain, a white substance separated. This substance was insoluble in the usual organic solvents and it has not so far been possible to obtain it in a crystalline form. The residue obtained by evaporating the mother liquors to dryness is partly soluble in water. The aqueous solution of the residue gives a voluminous precipitate with lead acetate, and the filtrate from this gives a precipitate with basic lead acetate. It has not so far been possible to obtain any crystalline substance from these lead precipitates. The extract contains considerable quantities of glucose.

70% alcohol extract, cold distilled water extract, and boiling water extract had the usual characteristics. No active principle could be isolated from them. All the extracts give tests for reducing sugars.

Cold 1% hydrochloric acid extract. The extract had the usual properties and did not give any tests for alkaloid. On basification, it gave considerable quantities of a brown precipitate, which was insoluble in organic solvents. On being ignited, it left an infusible residue. This substance was found to have the properties of ferric phosphate.

Chemical Laboratory,
Annamalai University,
26th February, 1936.

SIDDHITRAYA

By
Yāmunācārya

Edited with English Translation and Notes

By
R. RAMANUJACHARI
AND
K. SRINIVASACHARI

अपि च प्रत्यक्षसंवित् स्वसत्ताकाले स्वविषयस्य सद्भावं साधयन्तो यत्तस्य न सर्वदा सत्तां साधयति । तदवसीयते अहमिदानीमेवास्मि नान्यदेति कालविशेषावच्छिन्नैव सा चकास्ति इति । इतरथा घटादेरपि नित्यत्वप्रसङ्गात् । एवमनुमानादिसंविदोऽपि । न च प्रत्यक्षानुमानादिभेदशून्या निर्विषया निराश्रया धीः संभवतीत्युक्तमेव ।

न चान्याविषयत्वात् संविदोऽन्यतस्तत्प्रागभावाद्यसिद्धिः । अज्ञासिषमिति प्राक्तनसंविदोऽद्यतनधिया विषयीक्रियमाणत्वात् । प्रतिकूलानुकूलविषयनियतहानोपादानादिलिङ्गावगम्यत्वाच्च परसंविदः । तदनभ्युपगमे च शब्दार्थग्रहणासंभवेन वैदिकलौकिकसमस्तव्यवहाराभावप्रसङ्गः, गुरुपसर्पणाद्यनुपपत्तिश्च ; ज्ञानवत्त्वेन तस्याप्रतीतिः ।

Moreover, perceptual knowledge establishes the existence of its object at the time of its own existence, and not the existence (of the object) at all times. Hence, it has to be stated that consciousness manifests itself only as being limited by time, taking the form 'I exist only at this moment, not at other times.' Otherwise (if knowledge were not limited by time, its object too, namely) the pot and the like would be eternal. Similarly, inference and other kinds of knowledge (must be limited by time; otherwise, they would reveal their objects also to be eternal). And it has already been said that a pure consciousness, which is devoid of the distinctions of perception and inference, and which is objectless and supportless, cannot exist.

The contention that the antecedent non-existence of consciousness cannot be proved by anything other than consciousness on the ground that consciousness cannot be the object of anything else (p. 35) is indefensible; for (one's own) previous knowledge is made the object of present cognition, as in the judgment 'At one time I knew'. Besides, the consciousness of other persons is inferred from reasons (linga) such as, the invariable rejection and acceptance respectively of disagreeable and agreeable objects. And, if it is not admitted that the consciousness of others is inferred, there would result the impossibility of all scriptural and wordly usage, in as much as it would be impossible to grasp the meanings of words.⁶⁰ Further, approaching the guru and the like would be impossible, for there could be no apprehension that he is possessed of knowledge.

60. The meanings of words may be understood from vyavahāra. Thus, for example, a youngster notices the pupil fetching a cow when his master utters the words 'Fetch the cow,' and immediately concludes that the action of fetching the cow was the result of the pupil grasping the desire of the master when he heard the words 'fetch the cow.' At that time, he takes the words in one mass

न चान्यविषयत्वे अननुभूतित्वम् । स्वाश्रयस्य स्वसत्तयैव प्रकाशमानत्वं स्वविषयसाधनत्वं वाऽनुभूतित्वम् । ते च संविदन्तरविषयभावेऽपि स्वानुभवसिद्धे न भ्रश्येत इति कथमननुभूतित्वप्रसङ्गः । घटादेस्तु तथास्वाभाव्याभावादेव अननुभूतित्वम्, नानुभाव्यत्वात् ।

The belief that if consciousness is the object of anything else, it would cease to be consciousness is untenable. The character of being consciousness consists in the quality of manifesting itself solely by means of its own existence to its substrate; or in the quality of being the means of manifesting (by its own existence) its object (to its substrate).⁶¹ These two characteristics (of consciousness, namely, that of manifesting itself and its object to its substrate), which are established by one's own experience, do not fall away even when consciousness becomes the object of another consciousness. How then can it be maintained that consciousness ceases to be consciousness (when it becomes the object of another consciousness)? Pots and the like, on the other hand, do not possess the quality of being consciousness, simply because they do not possess the aforesaid characteristics and not because they are objects of experience.

as conveying one complex whole of meaning. Which word in that whole stands for the animal, and which signifies the action is not apprehended there. Later, when the teacher says 'fetch the horse,' a different animal is brought. Again, when he says 'tie up the cow,' a different action follows. By observing varied actions resulting from the different utterances, the youngster understands that the word 'cow' denotes an animal of a certain description, that the word 'horse' an animal of another kind, the word 'bring' denotes the action of bringing, and so on.

61. In commenting upon these definitions, Sudarśanācārya observes that if consciousness is defined as that which manifests itself, this definition would also apply to pots and the like, for, they too manifest themselves. To exclude them, the qualification 'to its own substrate' is added; the pot manifests itself, not to its substrate, the ground on which it stands, but to the knowing person. Again, the further qualification 'solely by means of its own existence' is included in order to exclude certain attributes of the self, such as, atomic size, eternity and so on, which are manifested to their substrate, not by themselves, but by an act of knowledge. The Śrī Bhāṣya would add yet another qualification 'at the present time' with a view to excluding past states of consciousness. Even without this addition, past states of consciousness stand excluded, since every past experience is revealed not by its own existence, but by another act of knowing. But this qualification serves to emphasise the fact that any state of consciousness can manifest itself by its own existence only at the time it exists, and that a past state of consciousness can be apprehended by another state—a fact denied by the opponent. 'At the present time' denotes 'the time when the rela-

अपि च अननुभाव्यत्वेऽपि समानस्तत्प्रसङ्गः गगनकुसुमवत् ।

न चात्मनोऽनुभूतित्वम्, अनुभवितृत्वात् । नाप्यसावननुभाव्यः, अनुभवस्येव स्वतः सिद्धयतोऽप्यस्य स्वपरसंवेद्यत्वाभ्युपगमात् । वेद्यत्वेऽनात्मत्वापादनं अवेद्यत्वेऽपि समानं पूर्ववत् ।

यदि तु गगनकुसुमस्यासत्त्वमेव अनात्मत्वाननुभूतित्वप्रयोजकमास्थीयेत, आस्थी-

Further, (even on your view) that consciousness does not possess the character of being the object of another consciousness, the same difficulty, namely, that it will cease to be consciousness, does exist as in the case of the sky-flower, (which is not an object of cognition, and which is not a cognition).

The quality of being consciousness cannot be attributed to the self, for it possesses the character of being the seat of consciousness. Nor can it be said that it (the self) is not the object of consciousness; for, though it is self-luminous like consciousness, it is admitted to be capable of being known by oneself and others. The objection that, if the self is knowable, it would cease to be self would, as stated before, equally apply even to the view that it is not knowable.

If it is contended that it is only the non-existence of the sky-flower (rather than the fact that it is not the object of experience) that is responsible for the sky-flower not being soul or consciousness, then let it be

tion of consciousness to its object exists'. Since a state of consciousness cannot manifest itself, solely by its own sake, to any person other than its own substrate, the words 'to its own substrate' become necessary. This definition is acceptable only to those who maintain the svayamprakāśatva theory; hence, a second, which will be acceptable to all is offered. The qualifications 'to its own substrate,' 'by its own existence' and 'at the present time' have to be supplied in this definition also. 'Means of manifesting' would apply also to the potter's stick, wheels and other instruments; and hence the qualification 'to its own substrate.' The knowledge arising from one sense organ cannot be the means for the manifestation of an object revealed by another sense; visual perception, for example, does not manifest that which is the object of auditory perception. Hence the need for the words 'its own object.' The qualification 'by its own existence' serves to exclude the sense organs, which are instrumental in revealing objects, not by their own being, but in so far as they give rise to knowledge. As in the case of the first definition, here also the expressions 'at the present time' and 'to its own substrate' are intended to exclude respectively past states of consciousness and the experience of others.

यतां तर्हि घटादेरप्यसंविदाश्रयत्वाज्ञानाविरोधित्वयोरेव तत्प्रयोजकत्वम् । अथ ते अपि विषयत्वे स्यातामिति चेत्, अविषयत्वेऽपि तथैवेत्यलमप्रतिष्ठितकुतर्कापहसनेन ।

यदपि जननविरहादनुभूतेर्विकारनिरसनम्, व्यभिचरति तदपि प्रागभावे । जन्माभावेऽपि तस्य विनाशदर्शनात् । भावविशेषणोपादानेऽपि भवदभिमताविद्ययानैकान्त्यम् । सा हानादिरपि विविधविकारवती विनाशवती च तत्त्वज्ञानोदयात् । अपरमार्थास्तद्विकाराः सन्ति इति चेत्, परमार्थाश्च ते किं विकाराः सन्ति ? जन्मवन्तो वा परमार्थाः ? येन परमार्थेन विशेषणं साध्यस्य साधनस्य वा अर्थवत्तामश्रुवीत । तथा च सति साधु समर्थितं तर्ककुशलेनेत्यलमनेन ।

held that even in the case of pots and the like, it is only their character of not being the seat of consciousness and of their not being opposed to ignorance⁶² that is responsible for their being non-soul and non-consciousness. Should it be contended that if consciousness is the object of consciousness these two qualities (namely, the quality of not being the seat of consciousness and of not being opposed to ignorance) must belong to it, (we reply) that even on the view that consciousness is not the object of consciousness, it would likewise possess those two qualities, (as in the case of the sky-flower). No further need to ridicule these devious and flimsy arguments.

Again, the assertion that as consciousness has no origin, other modifications of it are negatived is fallacious ; for, (the implied general proposition, namely, that whatever has no origin has none of the other changes, is falsified by the contradictory instance of antecedent non-existence, because,) although antecedent non-existence has no origin, it is found to have destruction. Even if the qualification 'positive entity' be added, the falsity (of the general proposition as modified viz., All positive entities having origin have none of the other changes) will be proved by the ignorance (avidyā) which is admitted by you. For, this ignorance, even though it has no origin, is subject to manifold changes and terminates through the rise of knowledge. If it is said that its modifications are unreal, (we ask) do you admit changes which are ultimately real, and believe in any entity having an origin and still being ultimately real? It is only if these are admitted, the qualification 'ultimately real' can be fruitfully applied either to the major or to the middle term. If these are admitted, then your case has, indeed, been ably defended by one skilled in logical acumen !

62. It is not necessary that if external objects, such as pots, exist at all, they ought to be known. Hence, they are not considered to be opposed to ignorance (ajñānavirodhi). Knowledge, however, is opposed to ignorance (ajñānavirodhi), because when it exists it must necessarily shine forth.

यदपि न ह्यजं विभाग्यस्तीति, तदपि न । अजस्यैवात्मनो देहेन्द्रियादिभ्यो विभागस्य समर्थितत्वात् । अनादित्वेनाभ्युपगतस्याज्ञानस्यात्मनो व्यतिरिक्ततया अवश्याश्रयणीयत्वात् । अपरमार्थस्स विभाग इति चेत्, परमार्थभेदः किं जन्मप्रतिबद्धः कचिद् दृष्टः ? । निर्बाधप्रतीतिसिद्धश्च दृग्दृश्यभेदः परमार्थ एवेत्यनन्तरमेवोपपादयिष्यामः ।

यदपि नास्या मेयो धर्मोऽप्यस्ति, चेत्यानां न चिद्वर्मत्वमिति च, तदपि शास्त्रानुमानादिप्रमाणसिद्धैः स्वयंप्रकाशत्वनित्यत्वादिधर्मैः स्वयमभ्युपगतैरनैकान्तिकम् । न च ते

The statement that what is unborn cannot possess differentiations is not correct ; for, the distinction of the self, which is assuredly unborn, from the body, senses and the like has already been established ; and because ignorance, which is admitted to be beginningless, has necessarily to be taken as being distinct from the self.⁶³ If it is said that this differentiation is phenomenal, (we ask) have you observed anywhere real distinction to be invariably concomitant with origination ?⁶⁴ It will be shown presently that the distinctions existing between various kinds of knowledge and objects of knowledge, which are established by uncontradicted experience, are ultimately real.⁶⁵

The contention that consciousness does not possess the attributes which are objects of knowledge, and that the attributes which are known do not belong to consciousness as its qualities is proved to be fallacious by the qualities of self-luminosity, eternity and the like, which are established, by scriptural testimony, inference and other means of knowledge to exist in consciousness, and which are acknowledged by yourself.⁶⁶ It cannot be pointed out that these attributes are in reality

63. All systems of Indian thought, with the exception of the Cārvāka darśana, accept the distinction of the self from the body, senses and so on ; and the opponent admits, in addition, the distinction of the self from avidyā. Hence, he cannot deny vijātiyabheda.

64. In order to prove that consciousness admits of no real distinctions, because it has no origin, the negative concomitance (vyatirekavyāpti)—whatever has real distinctions must have an origin—must be cited. But as the opponent does not admit real distinctions, he cannot point to any instance of this negative generalisation. Hence, his argument commits the fallacy of vyāptatvasiddhi. Moreover, if the distinction of avidyā from the self is not real, it follows that ignorance itself may become the self.

65. The distinction between objects of knowledge necessarily points to the distinction between kinds of knowledge. This shows that sajātiyabheda is real.

66. The admission that consciousness possesses the attributes of self-luminosity, eternity and the like implies that consciousness admits of internal differences (svagatabheda).

चितिमात्रमिति वाच्यम् । तत्सिद्धावपि तेषु विमतिदर्शनात् । अभ्युपगम्यैव हि संविदं तदनुमेयत्वक्षणिकत्वादि प्रतिजानते वादिनः । स्वरूपभेदाच्च । स्वाश्रयं प्रति सत्तयैव कस्यचित्प्रकाशनं हि संवेदनम् । स्वयंप्रकाशता तु सत्तयैवात्मने प्रकाशमानता । प्रकाशश्च चिदचिदशेषपदार्थसाधारणो धर्म इति संवित्सिद्धावेव साधितम् । तदनभ्युपगमे तु व्यवहारानुगुण्यवचनः प्रकाशशब्दः । नित्यता तु सर्वकालवर्तमानता । एकसंख्यावच्छेदः एकत्वमिति ।

न च जडत्वकालदेशनानात्वाद्यवच्छेदशून्यतारूपत्वात्तेषां न यथोक्तदोष इति युक्तम् । तथारूपैरपि तैश्चित्तिधर्मभूतैरनैकान्त्यस्यापरिहार्यत्वात् । संविदि च निषेध्यत्वाभिमतजडत्वानित्यत्वनानात्वादिविरुद्धविविधधर्माभावे निषेधोक्तिरुक्तिमात्रमेव ।

only pure consciousness; for, even though it (consciousness) is admitted to exist, conflicting views with regard to these attributes are noticed. It is only after admitting the existence of consciousness that disputants maintain its inferability, momentariness, and the like. Besides, consciousness and these attributes are in their essential nature distinct. Indeed, consciousness is that which, solely by means of its own existence, manifests some object to its own substrate. But self-luminousness consists in shining forth or being manifest solely by means of its own existence to the soul. While determining the nature of consciousness,⁶⁷ 'shining forth,' which is implied therein, has been taken to be a quality common to all sentient and insentient things alike. If you were to (confuse this 'shining forth' with *prākāṣya* and) say that it is not admitted by Vedāntins, (we point out that) the expression 'shining forth' refers to the quality of being fit to be an object of reference. Eternity, again, is the quality of existing at all times. Unity is limitation by the number 'one.'

It is not proper to suggest that as these attributes (self-luminosity, eternity and unity) constitute the negation of non-intelligence, of spatial and temporal limitations and of plurality respectively, the aforesaid difficulties are got over. For, even if they are of this nature, as they will still be the attributes of consciousness, you cannot meet the charge of *anaikānta* (straying reason). The denial of non-intelligence, non-eternity, plurality and the like would be empty statement signifying nothing, if the several qualities opposed to these were not present in consciousness. Ignorance (*avidyā*), which

67. The expression 'samvitsiddhāveva sādhitam' has been interpreted to mean 'while determining the nature of consciousness' and not 'in the book called *Samvitsiddhi*,' because it is a subsequent work of Yāmunācārya.

चेत्यं चाज्ञानमात्मनि दृष्टमिष्टं च भवताम् ।

अपि च अस्या इति षष्ठ्या अनुभूतेः संबन्धमभिधाय निर्धर्मत्वं प्रतिज्ञायमानं वन्ध्यात्वमिव जनन्या विरुद्धार्थमापद्येत ।

सिद्धिश्चेदभ्युपेयेत संविदः स्यात्सधर्मता ।

न चेत्तुच्छत्वमेवोक्तं भवेच्छशविषाणवत् ॥

ननु सिद्धिरेव सा । कस्य भोः ? । यदि न कस्यचित्, न तर्हि सिद्धिरेव । सा हि पुत्रत्वमिव कस्यचित् कंथितप्रति । आत्मन इति चेत्, कः षष्ठ्यर्थः ? । तदेवं व्योमारविन्दसदृशवपुषि यथोदितदृशि वेदान्ततात्पर्यवर्णनं वेदान्तायैव स्यात् ।

अपि च नित्यत्वेऽप्यनुभूतेः प्रत्यभिज्ञानुपपत्तिस्तदवस्थैव । सा ह्यनुभवितारं

is knowable, is found in the self; and this is a position admitted by you. (Hence, it cannot be maintained that the attributes which are known do not belong to consciousness as its qualities).

Further, after suggesting the relation of consciousness to something with the aid of the genitive case ending found in the word *asyāḥ* (occurring in the statement *nāsyā meyo dharmah*) to assert the attributelessness (of consciousness) will, like the attribution of the quality of being a barren woman to one's mother, convey the opposite meaning. If consciousness is admitted to be manifest, it will follow that it possesses attributes; otherwise, (if it is not admitted to be manifest) it amounts to positing an absolute non-entity like the horns of a hare. If it is said that manifestation itself is consciousness, (we ask) 'Oh, Ye! tell us whose manifestation it is. If the reply is that it is not the manifestation of anything, then, it cannot be manifestation at all, for, manifestation, like the quality of being the son, always refers to some entity and belongs to somebody. If it is said that it (manifestation) belongs to the self, (we ask) what is the meaning of the genitive case ending?'⁶⁸ Hence, to maintain that a consciousness, which has been described as above and which has a character similar to that of sky-lotus, is the ultimate end of the Vedānta will only lead to the destruction of the Vedas themselves.⁶⁹

Further, even if consciousness were eternal, the impossibility of recognition would still persist; for, recognition which takes the form—

68. Pāṇini's Sūtra,—*Ṣaṣṭhi śeṣe*—declares that the genitive case ending invariably refers to some relation or other. The expression 'soul's manifestation' (*ātmanah siddhiḥ*) must, therefore, indicate that there is some relation between soul and the quality of manifestation. Hence, it cannot be maintained that the soul is attributeless.

69. There is a pun on the word *vedānta*.

पूर्वापरकालावस्थायिनमुपस्थापयति, अहमिदमन्वभूवमिति। अनुभूतिस्त्वनुभूतिरेव भवताम्।
न तां प्रति सा कर्त्री कर्म वा।

यद्युच्येत परमार्थतस्तथाभूतापि भ्रान्त्या अनुभवितृतया परिस्फुरति रजततयेव
शुक्तिः। न हि तद्यमनवलम्ब्य मिथ्यावभासस्योत्थानमिति। तन्न। तथा
सत्यनुभवसमानाधिकरणतया अनुभविता अहमर्थः प्रकाशेत अनुभूतिरहमिति, पुरः
स्थितभास्वरद्रव्यशङ्खमुखचन्द्रादेराकरतयेव रजतपीतमुकुरस्थताद्वित्वादि। पृथगव-
भासमान एव त्वयमनुभवः दण्ड इव देवदत्तमर्थान्तरमहमर्थं विशिष्यन्नालक्ष्यते अनुभवाम्य-

'I experienced this at one time'—indicates that there is a conscious sub-
ject existing at earlier and subsequent times. But, in your view,
consciousness is only consciousness. With regard to itself, conscious-
ness cannot be its own subject and its own object.

Should it be argued that, even though consciousness is ultimately
only consciousness, it falsely appears as an experiencing subject, even as
the shell appears as silver, and that (this consciousness itself cannot be
said to be illusory, for) without a real basis no illusion can arise, this
argument is unsound. On this view, the conscious 'I' would shine
forth as equivalent to consciousness, taking the form 'consciousness is
I,'⁷⁰ even as silver, the yellow colour, the quality of being existent in the
mirror, duality and the like appear falsely as being the form of the
lustrous object presented before us, the conch, the face, the moon and
the like. This consciousness which always presents itself as something
distinct (from the conscious subject) is marked as taking
the form 'I am conscious' and as being the distinguishing at-
tribute of the altogether separate entity known as 'I', just as the
stick is found to be the attribute of Devadatta; when the judgment
'Devadatta holds a stick' does not have for its object the stick only, how

70. When a piece of shell is mistaken for silver, the illusion takes the form
'This is silver,' and not 'shell is silver' for, so long as the specific qualities of an
object are known, no illusion with regard to it can arise. Likewise, when con-
sciousness erroneously appears as the 'I', the illusion must take the form 'This is
I,' and not 'consciousness is I.' Hence, it may be asked: How can it be asserted
that the illusion concerning consciousness would take the form 'consciousness is I'?
Our reply is that in the case of shell-silver it is not the shell aspect of the
sented object, but some other aspect that causes the illusion. But in the case of
consciousness, as the opponent describes it to be attributeless, it cannot be said
that some aspect other than that of being consciousness leads to the illusion. Hence,
it has to be admitted that even when its specific aspect of being consciousness is
known consciousness gives rise to the illusion of 'I' and takes the form 'con-
sciousness is I.' See Śrūta Prakāśikā.

हमिति। तदेवमनुभवविशिष्टमस्मदर्थमवभासयन्महं प्रत्ययः कथमिव विशेषणभूतानु-
भूतिमात्रावलम्बनः प्रतिज्ञायेत, दण्डमात्र इव दण्डी देवदत्त इति प्रत्ययः।

कुतश्चैष निश्चयोऽध्यस्तं ज्ञातृत्वमिति। स्थूलोऽहमितिवद्देहात्माभिमानवतः
प्रतिभासनादिति चेत्, नन्वात्मतयाभिमतानुभूतिरपि तद्वत् एवावभातीति सापि
तथा स्यात्। तत्त्वज्ञानोदयात्परतोऽपि तदनुवृत्तेर्न तथा सेति चेत्, किं भोः तत्त्वज्ञानात्
परमबोद्धैव अयमात्मा?। हन्तैवं वरमितोऽतत्त्ववेदित्वम्। भ्रान्त्यापि हि तत्र बहु
भद्रं पश्यतीति।

ननु ज्ञातृत्वं ज्ञानक्रियाकर्तृत्वं विक्रियात्मकं जडमहंकारग्रन्थिस्थम्। तत्फल-

can it be asserted that (in the analogous case) this consciousness of 'I',
which reveals the entity called 'I' as owning consciousness, has for its
object this consciousness only, which is, in fact, a mere attribute.

How (we ask) did you arrive at the conclusion that the character of
being a knower is an illegitimately transferred quality (adhyasta)? If it
is replied that this, like the statement 'I am stout', presents itself only to
him who erroneously identifies the self with the body, (and as such, the
character of being a knower, like stoutness, is superimposed on the self,
we rejoin that) since the consciousness too, which you regard as the
self, presents itself only to that person who has that (confusion of the
self with the body), this consciousness also must likewise be a super-
imposition. If it be said that, since it (consciousness) continues even
after the dawn of the true knowledge of reality, it cannot be illusory, (we
ask) 'Sir, does the self really cease to be a knower after the acquisition
of true knowledge?'⁷¹ Oh! if that were so, it would be far better not to
be the knower of the real than to be the knower of the real; for, at least
in illusion, he would perceive, in that state, many a happy thing.

You may maintain that to be a knower is to be an agent in the act
of knowing, to be liable to change,⁷² to be non-intelligent, and
to reside in the knot of the ahamkāra;⁷³ and that the self is the enjoyer

71. Scriptural passages describing the state of release definitely declare that
the released soul continues to be a knower. Hence, it cannot be maintained that
with the rise of true knowledge the quality of being a knower vanishes.

72. Knowledge is an activity and it has a beginning and an end; hence, the
quality of being an agent in the act of knowing must have a beginning and end,
that is, must be subject to change.

73. Ahamkāra is spoken of as a knot (granthi) either because it is the root
cause of the tangled mass of illusions or because it binds the jīva closely to the
manifold illusions which are, in fact, its own handiwork.

मुक् अकर्ता अविक्रियः साक्षी प्रकाशमात्र आत्मा । कर्तृत्वादिर्हि दृश्यत्वात् रूपादि-
वन्मात्मधर्मः । कर्तृत्वे आत्मनोऽहंप्रत्ययगोचरत्वेऽपि देहस्येव अनात्मत्वपरार्थत्वजड-
त्वादिप्रसङ्गो दुर्निवारः । इष्टं च लौकिकवैदिककर्मसु कर्तृतया प्रसिद्धादेहात्तत्क्रिया-
फलभुजः प्रमातुरहंप्रत्ययिनः पृथक्त्वम् । तथेहापि प्रमातुरहमर्थाद्विलक्षणः साक्षी
प्रत्यगात्मेति युक्तम् । नैवं युक्तम् । अहं जानामीति ज्ञातृतया सिद्धयतः प्रत्यगात्मनो
व्यतिरेकेण साक्षिणो नाम प्रकाशमात्रस्य आत्मनोऽनुपलब्धेः । देहेन्द्रियमनःप्राणवि-
ज्ञानेभ्यो ज्ञानाश्रयतया विविच्यमाने प्रतीपमञ्जरीव निर्मासमानोऽहंभाव एव प्रत्यक्तत्वं

of the fruits of the knowing process, a non-agent, a changeless entity, the witness (sākṣin)⁷⁴ and pure luminosity; and that the character of being an agent and the like cannot be the attributes of the self; for, like colour and other qualities, they are knowable; and that if the quality of being an agent belongs to the self, even though the latter is an object of the consciousness of 'I', it will be impossible to avoid the unwelcome conclusion that the quality of being non-soul, of existing for the sake of others, of being non-intelligent and the like would belong to the self even as they belong to the body; and that the distinction of the knower, who is the object of the consciousness of 'I', and who enjoys the results of the activity of the body, from the body, which is well known to be the agent in all secular and sacred duties, is noticed; and that similarly here also it is reasonable to admit that the witnessing inward self is distinct from the knower denoted by the term 'I'. This argument (of yours) is illogical, for, apart from the inward self which shines forth as the knower in the judgment 'I know', no other self which is pure luminosity only and which is termed 'witness' is apprehended. The character of inwardness as attributed to the self (pratyaktva) consists precisely in the quality of being 'I' found in that entity which, by virtue of its being the seat of knowledge, is marked off from the body, senses, mind, vital breath and consciousness, and which, contrary to the procedure of outward objects, proceeds, as it were, and shines

74. According to the Advaitins the ultimate reality, Brahman, which is one, undifferentiated, eternal and self-luminous consciousness (caitanya), is particularised by the antahkaraṇa in two ways. When Brahman is determined by antahkaraṇa as a qualifying attribute (viśeṣaṇa), it is called the jīva; when it is determined by antahkaraṇa as a limiting adjunct only (upādhi), it is called the sākṣin. The antahkaraṇa is inseparably bound up with jīva, but is separable from the sākṣin. The sākṣin performs the office of manifesting the objects known as well as the knowing subject. Since all diversity takes its roots in ajñāna, the sākṣin which illumines objects of experience and the experiencer, is spoken of as the 'witness of ajñāna.'

नाम । साक्षित्वमपि तस्य साक्षाद् ज्ञातृत्वम् । न ह्यजानन् साक्षीति व्यपदिश्यते । सर्वं च प्रकाशमानं ज्ञानेऽहमिति चकाशते प्रकाशत इति प्रत्यात्मसिद्धोऽयमनुभवः अहं जानामि मह्यं प्रकाशत इति । न चाव्याकृतपरिणामभेदस्य अहंकारनाम्नो बुद्धिनाम-
धेयस्य वा ज्ञातृत्वम् । देहस्येव अचेतनत्वपरिणामित्वजडत्वपरार्थत्वादिहेतुभिस्तदनुप-
पत्तेः ।

न च चित्तिच्छायापत्त्या तयोस्तत्संभवः । अचाक्षुषस्य छायादर्शनात् । न च ज्ञातृत्वं चित्तावपि ते वास्तवमस्ति, येन अभिसंपर्कादयः पिण्ड इव औष्ण्यं तत्संप-
र्कादर्थान्तरे ज्ञातृत्वं जायेत ज्ञायेत वा ।

for its own sake.⁷⁵ The character of being a witness as attributed to the same (self) consists in being a direct knower (an eye-witness). Indeed, one who is not knower is not spoken of as a witness. Since all objects that are manifested reveal themselves to the knower who shines forth as 'I', the experience—'I know', 'It presents itself to me'—is shared by every self. The quality of being a knower cannot belong to that modification of unmanifest prakṛti (avyakta) which goes by the name of egoity (ahamkāra), nor to that known as intellect (budhi), for, as in the case of the body, the quality of not being an intelligent entity, the character of liability to change, insentience, the quality of existing for the sake of others and other similar reasons make it impossible (for the quality of being a knower to belong to either egoity or intellect).

Nor can it be said that the quality of being a knower may well belong to these (egoity and intellect) on account of the reflection of intelligence; for, what is not open to visual perception is not observed to have reflection. Besides, on your view, the quality of being a knower does not really belong to consciousness. If that is so (if the quality of being a knower really belongs to consciousness), on account of conjunction with that (consciousness) the quality of being the knower may appear in another substance (say in egoity or intellect) or be apprehended therein; even as heat appears in the iron-ball on account of contact with fire.

75. Outward objects present themselves for the sake of the knowing subject, and not for their own sake. The self, on the contrary, shines for its own sake. Svaamai bhāsamānatvam pratyaktvam. Parasmai bhāsamānatvam parāktvam.

यद्युच्येत ज्ञप्तिमात्रमेव आत्मानमभिव्यञ्जयन्चेतनोऽप्यहङ्कारः स्वाश्रयतया तमभिव्य-
नक्ति । स्वभावो ह्ययं व्यञ्जकानां यदात्मस्थतयाऽभिव्यञ्जयमभिव्यञ्जन्ति, दर्पणजलखण्ड-
मुण्डादय इव मुखमिहिरबिम्बगोत्वादीन् । तत्कृतश्चायं अहं जानामीति भ्रमः । अत
एव खलु अहमुल्लेखविगमे सुषुप्तिमुक्तयोः स्वाभाविकविशदानुभवमात्ररूपेणात्मनः प्रकाशः ।
तत एव च अनात्मत्वमहमर्थस्य । तथा च सौरेरं वचः ।

आत्मनश्चेदहं धर्मो यायान्मुक्तिसुषुप्तयोः ।

यतो नान्वेति तेनायमन्यदीयो भवेदहम् ॥ इति ।

तदिदमसंबद्धम् । यतः—

शान्ताङ्गार इवादित्यमहङ्कारो जडात्मकः ।

स्वयंज्योतिषमात्मानं व्यनक्तीति न युक्तिमत् ॥

आत्मत्वाभिमाताजडानुभवाधीना हि सर्वपदार्थाभिव्यक्तयोऽभिप्रेयन्ते । तादृशम-

You may perhaps maintain the following view : “ In manifesting the self which is none other than pure consciousness, the egoity (ahamkāra), although of non-intelligent nature, manifests the self as residing within itself ; for it is the nature of manifesting entities to reveal the objects that are being manifested as residing in themselves, just as a mirror, a sheet of water, particular instances of a class (say, the short, the hornless cows) and the like reveal the face, the sun, cowness, etc. as dwelling in themselves respectively. The erroneous view that finds expression in the judgment ‘ I know ’ is the result of that (i.e., the ahamkāra being a manifesting entity reveals consciousness as residing within itself ; in other words, ahamkāra appears as the possessor of knowledge. That is why in states of deep sleep and release, there is manifestation of the self in its true nature of pure consciousness only without the revelation of the ‘ I ’. That is also the reason why the quality of being non-soul has to be predicated of the ‘ I ’. Sureśvara’s statement runs to the effect—‘ If the quality of being ‘ I ’ belongs to the self, it must persist in states of deep sleep and release ; for the reason that it does not persist, it must be taken to belong to something else ’.⁷⁶” This (argument) is incoherent.

To say that the ahamkāra which is essentially insentient manifests the self-luminous soul is as illogical as to assert that a spent coal manifests the sun. In fact, the manifestation of all objects is known to depend on consciousness, which is not insentient, and which you consider to be the soul. The assertion—that the

76. *Naiṣkarmya Siddhi*. Bombay Sanskrit and Prākṛit Series. No. 38. Ch. II Stanza 32. p. 70.

शेषार्थसाधकमुदयास्तमयविपरिवृत्तिशून्यप्रकाशस्वभावं तन्तमनुभवं तदधीनसिद्धि-
रचिदहङ्कारोऽभिव्यनक्तीति उपहास्यमिदमात्मविदाम् । किंच ।

व्यङ्क्तृव्यङ्ग्यत्वमन्योन्यं न च स्यात्प्रातिकूल्यतः ।

व्यङ्ग्यत्वेऽननुभूतित्वमात्मनि स्याद्यथा घटे ॥

दिनकरकरव्यङ्ग्यकरतलं तदभिव्यञ्जकं दृष्टमिति मा वोचः । करतलस्य तद्वा-
हुल्यमात्रहेतुत्वात् । तथाभूताश्च दिनकरमरीचयः स्फुटमुपलभ्यन्त इति न करतल-
व्यङ्ग्यत्वम् ।

अपि च केयमभिव्यक्तिः, या अनुभूतिरूपस्य आत्मनः अहङ्काररूपेण क्रियते
इत्युच्यते ? । न तावत्तत्सिद्धिः । तस्य स्वतः सिद्धत्वेनानन्याधीनसिद्धित्वाभ्युपगमात् ।

non-intelligent ahamkāra, which itself depends for its revelation on con-
sciousness, reveals such a consciousness, which manifests all objects
without an exception and which has as its essential nature a luminosity
that knows neither birth nor extinction, nor any other modification—
will be ridiculed by those who have understood the real nature of the
soul.

Further, the relation of being the manifesting and the manifested
entity cannot obtain between ahamkāra and consciousness, for they are
opposite in nature.⁷⁷ If the self is admitted to be capable of being
manifested, it would imply that, like the pot, it would cease to be con-
sciousness. Do not say that the surface of the hand, which is itself mani-
fested by the sun’s rays, is seen to manifest those rays themselves ; for,
the surface of the hand is responsible only for the accumulation of those
rays.⁷⁸ The sun beams thus accumulated are distinctly perceived ;
hence, they are in reality not manifested by the hand at all.

Again, what (we ask) is the nature of this ‘ manifestation ’, which
is said to be effected by the ahamkāra in respect of the self which is
essentially consciousness ? It cannot be said to be the origination of
consciousness ; for, inasmuch as it is self-dependent, it must be admitted
not to depend for its existence on anything other than itself. Nor can it

77. Consciousness and ahamkāra have opposite natures. The former has the
character of manifesting all objects without an exception ; while the latter, being
distinct from consciousness, depends for its manifestation on consciousness.
Hence, it is impossible for ahamkāra to manifest consciousness.

78. This analogy is unsound, because, unlike the sun’s rays, consciousness is
not spread out and cannot be said to be collected by ahamkāra.

सिद्धिः

नापि तद्विषयज्ञानम्, ज्ञानान्तरानुभावत्वात् । अनुभाव्यत्वे हि प्रसङ्गः ।

अत एव न ज्ञानकरणानुग्रहः । स हि वेद्यगतज्ञानोदयप्रतिबन्धकापनयनेन वा दीपेनेव संतप्तनिरसनेन चक्षुषः, वेद्यसन्निकर्षोपाधित्वेन वा व्यक्तिदर्पणादिनेव जातिनिजमुत्पादिवोधकस्य नयनादेः, वेद्यगतकलङ्कक्षालनेन वा शमदमादिनेव परावरा-
त्मतत्त्वज्ञानोपायस्य आगमादेः । न तावदनुभवगतमहङ्कारापनेयमस्ति किञ्चित् ज्ञानो-
दयपरिपन्थि । अज्ञानं तु ज्ञानसमानाश्रयविषयतया न तदुभयभावविरहिणि भवद-
भिमतसाक्षिणि निक्षेपमर्हति । न खलु ज्ञानप्रसक्तिशून्यो घटादिरज्ञानीत्युच्यते ।

be said to be the illumination concerning consciousness, since it is not capable of being apprehended by another consciousness. Indeed, if it is capable of being experienced (by another consciousness), it would imply that it, like pots, etc., would cease to be consciousness.

For the same reason (i.e., that consciousness is not the object of another consciousness), it (manifestation) cannot be said to be the assistance rendered to the instruments of knowledge (concerning consciousness). This assistance may be (of three kinds)—(i) It is either such as results from the removal of those obstacles to the rise of knowledge which reside in the object to be known, like the service rendered to the eye by light through the dispelling of darkness. (ii) Or, it is the help arising from being the means of contact between objects known and the sense-organs, like the help rendered by the particular instance, mirror, etc., to the eye and the like, which reveal respectively general qualities, one's own face, etc. (iii) Or, it is the help which accrues from the removal of the impurities residing in the knower, like the service rendered by (virtues such as) tranquillity, restraint and so on to the śāstras, which are the means of the true knowledge concerning the infinite and the finite self.

(It cannot be the first kind, for) there is nothing resident in consciousness which impedes the origination of knowledge (of consciousness) and which could be removed by ahamkāra. (You cannot reply that ajñāna dwells in consciousness and is dispelled by ahamkāra, for) inasmuch as ignorance would have the same abode and the same object as knowledge, it is impossible to locate it in the witness which you have admitted, and which is devoid of the two qualities (of being the seat of knowledge and its object). Indeed, pots and the like, which are devoid of the possibility of knowledge, are never spoken of as possessing

तथैव न जातुचित् ज्ञातृत्वं ज्ञानमात्रस्येति न तस्याप्यज्ञानं भवेत् । भवदपि तदहङ्का-
रापनेयं नेष्यते । ज्ञानैकनिवर्त्यत्वादज्ञानस्य, तथाभ्युपगमाच्च । ज्ञानं च स्वविषय
एव अज्ञानं निवर्तयति । न च तद्विषयत्वमात्मतयाभिमतस्यानुभवस्येष्ट्यत इति तत्रत्यम-
ज्ञानं न केनचित्कदाचिदुच्छिद्येत । ज्ञानप्रागभावरूपं चाज्ञानं न ज्ञानोत्पत्तिप्रतिबन्धक-
मिति शक्यं व्यपदेश्यम् । भावरूपमज्ञानमनिर्वचनीयं जगदुपादानमित्यादि प्रलापमात्र-
मिति संबन्धनिरूपणे प्रतिपादयिष्यते । अतो न वेद्यदोषापनयनरूपाहङ्कारेणानुभा-
विभ्यक्तिः ।

ignorance. Similarly, for the reason that the quality of being the knower never belongs to pure consciousness, it can never possess ignorance. Even if it is so (i.e., even if consciousness possesses ignorance), it is not admitted that ignorance is removable by ahamkāra, since ignorance can be put an end to only by knowledge, and since it has been so admitted. Besides, knowledge terminates the ignorance which concerns its own object only.⁷⁹ As the quality of being the object of knowledge has not been attributed to consciousness which is regarded as the self, the ignorance residing therein can never be destroyed by anyone at any time. (The ignorance which you speak of as existing in consciousness may be either defined as the antecedent non-existence of knowledge or considered as the indefinable). Ignorance, which is of the nature of the antecedent non-existence of knowledge, cannot be regarded as an obstacle to the rise of knowledge.⁸⁰ That the following statements—Ignorance is positive in nature; (it is) indefinable; (it is) the material cause of the world; and so on—are merely incoherent prattle will be shown in the section dealing with the relation (of the finite soul to the infinite self). Hence, it cannot be said that the manifestation of consciousness is effected by the ahamkāra whose essential nature is the removal of defects in the objects known.

79. When knowledge arises it dispels only that ignorance which centres round the object known. For example, when the shell is known as shell, this apprehension terminates the illusory cognition of that object which existed till then. If knowledge is said to put an end to all ignorance, it would have to be admitted that knowledge of the true nature of the shell dispels every form of illusion. See *Śrūta Prakāśikā*.

80. The antecedent non-existence of an object cannot be regarded as an obstacle to the origination of that object.

नापि तद्विषयज्ञानम्, ज्ञानान्तराननुभाव्यत्वात् । अनुभाव्यत्वे हि घटादिवदननुभूतित्व-
प्रसङ्गः ।

अत एव न ज्ञानकरणानुग्रहः । स हि वेद्यगतज्ञानोदयप्रतिबन्धकापनयनेन
वा दीपेनेव संतमसनिरसनेन चक्षुषः, वेद्यसन्निकर्षोपाधित्वेन वा व्यक्तिदर्पणादिनेव
जातिनिजमुखादिबोधकस्य नयनादेः, वेत्तृगतकलङ्कक्षालनेन वा शमदमादिनेव परावरा-
त्मतत्त्वज्ञानोपायस्य आगमादेः । न तावदनुभवगतमहङ्कारापनेयमस्ति किञ्चित् ज्ञानो-
दयपरिपन्थि । अज्ञानं तु ज्ञानसमानाश्रयविषयतया न तदुभयभावविरहिणि भवद-
भिमतसाक्षिणि निक्षेपमर्हति । न खलु ज्ञानप्रसक्तिशून्यो घटादिरज्ञानीत्युच्यते ।

be said to be the illumination concerning consciousness, since it is not
capable of being apprehended by another consciousness. Indeed, if it is
capable of being experienced (by another consciousness), it would
imply that it, like pots, etc., would cease to be consciousness.

For the same reason (i.e., that consciousness is not the object of
another consciousness), it (manifestation) cannot be said to be the
assistance rendered to the instruments of knowledge (concerning con-
sciousness). This assistance may be (of three kinds)—(i) It is either
such as results from the removal of those obstacles to the rise of know-
ledge which reside in the object to be known, like the service rendered
to the eye by light through the dispelling of darkness. (ii) Or, it is the
help arising from being the means of contact between objects known and
the sense-organs, like the help rendered by the particular instance,
mirror, etc., to the eye and the like, which reveal respectively general
qualities, one's own face, etc. (iii) Or, it is the help which accrues from
the removal of the impurities residing in the knower, like the service
rendered by (virtues such as) tranquillity, restraint and so on to the
śāstras, which are the means of the true knowledge concerning the
infinite and the finite self.

(It cannot be the first kind, for) there is nothing resident in con-
sciousness which impedes the origination of knowledge (of conscious-
ness) and which could be removed by ahamkāra. (You cannot reply
that ajñāna dwells in consciousness and is dispelled by ahamkāra, for)
inasmuch as ignorance would have the same abode and the same object
as knowledge, it is impossible to locate it in the witness which you have
admitted, and which is devoid of the two qualities (of being the seat of
knowledge and its object). Indeed, pots and the like, which are
devoid of the possibility of knowledge, are never spoken of as possessing

तथैव न जातुचित् ज्ञातृत्वं ज्ञानमात्रस्येति न तस्याप्यज्ञानं भवेत् । भवदपि तदहङ्का-
रापनेयं नेष्यते । ज्ञानैकनिवर्त्यत्वादज्ञानस्य, तथाभ्युपगमाच्च । ज्ञानं च स्वविषय
एव अज्ञानं निवर्तयति । न च तद्विषयत्वमात्मतयाभिमतस्यानुभवस्येष्ट इति तत्रत्यम-
ज्ञानं न केनचित्कदाचिदुच्छिद्येत । ज्ञानप्रागभावरूपं चाज्ञानं न ज्ञानोत्पत्तिप्रतिबन्धक-
मिति शक्यं व्यपदेष्टुम् । भावरूपमज्ञानमनिर्वचनीयं जगदुपादानमित्यादि प्रलापमात्र-
मिति संबन्धनिरूपणे प्रतिपादयिष्यते । अतो न वेद्यदोषापनयनरूपाहङ्कारेणानुभावा-
भिव्यक्तिः ।

ignorance. Similarly, for the reason that the quality of being the knower
never belongs to pure consciousness, it can never possess ignorance.
Even if it is so (i.e., even if consciousness possesses ignorance), it is not
admitted that ignorance is removable by ahamkāra, since ignorance can
be put an end to only by knowledge, and since it has been so admitted.
Besides, knowledge terminates the ignorance which concerns its own
object only.⁷⁹ As the quality of being the object of knowledge has not
been attributed to consciousness which is regarded as the self, the
ignorance residing therein can never be destroyed by anyone at any
time. (The ignorance which you speak of as existing in con-
sciousness may be either defined as the antecedent non-exis-
tence of knowledge or considered as the indefinable). Ignor-
ance, which is of the nature of the antecedent non-existence
of knowledge, cannot be regarded as an obstacle to the rise
of knowledge.⁸⁰ That the following statements—Ignorance is
positive in nature; (it is) indefinable; (it is) the material cause of
the world; and so on—are merely incoherent prattle will be shown in
the section dealing with the relation (of the finite soul to the infinite
self). Hence, it cannot be said that the manifestation of consciousness
is effected by the ahamkāra whose essential nature is the removal of
defects in the objects known.

79. When knowledge arises it dispels only that ignorance which centres round
the object known. For example, when the shell is known as shell, this apprehension
terminates the illusory cognition of that object which existed till then. If know-
ledge is said to put an end to all ignorance, it would have to be admitted that
knowledge of the true nature of the shell dispels every form of illusion. See *Śrūta
Prakāśikā*.

80. The antecedent non-existence of an object cannot be regarded as an obsta-
cle to the origination of that object.

करणानामभूमित्वात् तत्संबन्धहेतुता ।
अहमर्थस्य बोद्धत्वात् स तेनैव शोध्यते ॥

न च स्वाश्रयतया अभिव्यक्त्यप्रकाशनमभिव्यक्त्यितुः स्वभावः, प्रदीपादाव-
दर्शनात् । यथावस्थितवस्तुप्रकाशानुकूलस्वभावत्वाच्च ज्ञानतत्साधनतदनुग्राहकाणाम् ।
तच्च स्वतःप्रामाण्यन्यायात् । तदनभ्युपगमे च सर्वत्रानाश्वासप्रसङ्गात् ।

व्यक्तेस्तु जातिराकार एवेति तथाप्रत्यायनम् । न व्यञ्जकत्वप्रयुक्तम्,

(It cannot be the second, for) as consciousness is beyond the reach of the senses (the assistance rendered to the means of knowledge by ahamkāra) cannot consist in being responsible for the contact (of the objects known with the senses). (Nor can it be the third, for) as the entity known as 'I' is (in your view) the knower, it cannot be cleansed of its impurities by itself.

Nor can it be said that it is the nature of the manifesting entity to reveal the manifested objects as residing within itself; because such a nature is not observed in the lamp and the like (which manifest things without exhibiting them as residing in themselves); and because, knowledge, the means thereof and whatever is auxiliary to them have the nature of promoting the manifestation of things as they really are. That knowledge, the means thereof, and whatever is auxiliary to them have the aforesaid nature follows from the doctrine of the self-validity of knowledge (svataḥprāmāṇya)⁸¹; and if this is not admitted, there would ensue lack of certainty in anything.

(With regard to the analogy of the particular instance, vyakti, cited by you), such a manifestation (of the universal as residing in the particular instances) is due to the fact that the universal is only the character met with in the instances, and not the fact of those instances being the manifesting entities, as it has already been shown (that the case of

81. On the question of the validity and invalidity of knowledge four views have been held. According to the Sāṅkhyas the validity and invalidity of knowledge are both inherent in it. The Nyāya-vaiśeṣika takes the opposite position and contends that both the validity and invalidity of knowledge depend on external factors. On this view, knowledge, in itself, is neither true nor false; it is rendered valid or invalid by outside factors. The Buddhists take invalidity to be intrinsic to knowledge, and validity extrinsic. The Mīmāṃsakas and Vedāntins, while admitting the Nyāya-vaiśeṣika view in regard to invalidity of knowledge, maintain that validity is inherent in knowledge.

उक्तादेव व्यभिचारात् । दर्पणादिस्तु नायनमहःप्रतिफलनलक्षणदोषहेतुर्नाभिव्यञ्जको वदनादेः । व्यञ्जकस्त्वाल्लोकादिरेव । व्यञ्जकत्वेऽपि प्रतीपगमनदोषप्रयुक्तस्तत्रान्य-
थावभासः । न चेह तथाहमर्थस्य तादृशदोषापादकत्वं स्वभावः । तथासति सर्व-
स्यापि प्रत्यक्षादेरप्रामाण्यप्रसङ्गात् न किं चित्तथ्यं स्यात् । तस्मात् ज्ञातृतया सिद्धयन्-
हमर्थ एव प्रत्यगात्मा न ज्ञप्तिमात्रम् ।

यत्तु सुषुप्तिमुत्तयोर्ज्ञप्तिमात्रतया स्फुरणम्, अहमिति तु न प्रतिभातीति ।
तत्र सुषुप्तौ तथावस्थितिः पुरस्तादेव निरस्ता । अहमित्येकरूपेण आ प्रबोधात्तत्राप्यात्मनः

the lamp flame) falsifies the view (that all manifesting entities reveal objects as taking their abode in themselves). (As for the analogy of the mirror, etc.) mirror and similar objects are only responsible for the mistake, namely, the reflecting of the ocular rays, and are not manifesting agents of faces and other objects.⁸² The real manifesting agents, however, are only light and the like. Although light is the real manifesting agent the false impression (of the face appearing within the mirror) is the outcome of the mistake of the deflection (of the ocular rays). But here, the capacity to produce a similar mistake (in the self-luminous consciousness) does not belong to the entity known as 'I'. If it is so, (i.e. if that capacity belonged to the 'I'), then perception and other forms of knowledge would lose their validity; and hence, nothing would be true. Therefore, what constitutes the inward self is not pure consciousness, but the entity 'I,' which reveals itself as a knower.

As regards your contention that in deep sleep and release the self manifests itself only as mere consciousness and does not appear as 'I', the belief that in deep sleep such a condition of consciousness (i.e., consciousness shining forth without an object or a substrate) prevails has already been refuted. Since even in deep sleep the self does present itself up to the time of waking only in the form of the 'I', (the manifestation of the 'I' cannot be said to be absent in that state).⁸³ If

82. The general proposition 'all manifesting entities reveal their objects as residing within themselves' was sought to be established on the strength of instances such as mirror, etc. In refuting this view, it was first pointed out that there are instances against this generalisation. Now it is shown that even the instances cited by the opponent do not prove his case. The mirror for example, is responsible only for reflecting the ocular rays, and not for manifesting the face. The real manifesting agents are light and the like.

83. Ekarūpeṇa also suggests that the presentation of the self as 'I' is common to everybody.

स्फुरणात् । यदि परं परागर्थाननुभवात् तमोगुणाभिभवाच्च न विविच्य स्फुटं चकास्ति भवदभिमतानुभूतिरपि तदानीं तथैव हि प्रथत इति वाच्यम् । 'नाहमहम्, नाप्यर्थान्तरम्, अपि तु अनुभूतिमात्रमज्ञानसाक्षितयाऽवतिष्ठत' इत्येवंविधं स्वापसमयभवमनुभवं न हिसुप्तो-
त्थितः कश्चित् पराश्वशङ्खपल्लवचरः ।

एतावन्तं कालं न किञ्चिदहमवेदिषमिति परामर्शनादेव तथात्वं लभ्यत इति चेत्, कथमिव ? । न किञ्चिदिति निर्देशादिति चेत्, नन्वेवमनुभूतिप्रतिभासोऽपि प्रत्याख्यातः स्यात् । अपि च सुषुप्तिसमयसिद्धमात्मानमहमिति परामृश्य न किञ्चदवेदिषमिति तस्य वेदने प्रतिषिध्यमाने तात्कालिकीं वित्तिसिद्धिं अहमर्थस्य चासिद्धिमभिधानोऽनुभवविरो-
धमपि न जानाति देवानां प्रियः । निर्विषया निराश्रया च वित्तिर्नास्तीत्युक्तमेव ।

it is said that on account of the absence of consciousness of external objects, and prevalence of darkness (tamas) in deep sleep, the 'I' does not present itself clearly and distinctly, (we reply that) it must be admitted that even the consciousness assumed by you does not, likewise, present itself clearly and distinctly in that state. No one who has risen from deep sleep is found to recall the experience which occurred to him during sleep, namely, 'I am not I (ahamkāra); nor am I anything else (the knower or the known); but I am only pure consciousness and I stand as the witness of ignorance.'

If you were to say that from the reflection 'For so long a time I knew nothing at all' such a position (namely, that in deep sleep there is presentation of pure consciousness only) is made out, (we ask) how (is it made out)? (If your reply is that) this follows from the expression 'nothing at all' (occurring in the aforesaid reflection, we rejoin) in that case, the manifestation of consciousness also would have to be denied. While in the judgment, 'I knew nothing at all,' the word 'I' denotes clearly the self which is manifested in deep sleep and the words 'knew nothing at all' negative (all) knowledge on the part of that 'I', the fool who maintains (that the self-same judgment establishes) that in deep sleep there is manifestation of pure consciousness along with the absence of the presentation of 'I' does not know its contradiction to experience. It has already been said that there can be no knowledge without an object and without a substrate.

ननु मामप्यहं न ज्ञातवान् प्रसुप्त इत्यस्ति हि प्रबोधे प्रत्ययः । सत्यम् । स तु वर्णाश्रमादिविशिष्टतया प्रबोधसमयसंवेद्यमानं देहिनं मामित्यादाय स्वाप्ययावस्थाप्रसिद्धा-
विशदस्वानुभवैकतानाहमर्थस्य तेन रूपेणाज्ञातत्वं प्रज्ञापयति । न पुनर्ज्ञस्वभावस्य अह-
मर्थस्यापि । एवमिव खल्वयमनुभवः, "अत्र सुप्तोऽहमीदृशश्चेति एवं मामपि न ज्ञात-
वानहम्" इति ।

अपि च आत्मा सुषुप्तावज्ञानसाक्षित्वेनास्ते इति हि यौष्माकी स्थितिः । साक्षित्वं च साक्षात् ज्ञातृत्वमित्युक्तम् । स चायं जानामीति प्रतिभासमानोऽस्मदर्थ एवेति कथमिव तदानीमहमर्थो न प्रथेत । स्वस्मै स्वयंप्रकाशमानोऽहमित्येव प्रकाशत इति ।

यत्तु मुक्तावहमर्थो नानुवर्तत इति । तद् वार्तम् ; यतस्तथा सति वैनाशिकदर्शन इव आत्मनाश एवापवर्गः प्रकारान्तरेण प्रतिज्ञातः स्यात् । नो खल्वहमिति धर्ममात्रम्,

You may ask : Do we not, on waking, get the knowledge 'I, who slept, was not even conscious of my self' ? (Does it not indicate that in sleep there is absence of the manifestation of 'I'?). True, (we reply); that knowledge (namely, the reflection 'I was not even conscious of myself') after indicating by the word 'myself' the self, which, in the waking state, is understood as being characterised by caste, stage in life, etc., shows that the 'I', which shines forth in sleep, which is not clearly experienced, and which manifests itself for its own sake, is not known in such a manner (i.e. as characterised by caste, stage in life, etc.); but it does not show that the 'I' whose essential nature is to be the knower, is itself not apprehended. Indeed, our reflection is to the effect : 'I did not even know myself as having slept in a particular place and as possessing certain characteristics.'

Moreover, your position indeed is this, namely, that in deep sleep the self exists as the witness of ignorance. And it has already been said that to be a witness is to be a direct knower. This witness too is nothing but the 'I' which is apprehended in the judgment 'I know'; and how then, could this 'I' not be apprehended in the state of sleep ? That which illumines itself for its own sake appears only as the 'I'; hence, it follows that the self, which shines forth even in sleep and other similar states, appears only as the 'I'.

To maintain that the 'I' does not persist in the state of liberation is unsound ; for, it amounts to asserting, as is done in Buddhism, in a somewhat different way, that release consists only in the annihilation of the self. The 'I' is not a mere attribute of the self ; if it were an

येन तदपगमेऽप्यविद्यानिवृत्त्याभिवात्मनः स्वरूपेणावतिष्ठत इत्युच्यते । अहमित्येव हि तस्य स्वरूपम् । ज्ञानमपि हि तद्धर्मत्वेन तस्यैव प्रकाशते, ज्ञानं मे जातमिति । का कथा पुनरर्थान्तरस्यात्मत्वे ।

अन्यच्च यः सांसारिकदुःखैर्दुःखित्वेनात्मानं तत्त्वतो भ्रान्त्या वा प्रत्येति दुःखग्रह-मिति, स सर्वमिदमनिष्टजातं कथमहमपुनरुदयमपनुद्य अव्याकुलं स्वस्थो मूयासमिति संजातमुमुक्षुः तत्साधने प्रवर्तते । स यदि साधनानुष्ठानादहमेव न भविष्यामीत्यवगच्छति, अपगच्छेदसौ मोक्षकथाप्रसङ्गादपि । ततश्चासंभवदधिकारितया सर्व एव वेदान्तविधयः सर्वाणि च मोक्षशास्त्राणि प्रामाण्यादेव प्रच्यवेरन् । अहमुपलक्षितः प्रकाशोऽप-वर्गेऽवस्थास्यत इति चेत्, किमतः ? । न हि मयि नष्टेऽपि कोऽपि प्रकाशः स्थास्यतीति

attribute, it may be said that even after its destruction the self exists in its true being, as it persists on the dissolution of ignorance. In fact, the true being of the self is nothing but the 'I'; and knowledge appears to the self as an attribute of the latter, as is evident from the judgment 'knowledge has arisen in me'. (It has been shown that even granting your position that the self exists as a witness of ignorance in deep sleep, it does not follow that the 'I' disappears in that state.) There is no need to argue the point, when something other than the witnessing consciousness (sākṣicaitanya) is the self.

Moreover, he who considers himself to be afflicted by the miseries of worldly existence, whether in truth or in error, and thinks 'I am suffering pain', and in whom the desire for release has arisen, making him reflect: 'How may I become tranquil and blissful, setting aside this entire collection of miseries?', he alone enters upon the means for realisation. If (on the other hand) he were to realise 'I should be no more if I practised the means (for the attainment of release)', he would run away at the very mention of the topic of release. As a consequence of this, since there can be none possessing the requisite qualifications (to enter upon the study of the scriptures), the entire upanishadic texts and all the śāstras relating to liberation would lose their validity.⁸⁴

If you were to say that mere luminosity which is indicated by the word 'I' would persist in the state of release, (we ask) 'Of what use is it?' For, no sensible person would exert himself under the influence

84. The validity of scriptures consists in their generating true knowledge in the mind of the aspirant. If there were no qualified pupils to study them, they would lose their validity.

कश्चित्प्रेक्षावान् प्रयस्यति ।

एतेन तदपि परास्तम्—अस्मत्प्रत्यये योऽनिदमंशश्चिदेकरसः प्रकाशः स आत्मा । तस्मिन्स्तद्वलनिर्भासिततया लक्षणतो युष्मदर्थ एव अहं जानामीति सिद्धयर्थ इति । प्रत्यक्षविरोधात् । अहं जानामीति सिद्धयर्थेतनो युष्मदर्थ इति माता बन्ध्ये-तिवद्व्याहृतार्थं वचः । न चासावन्याधीनावमासः । चैतन्यस्वभावतया स्वयंज्योति-ष्टात् ।

of the idea 'Though I shall perish, there will remain some luminosity.'⁸⁵

For the same reason, even the contention—that in self-consciousness (which expresses itself in the judgment 'I know') that element which is not referred to by the word 'this' (i.e. the non-objective element, pratyagartha), which has consciousness for its sole essence, and which is luminosity, is the self; and that in the same self-consciousness what has to be considered as objective element (yuṣmadartha, parāgartha), for the reason that it depends for its manifestation on consciousness, is the 'I' referred to in the judgment 'I know'—stands condemned.⁸⁶ It is also contradicted by direct perception, (for the judgment 'I know' implies that knowledge is an attribute and that the 'I' is its possessor, and that knowledge is an objective element (parāk), while the 'I' is a non-objective element, pratyak).

The statement that the intelligent entity referred to in the judgment 'I know' is an objective element (parāk) is as self-contradictory in its meaning as the assertion 'My mother is a barren woman'. Nor can it be said that this intelligent entity depends on something else for its manifestation (and is hence parāk, i.e., non-soul), for, being of the nature of consciousness, it is self-luminous.

85. Cf. Śrī Bhāṣya.

Nirastākhiladuḥkham anantānandabhāk svarāt |
Bhaveyamiti mokṣārthī śrvaṇādaḥ pravartate ||
Ahamarthavināśaścet mokṣa ityadhyavasyati |
Apasarpedasau mokṣakathāprastāvagandhataḥ ||
Mayi naṣṭepi mattonyā kācit jñaptiravasthitā |
Iti tatprāptaye yatnaḥ kasyāpi na bhaviṣyati ||

86. Two arguments of the opponent are here referred to. The first seeks to prove that consciousness is the soul, for the reason that it is a non-objective element; that it is non-objective is inferable from its being self-luminous; its self-luminous nature follows from its being consciousness. The second tries to establish that the entity 'I' is not the self, because it is an objective element. That the 'I' is an objective element is shown by its dependence on consciousness for its manifestation. Its dependence on consciousness for its manifestation is inferred from its being distinct from consciousness.

प्रकाशश्च प्रकाशत्वादेव कस्यचित् भवेत् दीपादिप्रकाशवदिति नात्मा भवितुमर्हति । अतो ज्ञातृतया अहमिति सिद्धयर्थ एव आत्मा ।

स च मुक्तावप्यात्मनेऽहमित्येव प्रकाशते । स्वस्मै प्रकाशमानत्वात् । यो यः स्वस्मै प्रकाशते स सर्वोऽहमित्येव प्रकाशमानो दृष्टः । यथा तथाप्रकाशमानत्वेनोभय-

बादिसंमतः संसार्यात्मा । यः पुनरहमिति न चकास्ति नासौ स्वस्मै प्रकाशते, यथा बटादिः । प्रकाशते चायं मुक्तात्मा । तस्मात्सोऽहमित्येव प्रकाशते ।

न चैवं प्रकाशमानत्वे मुक्तस्याज्ञानित्वसंसारित्वादिप्रसङ्गः आपादनीयः । मुक्तत्वविरोधात् अतदुपाधित्वाच्च तत्प्रत्ययस्य । न ज्ञानोपाधिरहंप्रत्ययः ।

Since luminosity, by the very fact of its being luminosity, must necessarily pertain to something or other, as in the case of the luminosity of the pot, etc., mere luminosity cannot be the soul. Therefore, that entity alone which shines forth as the knower and termed 'I' is the self.

This self, even in the state of release, shines to itself only as the 'I', for it shines for its own sake. (There is the general principle that) whatever shines for its own sake is found to shine only as the 'I'; for example, the self which is subject to the round of births and deaths is admitted by both the contending parties to shine in such a manner. Whatever does not appear as 'I' does not shine for its own sake; as pots and the like. The released soul does appear for its own sake. Therefore, it appears as the 'I' and in no other way.

It cannot be said that if the released self appears in such a manner (i.e., as the 'I') it would imply that it is involved in ignorance and samsāra; for, this would contradict the nature of being a released soul; and moreover, the consciousness of 'I' does not have for its cause the quality of being subject to ignorance and samsāra. Since even persons

ब्रह्मात्मापरोक्षज्ञानक्षपितनिरवशेषाविद्यानामपि वामदेवादीनां तत्प्रत्ययदर्शनात् । श्रूयते हि "तद्वैतत्पश्यन्नृषिर्वाग्देवः प्रतिपेदे अहं मनुरभवं सूर्यश्च अहमेव च वर्तामि भविष्यामि" इत्यादि ॥ तथा कथंचिदप्यविद्यादिक्लेशैर्लेशतोऽपि जातुचिदपरामृष्टस्य परमपुरुषस्याहमित्यात्मपरामर्शः प्रज्ञायते, 'हन्ताहमिमास्तिस्रो देवताः, बहु स्यां प्रजायेय, स ईक्षत लोका-न्नु सृजा' इति । तथा

यस्मात् क्षरमतीतोऽहमक्षरादपि चोत्तमः ।
अतोऽस्मि लोके वेदे च प्रथितः पुरुषोत्तमः ॥
तेषामहं समुद्धर्ता, अहं बीजप्रदः पिता ।
वेदाहं समतीतानि ॥

इत्यादिभिः ।

like Vāmadeva, who have had their ignorance destroyed in its entirety by means of the direct realisation of Brahman as the self of all, are found to have the consciousness of 'I', the latter cannot, in fact, have ignorance for its cause. The scriptures say—'Seeing this, the sage Vāmadeva understood: I was Manu and the Sun.'⁸⁷ 'I alone exist and shall exist.'⁸⁸ From the following passages and others like them it is clear that a similar reference to Himself as 'I' is noticed even in the case of the Highest Person, who is not afflicted even in the least by ignorance and other evils in any manner and at any time. (The following scriptural passages are found) 'Let me enter these three divinities (i.e., fire, water and food)';⁸⁹ 'May I become manifested and be born';⁹⁰ 'He thought: "May I create the worlds"'⁹¹ (It is said in the Gītā) 'Since I transcend the destructible (kṣara) and am also superior even to the Indestructible (akṣara), therefore, I am proclaimed in the world and in the Veda as the Highest Person';⁹² 'I am he who lifts them ...';⁹³ 'I am the giver of the seed, the father';⁹⁴ 'I know the things past';⁹⁵ and so on.

87. Brh. Up. I. iv. 10.

88. Atha. Up. I. i.

89. Chānd. Up. VI. iii. 2.

90. Chānd. Up. VI. ii. 3.

91. At. Up. I. i.

92. Bh. Gītā. XV. 18.

93. Bh. Gītā. XII. 7.

94. Bh. Gītā. XIV. 4.

95. Bh. Gītā. XII. 26.

एवं च साक्षादहमर्थादात्मनो विलक्षणेऽपि देहे येनाव्यक्तिकपरिणाममेवेनाह-
मिति भ्रमः तदभिप्रायोऽहंकारस्य क्षेत्रान्तर्भावोपदेशः भगवतः 'महामूतान्यहंकारः' इति।
बहुमन्तव्यजनावधीरणहेतुश्चासौ गर्वापरपर्यायस्तत्र तत्र शास्त्रेषु प्रायशो हेयतयोपदिश्यते।
तस्मादहमिति मतिर्बाधकापेक्षा साक्षादात्मगोचरैव। आनात्मनि तु शरीरे भवन्ती
अविद्येति युक्तम्। उक्तं च—

‘भूयतां चाध्यविद्यायाः स्वरूपं कुलनन्दन।

अनात्मन्यात्मबुद्धिर्या’—इति

महर्षिणा वसिष्ठनन्दनेन ॥ न च ज्ञप्तिमात्रप्रतिभासः कस्यचिच्छरीरेऽस्ति, येन
तन्मात्रात्मवादिनोऽप्यनात्मबुद्धिरुपपद्येत।

(It may be asked) 'If the 'I' really constituted the self, how could the Highest Lord have included ahamkāra among the elements that go to make up the material embodiment of the self (kṣetra), and how could he have classed it among the evils to be rejected?' (Our reply is) the teaching of the Highest Lord found in the verse (of the Gītā XV. 5) commencing with the words 'The great elements, the ahamkāra . . .', to the effect that ahamkāra is to be included among the objects that constitute the material embodiment of the self (kṣetra) really refers only to that modification of the unmanifest prakṛti by whose instrumentality the body, which is distinct from the real self denoted by the word 'I', is erroneously taken to be 'I'. And this ahamkāra, which is responsible for our slighting persons who are worthy of respect, and which is termed conceit, is often referred to by śāstras as meriting rejection. Therefore, it is proper to conclude that the consciousness of 'I,' which has nothing to contradict it, has really the self for its object; and that, on the other hand, the consciousness of 'I' which arises in regard to the body that is not the soul, is ignorance. (In agreement with this) it has been said by (Parāśara) the grandson of Vasiṣṭha: 'O thou! the giver of delight to thy family! Hear from me the essential nature of ignorance; it is the consideration of the not-self as the self.'⁹⁷ (Our position squares well with Parāśara's definition of ignorance; but yours does not; for,) the illusory apprehension of the body as pure consciousness occurs to no one. Even to you, who maintain that pure consciousness alone is the self, the consideration of the non-soul as the self will be possible, if there is the illusory apprehension of the body as pure consciousness. As is proved by perception

अतः प्रत्यक्षसिद्धत्वादुक्तन्यायागमाम्बयात्।

अविद्यायोगतश्चात्मा ज्ञाताऽहमिति भासते ॥

यदुक्तम् अजडत्वाद्विचित्रेवात्मेति; तत्रेदं वाच्यम्—किमिदमजडत्वं नामेति।
यद्युच्येत सदपि यत् न प्रकाशते तज्जडं तद्विपरीतमव्याभिचरितप्रकाशसत्ताकमजडम्
इति; तथासति सुखादिभिर्व्यभिचारी हेतुः। न खलु सुखदुःखेच्छादयो विद्यमाना
अपि कदाचिदनवभासमाना भवन्ति। स्वसत्ताप्रयुक्तप्रकाशत्वमपि दीपादिभिरनैका-
न्तिकम्। ज्ञानव्यतिरिक्तप्रकाशानङ्गीकाराच्चासिद्धता विरुद्धता च। यदि मतम्
अव्यभिचरितप्रकाशोऽपि सुखादिरन्यस्मै प्रकाशत इति घट इव जडतां नातिवर्तते तेना-
(the judgment 'I know' establishes knowledge to be an attribute and the 'I' to be its possessor), and as it results from the application of the aforesaid reasons (such as, if pure consciousness alone persisted and the 'I' disappeared in the state of release, no one would strive for realisation), and as scriptural texts (declare that even released souls refer to themselves as 'I'), and as there is the possibility of ignorance (only on our position), it follows that the self which is the knower presents itself as the 'I'.

With regard to (your) assertion that consciousness itself is the self, because it (consciousness) is not non-intelligent, it has to be pointed out (that you must explain) what you understand by 'not non-intelligence'. If it is replied that a non-intelligent entity is that which may (at times) fail to manifest itself, even though it be existent, and that an intelligent entity is that which has an opposite nature, namely, an existence invariably associated with manifestation (we point out that) since pleasure and the like are not considered to be soul even though they are not non-intelligent, your reason is fallacious. Indeed, when pleasure, pain, desire and the like exist at all they never fail to present themselves. (If an intelligent entity is defined as) that which depends for its manifestation on its own existence, (we point out that) since the lamp and the like are not taken to be the soul even though they depend for their manifestation on their own existence, your reason is fallacious. Besides, as a manifestation different from consciousness is not admitted (by you) your hetu (reason, namely, intelligence occurring in the argument that consciousness itself is the soul, because it is intelligent) becomes unestablished (i.e. commits the fallacy of svarūpāsiddha); it also contradicts your theory (that consciousness is attributeless). If it is your view that pleasure and the like, although invariably associated with manifestation, are bound to be non-intelligent, for the reason that, like the pot, they manifest themselves for the sake of others, and are in consequence, to be considered as not-soul, (we ask

नास्मेति, ज्ञानं वा किं स्वस्मै प्रकाशते । अन्यस्यैव हि तदपि जानतोऽहमर्थस्य प्रयते अहं जानामीति अहंमुखीतिवत् । तेन स्वस्मै प्रकाशमानत्वमभिप्रेत्य प्रयुज्यमानो जडत्वहेतुरसिद्धः संविदि । अतः सत्तयैव स्वमात्मनं प्रति सिद्धयन्नजडोऽहमर्थ एवात्मा । तत्सम्बन्धायत्ता तु ज्ञानस्यापि प्रकाशता । अत एव हि स्वाश्रयचेतनं प्रति प्रकटता इतरं प्रत्यप्रकटता च ज्ञानस्य सुखदुःखादेरिव । न चैवमात्मान्तरसम्बन्धमथीन्तरं वापेक्षायामात्मात्मने प्रकाशते । एतच्चानन्तरमेवोपपादयिष्यते । न च ज्ञानेन सहोपलम्भनियमोऽहमर्थस्यार्थान्तरं वारयति । ज्ञानस्यापि तथात्वप्रसङ्गात्, तदपि हि तेन नियतेन सहोपलम्भमित्यहमर्थान्तरं मिथ्यारूपमेवापद्येत । असिद्धश्च संविद्विशेषैः सहोपलम्भनियमः ; प्रत्येकं व्यभिचारदर्शनात् ।

in reply,) Do you mean, then to suggest that knowledge too manifests itself for the sake of something other than itself, namely, the knower, the 'I'? The judgment 'I know' establishes this, even as the judgment 'I am having pleasure' (proves that pleasure presents itself for the sake of the 'I'). Therefore, the quality of being not non-intelligent (ajāṭva), taken in the sense of the quality of manifesting for one's own sake, does not exist (asiddha) in consciousness (which is the minor term or pakṣa in your argument). Hence, it is only the entity known as 'I', which is not non-intelligent, and which manifests itself for its own sake by its own existence, that constitutes the self. The luminosity of consciousness itself is dependent on its connection with the self. That is why knowledge, as in the case of pleasure, pain and the like, manifests itself to that intelligent person who is its own substrate, and not to anybody else. The self, on the contrary, does not present itself for its own sake by depending on its connection with some other soul or some other entity. This will be explained presently.

You cannot maintain that the invariable association of the manifestation of 'I' with consciousness prevents us from taking the 'I' to be a distinct entity ; for, on the same count, it might as well follow that consciousness itself cannot be taken to be a distinct entity. Since it (consciousness) invariably manifests itself along with the 'I', it would follow that consciousness also is not an entity different from 'I' and that it is unreal.

Moreover, since in each item of knowledge we meet with the absence of the invariable association of the manifestation of 'I', the invariable manifestation of 'I' with any particular item of knowledge does not exist.

NYAYAKULISA

EDITED WITH INTRODUCTION AND NOTES

By

R. RAMANUJACHARI

AND

K. SRINIVASACHARI

॥ श्रीः ॥

स्वतःप्रामाण्यवर्णनवादो द्वितीयः ।



¹वेदप्रामाण्यसिद्धयर्थं स्वतःप्रामाण्यनिर्णयम् ।

²अन्यथाख्यातिपक्षस्था वर्णयन्ति कुमारिकाः ॥

अत्र किल वादिविप्रतिपत्त्या संशयः । ज्ञानानां हि प्रामाण्याप्रामाण्ये द्वे अपि स्वत इति साङ्ख्याः । द्वे अपि परत इति नैयायिकाः । अप्रामाण्यं स्वतः, प्रामाण्यं परत इति बौद्धाः । प्रामाण्यं स्वतः, अप्रामाण्यं परत इति मीमांसकाः । तत्र तावत्

स्वामाविकत्वमुभयोर्विरोधात्प्रपद्यते ।

³कथं अन्यानपेक्षस्य विपरीतात्मसंभवः ॥

तस्मात्

अन्वयव्यतिरेकाभ्यां साध्यसाधनता यदि ।

तायेव खलु दृश्येते गुणदोषौ प्रति द्वयोः ॥

1. प्रामाण्यस्य गुणाधीनत्वरूपपरतत्वे वेदस्यापौरुषेयतया तस्मिन्नासौ कस्वरूपगुणात्संभवेन तज्जन्यज्ञानस्य प्रामाण्यं न सिद्ध्येदिति भावः ।

2. अन्यथाख्यातिशब्दताप्रमाणज्ञानविशेषाङ्गीकर्तुमतेनापि प्रामाण्यस्य स्वतस्त्वसिद्धावप्रामाण्यमेवानभ्युपगच्छतो ज्ञानसामान्यस्य याथार्थ्यवादिनो वेदान्तिनः स्वस्य निष्प्रतिपक्षप्रामाण्यस्य स्वतस्त्वं सिद्धयतीत्याशयेनात्रान्यथाख्यात्यङ्गीकर्तुं कुमारिलपुरस्कार इति ध्येयम् ॥

3. स्वगतधर्मविषये कारणनिरपेक्षस्य ज्ञानस्य कथं परस्परविरुद्धप्रामाण्याप्रामाण्यरूपत्वभावसंभवः । कारणसापेक्षस्य तु कारणवैचित्र्यात् स सम्भवेदपीति भावः । आत्मशब्दोऽत्र स्वभाववाची ।

यस्य यत्कार्यं तस्य तदन्वयव्यतिरेकावेव तत्त्वे प्रमाणम् । गुणदोषान्वय-
व्यतिरेकानुविधायिनी प्रामाण्याप्रामाण्ये इति ते अपि तत्कारणके निश्चीयेते । न च
१ गुणेन प्रामाण्यस्यान्वयव्यतिरेकावन्यथासिद्धौ दोषनिरासार्थत्वादिति वाच्यम् । दोष-
स्यापि^२ गुणनिरासार्थतयान्यथासिद्धेरप्रामाण्यहेतुत्वानुपपत्तिप्रसङ्गात् । ३ न चैवम-
स्त्विति वाच्यम् । ४ तत्राप्यन्वयव्यतिरेकयोस्तुल्यत्वात् । गुणनिरासार्थो दोषस्यान्वय
इति चेत् ; विपरिवर्तप्रसङ्गात्^५ । ६ नन्वप्रामाण्यं स्वतः ७ दृष्टव्यभिचारस्य निश्चयानुपपत्तेरिति
चेत् ; किमेवं निश्चयो नास्तीति विपरीतं^८ सिद्धयति । तदा हि संशय एव स्यात् ।
तदेवाप्रामाण्यमिति चेन्न । भिन्नविषयत्वात् । प्रामाण्याप्रामाण्यगोचरो हि संशयः
अर्थगोचरे ते इति । ततोऽर्थगोचराप्रामाण्यनिश्चयो नोपपद्यते । ९ तस्मादन्वयव्यति-
रेकाभ्यां गुणदोषयोः प्रामाण्याप्रामाण्यहेतुत्वे सिद्धे । नन्वेवं निःस्वभावत्वं ज्ञानस्य
प्रसज्यत इति चेन्न । विषयपरिच्छेदस्वभावत्वात् । यथार्थपरिच्छेदः प्रामाण्यम् ।
अयथार्थपरिच्छेदोऽप्रामाण्यम् । कथं तदुभयपरित्यागे अर्थपरिच्छेदसिद्धिरिति चेन्न ।
अपरित्याज्यत्वानुपगमात् । तयोस्साधारणमेव अर्थपरिच्छेदं ब्रूमः । शिशुपापला-
शादिष्विव वृक्षत्वम् । न चासाधारणरूपातिरिक्तमत्र नोपलभामह इति वाच्यम् ।
यद्व्यावृत्तौ यन्न व्यावर्तते तत्ततोऽर्थान्तरमिति निष्कर्षात् । प्रामाण्याप्रामाण्ययोर्मिथो

१. नैयायिकाभिमतं प्रामाण्यस्य परतत्त्वं मीमांसको दूषयति—गुणेनेत्यादिना । अतः
प्रामाण्यस्य स्वतत्त्वमेव युक्तमिति भावः ।

२. नैयायिकः प्रतिवदति—दोषस्यापीत्यादिना ।
३. अप्रामाण्यस्य स्वतत्त्वप्रसङ्गमिष्टापत्या बौद्धः परिहरति—न चैवमिति ।
४. नैयायिकः प्रतिवदति—तत्रापीति । गुणप्रामाण्यविषय इव दोषाप्रामाण्यविषयेऽपीत्यर्थः ।
५. तथाच मीमांसकमतमेव किमिति नाङ्गीक्रियत इति भावः ।
६. बौद्ध एव विपरिवर्तं व्यावर्तयन् युक्तयन्तरेण स्वपक्षं साधयति—नन्वित्यादिना ।
७. दृष्टव्यभिचारस्य पुरुषस्य प्रामाण्यनिश्चयानुपपत्तेरिति भावः ।
८. विपरीतं—अप्रामाण्यम् ।
९. नैयायिकः स्वपक्षसाधनमुपसंहरति—तस्मादित्यादिना । सिद्धे इति द्विवचनान्तम् ।

व्यावृत्तावपि १ अर्थप्रकाशात्मनो ज्ञानरूपस्योभयत्रोपलब्धेः । ननु च गुणात्प्रामाण्या-
भ्युपगमेऽनवस्थानं स्यात् । नैवम् । इन्द्रियादिवद्गुणस्यापि सत्तया कारणत्वोपपत्तेः ।
२ गुणज्ञानं तु प्रामाण्यकारणमिति नाभ्युपगच्छामः । प्रामाण्यनिश्चये तु ३ तस्यापि
हेतुत्वमस्ति । तर्हि तत्रानवस्थेति चेन्न । तत्रावयोस्समानत्वात् । स्वतः प्रामाण्य-
वादिनोऽपि कौमारिल्यस्य न तावत्त्वेन स्वप्रामाण्यनिश्चय इति स्वज्ञापकादास्थेयम् ।
तस्यापि तथेति । कथं तर्हि परिष्ठानम् ४ । स्वपरनिर्वाहकेणानुमानेन^५ । अनुव्यवसाया-
दिकं हि (अनुमानं हि) विषयविषयिणोरात्मव्यवसाययोः (व्यवसायानुव्यवसाययोः)
६ रव्यभिचारमेकहेलया दर्शयतीति नापरापेक्षा । ७ एवमपि चेदनाश्वासः, अव्यभिचारः
(न ८ व्यभिचारः) कचिदपि स्यात् । तथा च कथं संशयः । अप्रसिद्धशिरस्कस्य
तस्यायोगात् । एवं प्रामाण्यनिश्चयो गुणसंवादज्ञानायत्तः । न च संवादेऽप्यनवस्था ।
नानाजातीयबहुसामग्रीसमत्वस्थ^९ कचिदपि व्यभिचाराभावत् । एवमर्थक्रियाज्ञान-
विशेषोऽपि द्रष्टव्यः । गुणसंवादार्थक्रियाज्ञानानि स्वप्नेऽपि भवन्तीति चेन्न । स्वप्नजा-
गरयोर्मिथः प्रतिसन्धानाप्रतिसन्धानाभ्यां विशेषस्य स्वध्यवसानत्वात् । तथाहि—
स्वप्नदशायां कस्याश्चिदनुभूता विशेषास्स्वप्नदशान्तरे व्यावर्तन्ते । जागरद-
शायां तु मिथोऽनुसन्धीयन्त इति विशेषः । तस्मात्संवादकारण(ज्ञान ?)-

१. अर्थप्रकाशकत्वरूपो यो ज्ञानस्याकारः तत्त्वेत्यर्थः ।

२. गुणज्ञानं प्रामाण्योत्पत्तौ न कारणम्, अपि तु ज्ञप्ताविति भावः ।

३. तस्यापि—गुणज्ञानशब्दितस्य, व्यवसायरूपं ज्ञानं प्रमा गुणाज्जगत्त्वादित्यनु-
मानस्यापि ।

४. परिष्ठानं—पर्यवसानम् ।

५. अनुमानेन—उक्तगुणज्ञानवक्ष्यमाणगुणसंवादज्ञानार्थक्रियाज्ञानानामन्यतमरूपेण ।

६. अव्यभिचारः—प्रामाण्यम् ।

७. मनुक्तार्थेऽस्मिन्निश्चयसाधने स्वतः प्रामाण्यमेवाङ्गीक्रियते चेदित्यर्थः ।

८. व्यभिचारः—अप्रामाण्यम् ।

९. समत्वं—एकरूपत्वं, एकरूपेण कार्यसाधकत्वम् ।

गुणज्ञानार्थक्रियाज्ञानानामन्यतमेन प्रामाण्यनिश्चयः । न चानवस्थेति^१ । वे पु
वदन्ति प्रामाण्यं स्वेनैव निश्चीयत इति तत्स्वयंप्रकाशवादे तेषां शोभते । अन्येषां कथं
स्वयंप्रकाशस्य (अस्वयंप्रकाशस्य ?) ज्ञानस्य स्वप्रामाण्यगोचरत्वम् । यदि प्रामाण्यैक-
देशभूतस्यार्थतथात्वस्य (अर्थस्य ?) स्वगोचरत्वमिति मतम् , कस्तत्र विप्रतिपद्यते यत्प्रय-
स्यद्भिस्साध्येत । यदि^२ हि स्वगोचरप्रकाशस्त्वयम् , किमस्माकं हीयते ? अथार्थमात्रं न
प्रामाण्यांशं ब्रूमः, किन्तु तथात्वमिति चेत् , किमिदं तथात्वमिति । यथा ज्ञाने भासते
तथावस्थितिरिति चेन्न । आत्मानमनवभास्यात्मगोचरत्वं (यथात्मगोचरत्वं ?) तथावस्थि-
तिरिति भासनानुपपत्तेः ।

यथात्वप्रतियोगिको हि तथाभावः । अथ तत्त्वगत्या तथाभूत एवार्थ इति
तथात्वगोचरत्वमिति चेत् ; हन्तैष पूर्वोक्तो विषयपरिच्छेद इति कस्तत्र विप्रतिपद्यते ?
यदि च तथात्वमनवभासते (अवभासते ?) कथं प्रामाण्यसन्देहः पश्चात् ।^३ न हि
प्रामाण्यांशं तथात्वमपह्यांशान्तरयोः प्रकाशापूर्वत्वयोस्संशय इति युक्तम् । तयोरव्य-
भिचारात् । न च प्रमाणाप्रमाणसाधारणो विषयः प्रामाण्यमिति युक्तम् । न हि
प्रमाणमात्रस्यायमर्थतथात्वलक्षणो विषय इति वक्तव्यम् । ज्ञानमात्रस्येत्यभ्युपगमनीय-
त्वात् । अन्यथा हि प्रमाणानां प्रामाण्यं नाम धर्मः स्ववेद्य इत्युक्तेऽपि प्रतिज्ञातं
ज्ञानमात्रस्य स्वतः प्रामाण्यं न सिद्धयेत् । इदमपि चात्र विकल्पनीयम् । किमर्थत-
थात्वं प्रतीयते, उत प्रमीयत इति । यदि प्रतीयते किं तेन । प्रामाण्यासिद्धेः ।

1. अनुमानात्मकस्योक्तज्ञानस्य स्वपरनिर्वाहकत्वाभ्युपगमादिति भावः ।

2. विप्रतिपत्त्यभावमेव स्वस्य हान्यभावेनोपपादयति—यदि हीत्यादिना ।

3. अयमर्थः—अनधिगताबाधितार्थप्रकाशकरूपतया प्रामाण्यस्य तत् तथात्वरूपस्या-
बाधितत्वस्यावभासेन तदंशे संशयासंभवेऽपि अनधिगतत्वात्मकापूर्वत्वार्थप्रकाशकरूपयोरे-
शान्तरयोस्संशयसंभवेन प्रामाण्यसंशय उपपद्यत इति न युक्तं वक्तुम् । तयोर्नियमेन भावात्
सद्विषये संशयोदयासंभवात् । अतः अबाधितत्वात् एव संशय इति वक्तव्यम् । स च अनु-
भूयमानः तस्य नियमेन भावांगीकारे नोपपद्यत इति ।

न हि प्रतीत इत्येवार्थस्सिद्धयेत् । तथात्वे वा किं प्रामाण्यपरीक्षणेन । अथ प्रमीयते
कथं ज्ञानमात्रसाधारणत्वम् । ज्ञानमात्रप्रयुक्तमपि कचित्परेण बाध्यत इति चेत् ; कथं
प्रमितस्य बाधः । तथात्वे च न कचिदाश्वास इति ॥

न च वेदोपयोगोऽपि तस्य पक्षस्य दृश्यते ।

गुणात्प्रामाण्यनिष्पत्तौ स्वेन ज्ञानं किमुत्तरम् ॥

मीमांसका हि वेदप्रामाण्यनिर्णिनीषया स्वतःप्रामाण्यसाधनाय यतन्ते । न
चास्मिन्पक्षे वेदोपयोगं पश्यामः । गुणाधीने प्रामाण्यजन्मनि तदभावात् वेदप्रामाण्यं
न सिद्धयति । तत्र स्वेनैव स्वप्रामाण्यवेदनं किं कुर्यात् । कामं च स्वेनैव स्वप्रामाण्य-
मवगम्यताम् । निर्णयस्तु परत एव । भवतैवाप्रमाणसाधारणमित्युक्तत्वात् ।
नन्वपवादरूपमप्रामाण्यज्ञानं दृष्टप्रामाण्यविरोधात् न कल्पयितुं शक्यमिति चेन्न ।
संप्रतिपत्तेषु अप्रमाणज्ञानेष्वपि तुल्यत्वात् ।

तत्र बाधकं दृश्यत इति चेन्न । कारणदोषज्ञानेनापि कल्प्यत्वेनाभ्युपगमात्^१ ।
दोषोऽपि वेदे नास्तीति चेन्न । गुणाभावात्कल्पनोपपत्तेः^२ । तथाहि—

यदा कार्यत्वविज्ञानं प्रामाण्यस्य गुणं प्रति ।

तदा हि कारणाभावात् कार्याभावोऽनुमीयताम् ॥

गुणाभावात्प्रामाण्याभावेऽनुमिते च पारिशेष्यात् अप्रामाण्यमेव वेदस्य स्यादिति ।
स्या(न स्या ?)देतत् । दोषस्याप्रामाण्यकारणत्वात्तदभावे तदपि न स्यादिति ।
एवमपि सन्देहात्प्रामाण्यनिर्णयानुपपत्तिरेव । स्वत एव निश्चीयत इति चेन्न । प्रमि-

1. कारणदोषबाधकप्रत्यययोः कल्पकयोर्मध्ये एकाभावेऽप्यन्येनाप्रामाण्यज्ञानस्य कल्प्य-
त्वाभ्युपगमादित्यर्थः ।

2. कल्पनोपपत्तेः = प्रामाण्याभावकल्पनोपपत्तेः ।

त्यनुपपत्तेः । तथापि प्रामाण्यस्य परित्यागो न युक्त इति चेन्नायं तर्कः^१ । प्रामाणिक-
विषयस्य परित्यागस्यैव तत्त्वात्^३ । प्रामाणिकपरित्यागो अनिष्टः अप्रामाणिकस्वी-
कारश्च । अप्रतिपन्नस्यापि प्रामाण्याभावस्यानुमाने चोक्तो हेतुः कारणाभावोऽनन्य-
थासिद्ध एव । गुणप्रामाण्ययोः कार्यकारणभाव एवासिद्ध इति चेदागतोऽसि पन्थानम् ।
तत्रोक्तो हेतुः । अपि च—

उभयोश्चैदुभौ हेतू ज्ञानं नानुभयात्मकम् ।
वक्तृभावे भवेद्दोषो वेदनित्यत्ववादिनाम् ॥

यदि च वेदं नित्यं मीमांसकाः साधयेयुः, तेषां तत्त्ववधाय कृत्योत्थापनम् ।
ज्ञानं हि प्रमाणमप्रमाणं वेत्येव नान्यत्संभवति । वेदाच्च ज्ञानमुत्पन्नम् । तद्यदि
वेदा नित्याः वक्तृगुणाभावे सिद्धे सामग्रीन्यूनताया दोषत्वस्य विशेषादर्शनात्संशयोत्पत्तौ
दृष्टत्वाच्छब्दप्रमाणसामग्रीपौष्कल्याभावलक्षण दोषकल्मषं वैदिकं ज्ञानमप्रमाणमेव भवेत् ।
तस्मादेवं स्वतःप्रामाण्यनिर्णयप्रयासो विपरीतफल एव (एवेत्युक्तं भवति ?) । एतदुक्तं
भवति ।

^१कति लोकेषु दृश्यन्ते सुग्रहग्राहका नराः ।
एवं न फलवद्बुद्धेः स्वप्रामाण्योपलम्भनम् ॥

तस्माद्यथोक्तप्रकारेण संवादादिभिः प्रामाण्यावसायः । कारणगुणात्तदुत्पत्तिरि-

१. अयं न समीचीनतर्क इत्यर्थः । प्रामाणिकार्थस्य परित्यागो न युक्त इत्यस्यैव
समीचीनतर्कत्वमिति भावः ।
२. तदेवोपपादयति— प्रामाणिकेत्यादिना ।
३. तत्त्वात् = अयुक्तत्वात् ।
४. कारणाभावः = कारणाभावरूपः ।
५. ज्ञानगतप्रामाण्यस्य ज्ञानेनैव ग्रहणमकिञ्चित्करमिति सदृष्टान्तं चादृक्त्या प्रतिपाद-
यति—कतीत्यादिना । कति = बहवः । यथा लोके नराणां स्वज्ञानस्य इतरान्प्रति सामीचीन्या-
द्विग्राहकत्वं वस्तुसत्तामीचीन्याय न प्रभवति, एवं ज्ञानस्य मम प्रामाण्यमस्तीति ग्रहणं न
स्तुतःप्रामाण्याय प्रभवतीत्यर्थः । लोकवत्परेण परगतगुणकथनमे विकतवित्तज्ञवपि मिथतास्माः ।

स्यास्थेयमिति । अत्रायं प्रयोगः—प्रमा ज्ञानहेत्वतिरिक्तहेत्वधीना कार्यत्वे सति तद्विशेष-
त्वात् अप्रमावदिति । यदि च ज्ञानहेतुमात्राधीना भवेत् अप्रमापि प्रमेव भवेत् ।
अत एव न्यायविदो वेदस्यासपुरुषपूर्वकत्वात्प्रामाण्यमातिष्ठन्त इति ।

अत्रोच्यते—

धिर्थां स्वाभाविकं तेषां (तद्यत् ?) प्रामाण्यं जायते स्वतः ।
अप्रामाण्यं पुनस्तासामपवादोऽन्यहेतुकः ॥

तथाहि—

यज्जातिव्यञ्जका धर्माः ये ते तज्जातिबन्धनाः (साधनाः ?) ।
तज्जातीयस्तु तैर्युक्तो (तज्जातिसाधनायुक्तो ?) निस्स्वभावः प्रसज्यते ॥

सर्वा एव जातयः तैस्तैः स्वप्रयुक्तैः संस्थानगुणादिभिर्व्यज्यमाना दृश्यन्ते । न
च व्यञ्जका नाम जातिप्रयुक्त^१

१. “अत्र गलितग्रन्थेन सह अतोऽवगच्छामो वस्तुगोचरत्वमेवार्थप्रकाशो बुद्धिरिति लक्ष-
णार्थ इति” इत्यन्तस्य ग्रन्थस्यार्थं प्रतिपाद्यांश इति प्रतिभाति ।

अत्र कौमारिक एव सिद्धान्तीत्यारम्भे इत्युक्तम् । स च ज्ञानस्य ज्ञाततात्त्विकानुमान-
साध्यत्ववादी । स तावत् तार्किकेण्यर्थप्रकाशो बुद्धिरिति लक्षणानुसारेण भ्रमप्रमासाधारण-
विषयप्रकाशकत्वस्यैव ज्ञानासाधारणधर्मत्वावगात्या ज्ञानस्य विषयप्रकाशकत्वमेव स्वाभाविका-
कारः । यथावस्थितार्थप्रकाशकत्वापुथावस्थितार्थप्रकाशकत्वरूपेप्रामाण्याप्रामाण्ये गुणदोषावसे
अस्वाभाविकाकारौ इत्येवावस्थाभ्युपगमनीयम् । न हि यथावस्थितार्थप्रकाशो बुद्धिरिति लक्षि-
तम् । तथासति हि स एव स्वाभाविकाकारः । स एव च ज्ञानस्य प्रामाण्यम्, आकारान्त-
रानुपलम्भात् । इदं रजतमित्यत्रापि ईदृशं प्रामाण्यमेवोत्सर्गतः प्राप्नोति । अनन्तरं बाधकेन
निवर्तत इति प्रामाण्यं स्वाभाविकम् । कश्चिदप्रामाण्यमपवादरूपमिति वक्तुं शक्येत । नैवं
लक्षितम् । तथा लक्षणकरणे भ्रमात्मकज्ञाने अस्यासिरेव स्यादिति पूर्वपक्षे प्रापिते स्वाभिमतं
प्रामाण्यस्य स्वतस्त्वमेवं साधयति । अर्थवस्तुसच्छब्दाः यथावस्थितार्थबोधका एव प्रयोगेषु
दृश्यन्ते । अतोऽत्र लक्षणवाक्ये अर्थशब्दो न विषयपर्यायः । अपि तु वस्तुपर्यायस्सन् यथाव-
स्थितार्थवादी । तथा च यथावस्थितार्थप्रकाशकत्वमेव लक्षणतया विवक्षितमिति तदेव

अतस्तेनैव स्वभावनिरूपको युक्तः । तत्रार्थप्रकाशसामान्यस्य नि] रूपं पटपदादिर्विशेषस्येति (घटपटादिभिर्विशेषस्येति ?) स्थिते सामान्या-

स्वाभाविकं ज्ञानस्य प्रामाण्यम्, आकारान्तरानुपलम्भात् । किञ्चास्मन्मते ज्ञानस्यार्थप्रकाशकत्वं नाम अर्थनिष्ठप्रकाशापरपर्यायज्ञातताजनकत्वम् । एतादृशज्ञाततया घटादौ विषयतासम्बन्धेन ज्ञानमनुमीयते । इत्थं च ज्ञानं अर्थनिष्ठप्रकाशसामान्यापरपर्यायज्ञातताजनकत्वेन सिद्धयतीति पर्यवसितम् ॥

अत्र ज्ञाततार्थनिष्ठेत्यर्थो ज्ञाततानिरूपको भवति । अर्थस्य तत्त्वरूपकत्वं च स्वेन रूपेण । न विषयतावत्स्वात्मकविषयत्वरूपेण । विषयताया एव ज्ञाततारूपतया आत्माश्रयत्वप्रसङ्गात् । एवं च विषयतारहितस्य शुद्धरूपस्यैवार्थस्य विषयतानिरूपकत्वसम्भव इति ज्ञानस्यार्थप्रकाशकत्वं वस्तुसर्व्यनिष्ठ(निरूपित ?)ज्ञातताजनकत्वरूपमिति सिद्धम् । अयमेवाकारः स्वाभाविकः प्रामाण्यमित्युच्यते । ज्ञाने आकारान्तरानुपलम्भात् । ईदृशं प्रामाण्यं इदं रजतमित्यत्र न सम्भवति । तत्र रजतत्वनिष्ठज्ञाततायां वस्तुतोऽत्राविद्यमानस्यात एवार्थशब्दावाच्यस्य केवलं दोषवशेनात्र भासमानस्य रजतत्वस्यैव निरूपकत्वात् । तथा च तत्र इदमंश इव रजतत्वांशेऽपि सामान्यतः प्राप्तं प्रामाण्यं बाधकेनापोष्यते । अर्थ घट इति प्रमायां विशेष्यांशे विशेषणांशे सम्बन्धांशे इदं रजतमिति अनेऽपि इदमंशे रजतत्वांशे च निरुक्तप्रामाण्यस्य सत्त्वेन तस्यैव स्वाभाविकत्वमुचितम् । संसर्गांशे परमप्रामाण्यम् । न हि वस्तुतो रजतत्वमेव नास्ति । आपणस्थरजते तत्सत्त्वात् । किन्तु शुक्तावेव तच्चास्तीति संसर्ग एवाविद्यमानो भासते । अतोऽप्रामाण्यस्य काचित्कत्वात् युक्तं तस्य परतत्त्वम् । अपि च विषयप्रकाशकत्वस्य बुद्धिलक्षणत्वेऽसम्भवप्रसङ्गः । विषयत्वेन विषयप्रकाशाभावात् । न हीन्द्रियार्थसंयोगानन्तरं अर्थं विषय इति कश्चिदपि प्रत्येति । अपि तु अर्थं घटः अर्थं पट इति तेन तेन वस्तुरूपेण । तेन तत्तद्वस्तुप्रकाशकत्वमेव लक्षणतया विवक्षितम् । भूयस्त्वादिवदेव स्वाभाविकं अनेऽपि प्राप्तमपोष्यते । एवं च तेन तेन रूपेण तत्तद्वस्तुप्रकाशकत्वरूप एक एवाकारो ज्ञाने बहुष्वंशेषूपलभ्यते, न कारान्तरमिति स एवाकारो लक्षणे विवक्षित इति तदेव प्रामाण्यमित्युच्यते । आम्सौ संसर्गांशे परं तज्जग्यते । नैतावता प्रामाण्यस्य त्वदभिमतगुणाधीनत्वरूपपरतत्त्वसंभवः । न चाभ्यासिपरिहारः कथमिति शङ्क्यम् । आम्सि-ज्ञानेऽप्यंशद्वये प्रामाण्यस्य सत्त्वेन तस्याः परिहृतत्वात् । विषयप्रकाशकत्वस्य ज्ञानत्वम् । तदेव सामान्याकारः । प्रामाण्याप्रामाण्ये तु तद्विशेषी । यस्यां ज्ञानव्यक्तावप्रामाण्यं तस्य क्यक्तौ पक्षात्त्वमिव शिञ्जुपायां प्रामाण्यं नास्त्येव इति पक्षः परं यत्नेन निरस्यते । क्यक्त्यत्वेन क्यक्त्यत्वेन चाभिमतयोः ज्ञानत्वनिरुक्तप्रामाण्ययोः वृक्षत्वशाखास्कन्धादिमस्वयोरिव अत्यन्तमेवाभावेन ज्ञानत्वादेरिव प्रामाण्यस्यापि स्वाभाविकाकारत्वस्यैव युक्तत्वात् । तस्मादर्थप्रकाशो बुद्धिरिति लक्षणवाक्येन न त्वदभिमतसिद्धयवकाशः । प्रत्युतास्माकमेव तदनुकूलमिति ॥

कारनिरूपकोऽर्थशुद्धरूप इति न^१ तन्निरूपितप्रकाशसामान्यसाधनत्वेन सिद्धयतो ज्ञानसामान्यस्य स्वभावतोऽर्थविषयत्व...[मेव संभ] वति ।

यद्यप्यर्थप्रकाशापरपर्यायं ज्ञातत्वं तथा तत्त्वयो(तत्त्वातत्त्वयो ?)रुभयोरपि समन्वेति । तथापि ^२सामान्यस्य तत्त्वसमन्वयस्वभाव इत्यवसीयते । ^३तत्सामान्यजननस्वभावतया तत्त्वमेव सामान्यतः प्रकाशयेत् । विशेषतस्त्वपवादात् दोषसंसर्गादयथार्थमिति । ततस्साक्षादर्थसंबन्धिनि ज्ञातत्वे ज्ञाने वा अर्थसंबन्धस्वभावः परीक्षणीय इति स एव क्रियत इति ।

न हि स्वविषयत्वेन ज्ञानेनार्थः प्रकाशयते ।

तस्माद्विषयनिर्भासो ज्ञानासम्भवि लक्षणम् ॥

यद्वि ज्ञाने विद्यते तदेव तस्य लक्षणमुचितम् । वस्तुप्रकाशत्वमेव ज्ञाने विद्यते, न तु विषयप्रकाशत्वम् । यतो विज्ञाने समुत्पन्ने विषयोऽयमिति न भाति किन्तु घटोऽयमिति । न च घटस्य ^४द्वैरूप्यं विद्यते । अतोऽवगच्छामो वस्तुगोचरत्वमेवार्थप्रकाशो बुद्धिरिति लक्षणार्थ इति ।

कस्यचित्प्रकाशः प्रकाशकमिति वा ज्ञानं निरूप्यताम् । किं विषयवस्तुविकल्पेनेति चेन्न । तत्रापि वस्तुन एव परामर्शात् । न^५ हि ज्ञानं तत्र परामृश्यते । तत्प-

१. अत्र नञ् नास्तीति भाति । तत्सत्त्वे अर्थविषयत्वमित्यत्रार्थपदं विषयपरं बोध्यम् ।

२. सामान्यस्य = ज्ञानसामान्यस्य ।

३. तत् ज्ञानसामान्यं कर्तुं अनेकस्थलानुयायि सामान्याकारजननस्वभावतया तादृशं तत्त्वमेव उत्सर्गतः प्रकाशयेदित्यर्थः ।

४. अस्तित्वनास्तित्वात्मकरूपद्वयवस्त्वम् । अविद्यमानस्यापि विषयत्वसंभवात् अर्थसङ्गावस्थले अस्तित्वं अभावस्थले नास्तित्वमिति विषयस्य द्वैरूप्यं विद्यत इत्यर्थः ।

५. कुमारिलेन स्वयंप्रकाशत्वानभ्युपगमादिति भावः ।

वैक्यो वा विषयः । ततो वस्तुस्य परामृश्यत इत्यायातम् । न च विषयवस्तु-
साधारणं ^१किञ्चिच्छब्दवाच्यं ^२रूपमस्ति । ^३विशिष्टाविशिष्टसाधारणस्य विशेष्यमात्र-
त्वात् । तस्य च पूर्वोक्तवस्तुमात्रत्वादिति । स्यादेतत् । ^४वस्तुगोचरत्वमव्यापक-
अप्रमाणे तदभावात् । ततोऽसाधारणं सन्न सामान्यव्यञ्जकम् । ^५तद्व्यञ्जकं च न
प्रमाणनियतमिति दुष्करं स्वतःप्रामाण्यघटनमिति ।

नैतदेवम्, यतः—

वस्तुगोचरता सैव संसर्गोशेन विश्रुता ।

अप्रमाणेऽपि विज्ञाने ज्ञानत्वव्यक्तिकारणम् ॥

यथैव हि साक्षापुच्छकर्णशृङ्गादिसंस्थानविशेषाभिव्यञ्ज्यं गोत्वं तेषामन्यतम-
वैकल्येऽपि शेषैरभिव्यज्यते, एवमखिलविशेषणविशेष्य ^६संसर्गलक्षणवस्तुगोचरत्वाभि-
व्यञ्ज्यं ज्ञानत्वमेकदेशवैकल्येऽपि शेषैरभिव्यज्यते ।

१. कस्यचित्प्रकाशकमित्यत्र किञ्चिच्छब्दस्य वाच्यमित्यर्थः ।

२. रूपमस्ति = रूपान्तरमस्ति ।

३. यथा दृष्टिदेवदत्तकेवलदेवदत्तोभयसाधारणं रूपं देवदत्तस्वरूपमेव नातिरिक्तमुपक-
भ्यते । एवं विषयताविशिष्टवस्तुकेवलवस्तुसाधारणं रूपं वस्तुस्वरूपमेव नातिरिक्तमिति कस्य-
चिदित्यत्र किञ्चिदेन विषयवस्तु साधारणरूपपरामर्शेऽपि वस्तुप्रकाशकत्वमेव सिद्धयति नातिरिक्त-
प्रकाशकत्वमिति भावः ।

४. यथावस्थितार्थस्यैव वस्तुशब्दवाच्यत्वात् तद्विषयकत्वस्याप्रमाणसाधितभ्रमरूपज्ञाने-
ऽभावात् प्रमाणरूपज्ञानमात्रवर्तीदृशं वस्तुगोचरत्वं न ज्ञानत्वरूपसामान्यव्यञ्जनसमर्थनं भवति ।
व्यञ्ज्यव्यञ्जकयोः समानदेशत्वावश्यंभावात् । न हि साक्षादिकं गोमहिषादिसाधारणं पशुत्व-
मभिव्यञ्ज्युमीदृ इत्यर्थः ।

५. ज्ञानत्वव्यञ्जकं च विषयप्रकाशकत्वं न प्रमाणज्ञानमात्रनियतमित्यर्थः । अथवा-
स्थितस्यापि विषयपदवाच्यत्वादिति भावः ।

६. संसर्गलक्षणं वस्तु तद्वोचरत्वेत्यर्थः ।

यथा ^१सच्छिद्रके हेतुकारकत्वं विहन्यते ।

उदकाहरणार्थेऽपि स्वतो लोकानुसारतः ॥

तथा लोकेन विज्ञाने व्यवहारार्थमाहते ।

प्रमाणत्वं निवर्तेत संसर्गविरूपत्वात् ॥

प्रमाण.....[मपि का]रकविशेषः । ^२कारकत्वं च केनचित्सामान्ये^३न प्रसक्तं
तत्र तत्र^४ कैश्चिद्विशेषैरुपोद्यते । एवं उपादानार्थिभिर्वा (हानार्थिभिर्वा?) ^५कारक-
त्वेन सामान्यतो लौकिकैरुपादीयमान(ने?).....[ज्ञाने प्रामाण्यम]पि कारणोत्थितैर्दोषैरुपो-
द्यते । तथापि न स्वतःप्रामाण्यव्याघातः । ^६कारकान्तरवत् ज्ञानस्यापि सामान्य-
प्रयुक्तत्वात्प्रमाणत्वस्य । न चैवं सति.....[कारका]न्तरेष्वपि ^७सामान्याकारातिरेकिभिः
कैश्चिद्विशेषैरेव तत्कारकत्वं निरूप्यत (निरुद्धत?) इति साम्प्रतम् । तथासति
^{१०}दृश्यं रूपमकारकं ^{११}अदृश्यं किञ्चित् कारकत्वनिर्वाहकं रूपमिति स्यात् । तथा च

१. स्वतः उदकाहरणार्थेऽपि घटे सच्छिद्रके यथा हेतुकारकत्वं विहन्यते तथा व्यवहारार्थं
लोकेनाहते विज्ञानेऽपि संसर्गाभावे सति प्रमाणत्वं निवर्तेत इत्यर्थः ।

२. उदकाहरणसाधनत्वकर्म कारकत्वं वेत्यर्थः ।

३. सामान्येन = घटत्वादिकत्वेन ।

४. तत्र तत्र = सच्छिद्रघटादिषु ।

५. विशेषैः = छिद्रादिभिः ।

६. कारकत्वेन = व्यवहारसाधनत्वेन ।

७. दोषैः = संसर्गोपप्लवादिभिः ।

८. सच्छिद्रविषये तदसंभवेऽपि घटत्वप्रयुक्तस्य उदकाहरणसाधनत्वकर्मकारकत्वस्य
बौत्सर्गिकत्वरूपं स्वतस्त्वं यथा सङ्गच्छते, एवं ज्ञानसंबन्धिनः प्रमाणत्वस्यापि ज्ञानत्वरूपसामान्य-
प्रयुक्तत्वेन स्वतस्त्वमुपपद्यत इत्यर्थः ।

९. घटत्वाद्यतिरिक्तैरिच्छित्वादिभिः विशेषैः ।

१०. परिदृश्यमानं बीजत्वादिकं रूपं अङ्गीकृतादिसाधनत्वकर्मकारकत्वाभिर्वाहकमित्यर्थः ।

११. अदृश्यं = बौद्धसमये कुर्वद्रूपशब्दितं किञ्चिद्रूपम् ।

बीजाङ्गुरादिष्वन्वयन्यतिरेकगोचरदृश्यसामान्यरूपस्यैव कारकत्वोपपादनं महता प्रयासेन क्षणमङ्गनिराकरणाय क्रियमाणमबुद्धिपूर्वकमापद्येत^१ । बीजत्वमात्रप्रयुक्तमङ्कुरकारकं (कारकत्वं ?) कालपाकाद्यपवादहेतुका तन्निवृत्तिरिति हि युक्तमभ्युपेतम् (अभ्युपेतम् ?) । तस्माद्वस्तुपरिच्छेदकत्वमेव ज्ञानत्वव्यञ्जकं रूपम् । तदभावे निस्त्वभावत्वं ज्ञानानामिति तदेव प्रामाण्यं स्वत इत्याचक्ष्मह इति । एतत्सर्वमभिसन्धायोक्तमाचार्यपादैः—

“ निस्त्वभावत्वमेवं हि ज्ञानरूपे प्रसज्यते ” इति ।

यत्तुक्तं शिशुपापलाशादिविशेषेषु वृक्षत्वमिव प्रमाणाप्रमाणयोः साधारणं ज्ञानत्वं तदवान्तर-विशेषौ प्रमाणत्वाप्रमाणत्वे इति । तदनेन प्रत्युक्तमिति वेदितव्यम् । नहि वृक्षसामान्य-स्यापवादिकं बौत्सर्गिकं वा रूपं शिशुपात्वादीति युक्तम् ।^२ न हि शाखाभङ्गादिना शिशुपात्वादि निष्पद्यते ।^३ अपिच —

१. तार्किकेण त्वया बीजत्वमेवाङ्कुरकारकत्वनिर्वाहकं, नाप्यदृश्यं कालपाकादिक्य दोषेण क्वचित्त्वापवाद इति साधयता कालपाकादिविदोषरहिते बीजे कञ्चनातिशय एव बीजत्वाति-रिक्तः कारकत्वनिर्वाहक इति वदतो बीजस्य क्रियमाणो निरासोऽज्ञानकृतः स्यादित्यर्थः ।

२. प्रकृतज्ञानस्थलापेक्षया वृक्षत्वस्य वैषम्यं दर्शयति—नदीत्यादिना । अयमाशयः । ज्ञानविषये विशेषणविशेष्यतदुभयसंसर्गरूपवस्त्वपरपर्यायवशावस्थितार्थप्रकाशत्वरूपाकार एवो-त्सर्गत उपलभ्यते । स एव ज्ञानत्वात्मक इत्यभ्युपगम्यते । तदपेक्षयातिरिक्तत्वस्य ज्ञानत्वे आपादयितुमशक्यत्वात् । भवतु वा अर्थप्रकाशकत्वज्ञानत्वयोर्द्वयकृत्यभवेन भेदः । तथापि ज्ञानानां ज्ञानत्ववदर्थप्रकाशत्वमप्युत्सर्गसिद्धमेव । तदेव प्रामाण्यमित्युच्यते । क्वचिदो-षवशात् वस्तुसतस्संसर्गाशस्याभावे एतादृशप्रामाण्यापवादेनाप्रामाण्यं भवति । वृक्षविषये तु नैवं वक्तुं शक्यम् । वृक्षस्य शाखास्कन्धादिमत्वमौत्सर्गिकं रूपं तदन्वयतमभङ्गे शिशुपात्वादिकमा-पवादिकं रूपं जायत इत्यदर्शनात् । एवं शिशुपात्वादिशिष्टस्यैव किञ्चिदन्वयत्वे पलाशत्वमित्यपि न दृश्यते । किन्तु तत्तद्विशेषेषु वृक्षत्ववत् शिशुपात्वादिकमपि स्वाभाविकमेव दृश्यते । ज्ञाने तु विशेषणविशेष्यसंसर्गरूपार्थत्रयविषयकत्वरूपं प्रामाण्यमुत्सर्गसिद्धम् । तेषां मध्ये संसर्गाश-वैकल्ये अपवादरूपप्रामाण्यमित्यनुभवसिद्धम् । तस्माद्वृक्षत्वमिव ज्ञानत्वं सामान्यं शिशुपा-त्वपलाशत्वादिकमिव प्रामाण्याप्रामाण्ये इति न युक्तमत्यन्तवैषम्यादिति ।

३. वैषम्यान्तरं प्रदर्शयति—अपिचेत्यादिना । अयमर्थः । वृक्षत्वरूपसामान्याकार-व्यञ्जनमात्रे अपर्यवस्यत् तद्विशेषभूतशिशुपात्वाद्याकारव्यञ्जनसमर्थः पर्णस्पर्शादिविशेषवृक्षशुपा-

वृक्षत्वव्यञ्जनाक्षीणपर्णस्पर्शादिभेदवत् ।

ज्ञानत्वानुपयुक्तोऽशः प्रामाण्ये (प्रमाणे?) नोपलभ्यते ॥

^१ यदि वृक्षसामान्याभिव्यञ्जकस्कन्धशाखादिमात्रमपहाय पर्णस्पर्शादिविशेषान्तर-वत् ज्ञानत्वव्यञ्जकमर्थप्रकाशमपहाय अधिकं रूपमुपलप्स्यत ततस्समभविष्यतामपि प्रामा-ण्याप्रामाण्ये विशेषौ । न चैवं लभ्यते—

संवादादिसहस्रैरप्युत्तरैरुपकारिभिः ।

निर्णीयमाने प्रामाण्ये^२ ज्ञानं नैवातिरिच्यते ॥

यथा हि ज्ञानोत्पत्त्यनन्तरमनुव्यवसायेन^३ ज्ञानमवभासते । तथैव हि तस्य प्रामाण्यनिर्णायकाभिमतैस्संवादकारणगुणज्ञानादिभिः सहस्रशः प्रवृत्तैरपि तदवभास्यते

दिवृक्षविशेषे यथोपलभ्यते एवं ज्ञानविशेषतया त्वदभिमते प्रमाणज्ञाने ज्ञानत्वरूपसामान्याकारा-पेक्षया अधिकाकारव्यञ्जनसमर्थोऽशः न कोऽप्युपलभ्यत इति ।

१. अर्थ भावः । पलाशादिवृक्षविशेषेषु सामान्यरूपं शाखास्कन्धादिमत्वं तत्तन्मात्रासा-धारणं पर्णस्पर्शादिभेदवत्त्वमेत्याकारद्वयमुपलभ्यते । तत्र सामान्याकारेण वृक्षत्वसामान्यं विशे-षाकारेण पलाशत्वादिकञ्चाभिधायत इति तत्र युक्तो वृक्षत्वस्य सामान्यत्वं पलाशत्वादीनां च विशेषत्वमित्यभ्युपगमः । ज्ञाने तु नैवं युज्यते । विशेषत्वेन त्वदभिमते प्रमाणरूपे ज्ञाने ज्ञान-त्वरूपसामान्याकारव्यञ्जनसमर्थस्यार्थप्रकाशकत्वरूपस्यैकस्यैवाकारस्योपलभ्यात् तद्विशेषाका-रानुपलभ्यात् । ततश्च व्यङ्ग्यविशेषत्वस्य व्यञ्जकविशेषत्वाधीनतया व्यञ्जकस्य चात्र कस्यचिद्वि-शेषस्यादर्शनेन न प्रामाण्यस्य तद्व्यङ्ग्यत्वसम्भव इति युक्तं निरुक्तप्रामाण्यस्य ज्ञानत्वं प्रति विशेष-त्वासम्भवेन तद्वदौत्सर्गिकत्वमभ्युपगन्तुमिति ॥

२. अनुव्यवसायवेद्याकारातिरिक्ताकारकं न भासत इत्यर्थः ।

३. सर्वस्यास्य प्रकरणस्य तार्किकं प्रति प्रवृत्ततया एवमुक्तिरिति ब्रह्मण्यम् । तन्मते व्यवसायात्मकस्य ज्ञानस्यानुव्यवसायवेद्यत्वाभ्युपगमात् । अस्तेदमवधेयं—वादेऽस्मिन्निद्वितीये ज्ञानत्वविशेषौ प्रामाण्याप्रामाण्ये । द्वे अपीमे परत एव । प्रामाण्योत्पत्तिर्गुणास्वरूपसतः । तद्विर्ण-यस्तु गुणज्ञानात् । एवमप्रामाण्यं दोषात् । तद्विर्णयोऽपि तज्ज्ञानादिति वदन्तं तार्किकं

नाधिकं किञ्चिद्रूपमुन्नीयते । अपवाद एव परं यत्नेनापि निरस्यते । अतोऽन्यथाज्ञान-
ज्ञानानां सामान्यरूपमेव प्रामाण्यम् । न वैशेषिकं रूपमिति । तदभिप्रायेण चोक्तम्—
“तस्माद्बोधात्मकत्वेन प्राप्ता बुद्धेः प्रमाणता” इति ।

अपि च—

यदि स्वाभाविकं बुद्धेः प्रामाण्यमिति नेष्यते ।

अन्यप्रामाण्यवान्छायामनवस्था प्रसज्यते ॥

अपूर्वार्थविधारणत्वं हि ज्ञानस्य प्रामाण्यम् । तत्र^३ शक्तिव्यभिचारेऽंशे
गुणेन समाधानं कर्तव्यम् ।

सिद्धास्ती अर्थप्रकाशकत्वमेव ज्ञानत्वं प्रामाण्यमप्यनधिगतत्वाभावात्तार्थप्रकाशकत्वमेव । ईदृश-
प्रामाण्यमेव ज्ञानस्योत्सर्गिकमित्यनुभवसिद्धम् । कश्चित् बोधवशात् संसर्गवैकल्ये एतदपवाद-
तया अप्रामाण्यमित्येतदपि । गोत्वस्थानापन्नस्य ज्ञानत्वस्याभिध्यञ्जकं साक्षाद्विस्थानापन्नं निरुक्त-
प्रामाण्यमितीदृशप्रामाण्यस्य कस्याचित् ज्ञानव्यक्तावनङ्गीकारे तस्या निस्त्वभावत्वं प्रसज्येत ।
तस्मात् व्यङ्ग्यपृथग्ययोस्समनियतत्वमेवोचितमिति साधयतः कौमारिकस्य मते स्थित्वा निर-
स्यतीति वेदितव्यम् । कौमारिकमतमवलम्ब्य तद्विरसनस्य प्रयोजनमन्यथाक्यात्यभ्युपगमेऽपि
तत्सिद्धौ वेदान्तिनः स्वस्य कैमुत्येन तत्सिद्धिरिति सूचनमिति पूर्वमेवोक्तम् ।

81. ज्ञानगतं प्रामाण्यं ज्ञानत्वप्रयुक्तमित्यर्थः । नहि प्रामाण्यस्य ज्ञानत्वविशेषत्वे एवमु-
क्तिस्तसंगच्छते । न हि पक्षाशत्वं बुद्धत्वप्रयुक्तमिति युक्तम् । तथासति सर्वोऽपि बुद्धः पक्षाः
स्यादिति भावः ।

82. अपूर्वपदेनानधिगतत्वमर्थपदेनावाधितत्वम्, अवधारणपदेन प्रकाशकत्वं च विवक्षित-
मिति ध्येयम् ।

83. प्रामाण्योत्पत्तौ सत्तयैव गुणस्य कारणत्वाङ्गीकारे कथमनवस्थावकाश इति शङ्कायां
प्रामाण्यज्ञाविव तदुत्पत्तावपि गुणज्ञानस्यैव कारणत्वमवस्थाङ्गीकार्यमित्यनवस्था प्राप्नोत्येवेत्यभि-
प्रायेण तत्रापि गुणज्ञानस्य कारणत्वं तार्किकं प्रत्युपपादयति—तत्तेत्यादिना ।

न च प्रकाशापूर्वत्वयोर्व्यभिचारसंभवति । न च^१ तयोरंशयोरप्रमाणज्ञान-
साधारणयोः गुणाः कारणमिति युक्तम् । तद्विनापि^२ भवतः तत्कार्यत्वानुपपत्तेः । न^३
च ज्ञानमात्रगोचरेणैव (गोचरत्वेनैव ?) स्वाभाविकत्वेनावगतस्यौपाधिकत्वसंभवः ।
तेन वि^४षयांश्च एवापेक्षेत्यवशिष्यते । तस्य तु ज्ञायमानत्वेनैव प्रामाण्यान्तर्भावः ।
तत्र च गुणाः सत्तया नोपकारकाः । तदा हि प्रामाण्यज्ञाने सत्तयैव हेतवः स्युः न
ज्ञाततया । न चोत्पत्तौ सत्तयोपयुक्तानां ज्ञसौ ज्ञायमानतया उपयोग इति वाच्यम् ।
प्रामाण्योत्पत्तावपि विषयांशस्य^५ ज्ञायमानत्वात् ।

तज्ज्ञसौ च विषयस्य^७ तादवस्थमेव । न हि प्रमाणोत्पत्ता (प्रामाण्योत्पत्ता ?)-
वनवगतं किञ्चिद्रूपं प्रामाण्यावगतिवेलायां विषयस्यावसीयते । न चैकस्यैकरूपेण ज्ञाने
किञ्चिदेकदा ज्ञातमन्यदा चाज्ञातं कारणमिति युक्तम् । न च प्रामाण्यावगतिवेलायां

1. एवं व्यभिचारशङ्कामिरासरूपप्रयोजनासंभवेनाज्ञानांतरयोः गुणानामनपेक्षामुपपाद्य
तयोर्गुणकारणकत्वस्यानुपपत्त्या तदनपेक्षामुपपादयति—न च तयोरित्यादिना ।

2. भवतः—ज्ञायमानस्य ।

3. औपाधिकत्वासंभवेन तामुपपादयति—न च ज्ञानमात्रेत्यादिना ।

4. विषयांश्च इति—अपूर्वार्थविधारणत्वमित्यत्र उक्तार्थांश्च इत्यर्थः ।

5. तथाच ज्ञातिस्थलावैक्यमुत्पत्तिस्थलत्वेति भावः ।

6. ननु कथमवैक्यं ज्ञातिस्थले विषयस्य वैलक्षण्यसम्भावादित्यत्राह—तज्ज्ञसौ चेत्यादिना ।
तज्ज्ञसौ—प्रामाण्यज्ञसौ ।

7. तादवस्थं—ऐकरूप्यम् ।

8. एतदेवोपपादयति—न हीत्यादिना । एतावता न चैकरूपस्यैकरूपेणैत्यादिवक्ष्यमाण-
बुद्धेः ऐक्येनोक्तमेकत्वं सम्पादितमिति ज्ञेयम् ।

9. प्रामाण्यज्ञसौ गुणज्ञानापेक्षेत्यस्मदुक्तेः नार्थरूपप्रामाण्यांश्च विषयत्वम् अपि तु अपूर्वत्व-
प्रकाशरूपान्तरविषयत्वम् । अतो नोक्तदोष इत्यत्राह—न च प्रामाण्येति ।

प्रकाशाद्यंशान्तरेषु गुणज्ञानापेक्षेति युक्तम् । अनुव्यवसायमात्रेणैव ^१तत्सिद्धेरुक्तत्वात् । न च गुणाः सत्तयैव प्रामाण्यं निश्चाययन्ति । तत्सन्वेदामावप्रसङ्गात् । न हि निश्चिते सन्वेदावकाशोऽस्ति ।

भवतां हि प्रामाण्यमेव सन्दिग्धते । ^२अस्माकं तु वक्ष्यामः । तस्मात्प्रामा-
ण्यांशे ^३विषये अज्ञातानां गुणानां असत्समत्वं प्रामाण्यावगतौ दृष्टमिति तदुत्पत्तावप्य-
र्थविधारणे ^४तदेवासत्समत्वम् । तस्माद्गुणज्ञानमेवार्थविधारणायापेक्षितमित्यायातम् ^५ ।

1. तत्सिद्धेः — अंशान्तरावभाससिद्धेः ।

2. ननु युष्मन्मतेपि सन्वेदाभावप्रसङ्गे दुर्बारः । व्यवसायात्मकज्ञानप्राप्तकानुमानेनैव तद्वत्प्रामाण्यस्यापि सिद्ध्या संशयासंभवादित्यत्राह—अस्माकंमिति । वक्ष्याम इति “अप्रामाण्ये-
ऽपवादे तु संशयोऽप्यवकाशवानि” त्यादिनेति भावः । तस्यैतद्विवरिष्यते ।

3. प्रामाण्यांशे विषये — प्रामाण्यशरीरप्रविष्टार्थरूपांशे ।

4. अर्थविधारणे — प्रामाण्यज्ञानात्मकेऽर्थज्ञाने । साधिते सतीति शेषः ।

5. तस्य तु ज्ञायमानत्वेनैव प्रामाण्यान्तरभावः इत्यादेः अपेक्षितमित्यायातमित्यन्तस्यार्थ निष्कर्षार्थः । प्रामाण्यशरीरप्रविष्टार्थरूपस्य मध्येऽर्थरूपस्यैव गुणापेक्षेति स्थितम् । अर्थोऽपि भासमान एव प्रामाण्यशरीरं प्रविशतीति अङ्गीकार्यम् । अन्यथायत्तौ ज्ञानस्य सम्बन्धो नास्तीति फलितमिति अर्थप्रकाशकत्वरूपप्रामाण्यस्यैवासिद्धिप्रसङ्गः । निर्धामकांशान्तरप्रकाश-
कत्वासंभवश्च । तस्मादर्थस्य ज्ञायमानतयैव प्रामाण्यानुपपत्तेः प्रामाण्यज्ञप्तिवैक्यामिव तदुत्पत्ति-
वेक्षायामप्यर्थस्य ज्ञानमस्तीत्यायातम् । प्रामाण्यज्ञाने सत्तया गुणानां हेतुत्वं प्रामाण्यसन्वेदा-
भावप्रसङ्गेन न सम्भवतीति ज्ञायमानतयैव गुणानां तत्र हेतुत्वमास्थेयम् । इत्थं च प्रामाण्य-
घटकार्यज्ञानस्थले कुत्रचिद् गुणज्ञानस्यैव कारणत्वं दृष्टमिदमेति प्रामाण्योत्पत्तिस्थलेऽपि प्रामाण्य-
घटकार्यज्ञानसङ्गावस्योपपादनात् वैषम्यपरिहाराय ऐकरूप्येण गुणज्ञानस्यैव हेतुत्वमङ्गीकार्यम् । न हि निरर्थकिकं वैषम्यमङ्गीकर्तुं युक्तम् । प्रामाण्यघटकार्यज्ञानं च प्रामाण्यज्ञानमेव । न च स्थलद्व-
येऽपि अर्थज्ञानात्मके प्रामाण्यज्ञाने एकरूपे सति एकत्र सत्तया गुणाः कारणं अपरत्र ज्ञायमानतयेति-
युक्तम् । अतः ज्ञप्तिस्थलं ह्योत्पत्तिस्थलेऽप्यज्ञातानां गुणानामसत्समत्वमेवेति तज्ज्ञानमावश्यकमिति
गुणज्ञानेऽपि गुणज्ञानान्तरापेक्षायां अनवस्था दुस्स्यजेति । एतावता “ननु च गुणात्प्रामाण्याभ्युपगमे
अनवस्थानं स्यात् । नैवं इन्द्रियादिवद्गुणस्यापि सत्तयाकारणत्वोपपत्तेः” इति तार्किकेण पूर्वमुक्तं
प्रत्युक्तमिति वेदितव्यम् ।

गुणज्ञानस्य प्रामाण्यं ^१गुणावधारणात्मकमिति तदर्थमपरगुणज्ञानं तस्यापि तथा इत्यन-
वस्था इत्युत्तरोत्तरज्ञानाभावात् ^२(उत्तरोत्तरज्ञानात् ?) पूर्वपूर्वा...[का]रस्यावधारणासि-
द्धेरखिलमपि जगदन्धमापद्येत । तदेतदुक्तम् ।

“जातेऽपि यदि विज्ञाने तावन्नार्थोऽवधार्यते” इत्यादिना ।

अन्यत्रापि च यत्र वार्तिके प्रामाण्योत्पत्तिज्ञप्त्योरनियमेन साधनदूषणप्रवृत्तिः तत्र सर्वत्रापि
विषयापेक्षया विशेषाभावादित्यनुसन्धेयम् । तेनैतत्प्रत्युक्तम् “यदिन्द्रियादिवद्गुणाः
सत्तया प्रामाण्यं जनयन्तीति ।

1. प्रामाण्यस्यार्थप्रकाशकत्वरूपतया गुणज्ञाने गुणानामेवार्थरूपत्वेनार्थविधारणात्मक-
तया पूर्वोक्तमेव प्रामाण्यमत्र गुणावधारणात्मकतयोक्तमित्यवगन्तव्यम् ।

2. अर्थं भावः । घटादिज्ञानस्य प्रामाण्यनिश्चये सत्येव हानादिव्यवहारः स्यात् । स
च निश्चयो न संभवति । तस्य गुणज्ञानाधीनत्वात् । तादृशगुणज्ञाने प्रामाण्यनिश्चयमन्तरा तेन
घटज्ञाने प्रामाण्यनिश्चयाद्योगात् । गुणज्ञानगतप्रामाण्यनिश्चयस्य गुणज्ञानान्तरायसः । तेन च
गुणज्ञानान्तरेण स्वोपरितनगुणज्ञानाधीनप्रामाण्यनिश्चयवशाकिना अभितन्वमित्यनवस्थायां सत्यां
एकस्या अपि गुणज्ञानव्यक्तेः स्वोत्तरगुणज्ञानव्यक्त्यन्तरनैरेवेत्येव स्वपूर्वगुणज्ञानव्यक्तिगतप्रामाण्य-
निश्चयकत्वासंभवेन सत्यां अपि गुणज्ञानव्यक्त्योऽभिहितस्वंगस्यप्रामाण्यका एवेति
प्रकाशतपटपटादिज्ञानगतप्रामाण्यनिश्चयाद्येन पटसरेन्द्रिया अपि सर्वे प्रमातारः प्रामाण्यनिश्चया-
त्मकज्ञानरहिता अत एव हानोपादानादादिकपटव्यवहारशून्या अभ्युपगमसदृशा भवेयुरिति ।

3. घटत्वविशिष्टघटाद्यर्थप्रकाशकत्वरूपं प्रामाण्यं यदि न निश्चीयत इत्यर्थः ।

4. यत्र यत्र वार्तिके प्रामाण्यस्योत्पत्तिविषये ज्ञप्तिविषये वा साधनं वा दूषणं वा अवैषम्ये-
णैकरूपतया प्रवृत्तं दृश्यते तत्र सर्वत्र पूर्वं न हि प्रामाण्योत्पत्तावनवगतमित्यादिना अस्मदुक्तविषया-
वैषम्याभिप्राय एव तादृशप्रवृत्तिमूलमित्यनुसन्धेयमित्याह—अन्यत्रापीत्यादिना ।

5. प्रामाण्यज्ञप्तिविन्द्रियाणामज्ञातानामसत्समत्वं दृष्टमिति तदेव तदुत्पत्तावपि अङ्गी-
कार्यम् । तत्रापि ज्ञप्तेस्सत्वादिति वदतः अस्मात्प्रति इन्द्रियादीनामिव गुणानां सत्तया प्रामाण्यं
प्रति कारणत्वमित्युक्तिः न युज्यते । इन्द्रियादीनां सत्तयैव अर्थज्ञानकारणत्वम् न कश्चिदपि ज्ञाय-
मानतयेत्यंशस्य संप्रतिपन्नतया कश्चिद् ज्ञायमानतयार्थज्ञानकारणत्वं कश्चिद् सत्तयेति वैषम्यस्य

न हीन्द्रियादीनां ज्ञायमानतया ^१प्रामाण्यप्रतिपत्तिहेतुभावः भवन्निरपि इष्यते । तेन विधर्मा दृष्टान्तः । यच्चानवस्थानमुभयत्रापि सममिति, तन्न । उत्पत्तावस्मत्पक्षे ज्ञानान्तरानपेक्षणात् । प्रमितौ यद्यपि ज्ञानद्वितयमपि ^३काक्षितं तथाप्युत्पत्तिमात्रं न स्वतः प्रामाण्यं लाभतः (तथाप्युत्पत्तिमात्रात्स्वतःप्रामाण्यलाभः ?) । प्रमाणमिदमित्यस्य व्यवहारस्य परिनिष्पत्तये प्रमाणान्तरापेक्षा । न तु ^४प्रमाणकार्ये हानादौ । स्वयंप्रकाश-ज्ञानपक्षे तद्व्यवहारे जानामीत्यादौ हानादौ वा प्रामाण्यस्यानाहार्यत्वेन हेत्वनपेक्षत्वात् । तत्र अपवादशङ्कैव निवर्तनीया । तदर्थं च दोषसदसम्भाव एव निरूपणीय इति न

तत्राभावेन दृष्टान्तस्य वैधर्म्यात् ययय वस्तुनः एकस्मिन्कार्ये सत्तया कश्चित् ज्ञायमानतया च कश्चित् कारणत्वं दृष्टम् तदेव स्वस्वनिष्पत्त्य दृष्टान्ततयोपादातुं युक्तम् । तादृशं हि वस्तु न लभ्येतैवेति भावः ।

१. प्रामाण्यं भासमानः अर्थः तत्प्रतिपत्तिः यथावस्थितार्थज्ञानम् ।

२. ज्ञानजनकसामग्र्यैव तद्वत्प्रामाण्योत्पत्त्यङ्गीकारादिति भावः । सा च सामग्री इन्द्रियार्थ-संयोगादिरूपा । तदेव मीमांसकानां प्रामाण्यस्य स्वतस्त्वम् यत् स्वाभ्युपगमजनकसाम-ग्र्यैव जन्यत्वम् ।

३. कुमारिलमते घटः घटत्ववद्विशेषकघटत्वप्रकारकज्ञानविषयः घटत्वप्रकारकज्ञातता-वत्त्वात् इत्यनुमानेन विषयतासंबन्धेन घटे तद्वति तत्प्रकारकस्वरूपप्रामाण्यविशिष्टज्ञानसिद्धय-भ्युपगमात्प्रामाण्यज्ञानं स्वसाधनतया निरुक्तानुमानं तत्साध्यकोटिप्रविष्टं स्वविषयप्रामाण्याभ्य-ज्ञानं चापेक्षत इत्यवगन्तव्यम् ।

४. परतःप्रामाण्यवादिमत एव ज्ञानोत्पत्त्यनन्तरं नियमेन प्रामाण्यसम्बन्धात् व्यवहारा-संभवः । तन्निर्णयार्थं च गुणजन्यत्वहेतुकानुमानात्मकगुणज्ञानापेक्षा च । स्वतःप्रामाण्य-वादिमते तु प्रामाण्यविशिष्टस्यैव ज्ञानस्येन्द्रियार्थसंयोगादिना उत्पत्त्यभ्युपगमेन तद्वन्तरमेव प्रामाण्यनिर्णयनिरपेक्षं व्यवहारः संभवति । इदं ज्ञानं प्रमा इति व्यवहारे तु व्यवहारं प्रति व्यव-वर्तय्यतावच्छेदकप्रकारकज्ञानस्य हेतुतया प्रामाण्यज्ञानमपेक्षितमिति तस्य ज्ञाततालिङ्गकानु-मानेन सिद्धिः । अस्य चानुमानस्य स्वतःप्रामाण्यशालितया कार्यकरणं निष्पत्त्युद्दिष्टमिति न प्रामाण्यनिर्णयायान्यापेक्षेति नानवस्था । यस्यां ज्ञानम्यत्तौ यदा संशयकसामग्रीकलेनापवाद-शङ्कया प्रामाण्यसम्बन्धः तस्यामेव तदेव प्रामाण्यनिर्णयायान्यापेक्षेति भावः ।

कचित्सजातीयापेक्षेति नानवस्था ।

यच्चानवस्थापरिहारार्थं स्वपरनिर्वाहकमनुमानमुपन्यस्तम् । तदयुक्तम् । कुतः ?

आकांक्षापरिहारार्थमनुमानं न कल्पते ।

तद्वि तामेकधा...[प्राप्तां बहु]धा जनयेद्यतः ॥

अनुमानं हि पक्षे(क्ष)हेतुदृष्टान्तादिवहुपरिकरसाध्यं तेषु तेषु प्रमाणमभिकांक्ष-माणं तन्मुखेनानवस्थां बहुलीकरोति ।

^१न चानुव्यवसायत्वे प्रामाण्यस्य व्यवस्थितिः ।

गुणज्ञानानपेक्षस्य तव तदुर्लभं यतः ॥

अनुव्यवसायादिषु पदार्थेषु प्रतिपक्षेषु हि भवत्यप्यव्यभिचारादिचिन्ता । तत्प्रती-तिरेव तु भवतां गुणज्ञानादिकमन्तरेण दुर्लभेत्युक्तम् । तद्यदि गुणज्ञानादिकमन्तरे-णापि कस्यचित्परस्तादवधारणमुपपद्यत इति ब्रूये वरं तत्प्रागेवाभ्युपगन्तुमिति कृतं कश्चित्परतःप्रामाण्यग्रहेणेति ।

यत्तु परस्तादनाश्वासे कश्चिदपि निश्चयानुपपत्तिरिति । तत्प्रथममस्माभिरुक्त-

१. न वयं गुणज्ञानादिरूपमनुमानं स्वपरनिर्वाहकमभ्युपगम्य तेन प्रामाण्यनिर्णयं व्यवसायात्मके ज्ञाने संपादयामः, येन इत्थमुपाकृत्येमहि । अपि तु अनुव्यवसायेनैवेत्यत्राह-न चेत्यादिना । पूर्वपक्षप्रकरणे स्वपरनिर्वाहकेणानुमानादिना अनुमानादिकं हि इति पाठे एवमनुमाने गतेऽपि अस्मात्परिगृहीतस्यैवानुव्यवसायस्य निर्दुष्टतया तेनैव प्रामाण्यं साधायाम इत्यत्राहेत्यवतरणं बोध्यम् । अनुव्यवसायस्य प्रामाण्यनिश्चये हि तेन व्यवसायगतप्रामाण्यं गृह्यते न चेति विचारस्तंभवति । स एव न संभवति । तव मते तस्य गुणज्ञानाधीनत्वात् । अद्य च त्वया गुणज्ञानं परित्यज्य अनुव्यवसायावलम्बनात् । यद्यनुव्यवसायगतं प्रामाण्यं स्वेनैव गृह्यत इति मतं तदा मिश्रमतमेव आहतमिति प्रामाण्यस्य परतस्त्वं परित्यक्तमेव । यथेवं व्यवसायस्यैव तदङ्गीकृत्य गुह्यमतमेवाग्रियताम्, किं व्यवसायप्रामाण्यमनुव्यवसायेन तद्वत्तं तु तेनैवेति वेद्यमेव । एवमपि परतस्त्वपक्षः परित्यक्त एवेति न चेत्यादेः ग्रहेणेत्यन्तस्य निष्कटार्थः ।

मेवानवधार्य पश्चात्स्ववर्णाजितमिव भवन्तो मन्यन्त इति विशेषः ।

यत्स्वन्वयव्यतिरेकान्यां गुणात्प्रामाण्यं जन्यत इत्यास्थेयमिति तदन्यथासिद्धत्वात्प्रत्यु-
क्तमिति वेदितव्यम् । यथा अणुमहदीर्घस्वादिसंज्ञानां भाववाचिनां विरोध्यभावप्रतीत्यन्व-
यव्यति.....[रेकसद्भावेऽपि] तत्कारणत्वमन्यथासिद्धत्वात्तद्विद्यते तद्वदत्रापि । तदुक्तम्—

तस्माद्गुणेभ्यो दोषाणामभावस्तदभावतः ।

अप्रामा.....[प्यस्य नास्ति]त्वं तेनोत्सर्गोऽन्योदितः ॥ इति ।

यच्चानुमानात्परतः प्रामाण्यसाधनमुपन्यस्तं प्रमा ज्ञानहेत्वतिरिक्तहेत्वधीनेत्यादि,
तत्रोच्यते ।

असिद्धिर्वा विरोधो वा ^१तद्विशेषत्वसाधने ।

न स्यान्तरजातिर्नो न ^२चान्यापेक्ष^३मन्यथा ॥

कार्यत्वे सति तद्विशेषत्वादित्यत्र विशेषत्वं नाम किं ज्ञानान्तरजातित्वं उपाधित्वं
वा विवक्षितम् । तदसिद्धम् । अथोक्तप्रकारेणान्योदितसामान्यरूपमेव, ततो
विरुद्धम् । न अचिच्छब्दस्य घटसामग्रीव्यतिरिक्तापेक्षा विद्यते । कार्यत्वे सतीति
^४चास्मान्मति व्यर्थम् । तव तु उपादेयमेवेति सङ्गतं सुमहत् । अथवा—

१. कार्यत्वे सति तद्विशेषत्वादित्यत्र तद्विशेषत्वकमे साधनात्ते ।

२. प्रमाणात्मकं ज्ञानं ज्ञानसामान्यकारणातिरिक्तकारणजन्यं न सिद्ध्यति । अपि तु
तेन हेतुना तादृशकारणाजन्यत्वमेव सिद्ध्येत् । अचिच्छब्दस्य तदा दर्शनात् । तथा चाभिमत-
विरुद्धसाधनाद्विरुद्धो हेतुरिति भावः ।

३. अन्योदितसामान्याकार एव तद्विशेषत्वमित्यङ्गीकारे ।

४. अस्मान्—ईश्वरस्य नित्यज्ञानमनभ्युपगच्छतः ।

^१न च केचिद्गुणा नाम प्रामाण्ये सन्ति हेतवः ।

दोषा हि ^२प्रकृतिस्थानां हेतूनां ^३विक्रिया यतः ॥

स्वाभाविकं हि रूपं इन्द्रियाणां गुण इत्यारूपायते । न तु कश्चिदतिशयः ।
मेवजमेदैरपि दोषा एव निरस्यन्ते । तथैव शास्त्रप्रवृत्तेः ।

न चाज्ञानसिद्धं रूपं विहायापरं गुणं प्रमाणान्तरेणापि पश्यामः ।

^४अनुमाने तु विज्ञानं यावत् ज्ञानस्य साधनम् ।

तावतो नातिरेकेण गुणः कश्चिदपेक्ष्यते ॥

न चानारोपितत्वं तेषां गुणः स्वरूपमात्रत्वात् । आरोपितत्वे तु तदभाव एव ।
न च ^५भावभावसाधारणं भावस्वरूपम्, विरोधादिति ।

न ^६च शब्दे गुणाः केचित् प्रामाण्योत्पत्तिहेतवः ।

आकांक्षादित्रयोपेतं वाक्यं ज्ञानस्य साधनम् ॥

न अत्युत्पन्नमाकांक्षादित्रयरहितं वाक्यं ज्ञानं साधयति । तथा साधयतु
प्रमाणमेवेति न गुणाः केचिदत्रापि । न च मूलप्रमाणापेक्षं योग्यत्वम् । सजाती-
यान्वयदर्शनादेव तत्सिद्धेरिति । तस्मात्सर्वाणि ज्ञानसाधनानि स्वरूपेण प्रमाणमेव

१. कार्यगतप्रामाण्यं प्रति हेतवः—हेतुत्वेन विवादविषयाः कारणगता गुणा नाम
केचित् सम्बन्धेऽप्यर्थः ।

२. प्रकृतिस्थानां—स्वाभाविकाकारसाधनानाम् ।

३. विक्रिया—भाकारवैकल्यम् । दोषस्य किञ्चिदाकारवैकल्यरूपतया तदभावात्म-
को गुणः स्वाभाविकाकारवैकल्यरूप एव नातिरिक्तः कश्चिदतिशय इति भावः ।

४. अनुमानकारणव्याप्यादिज्ञानातिरिक्तः कश्चिद्गुणोऽनुमाने नापेक्ष्यत इत्यर्थः ।

५. अनारोपितत्वस्य गुणरूपत्वे तस्य स्वरूपमात्रत्वेन आरोपात्मकाभावसाधारणा-
वसिः । न च तदुक्तम् । भावस्वरूपत्वस्याभावविरोधित्वादित्यर्थः ।

६. शब्दजन्यशब्दबोधात्मकज्ञानगतप्रामाण्यहेतुत्वेन विवादविषयाः केचिदाकांक्षादि-
त्रयसाहित्यरूपस्वाभाविकाकारातिरिक्ताः कारणे शब्दे गुणा न सम्बन्धेऽप्यर्थः ।

जनयन्ति । दुष्टानि तु भ्रान्तिमिति न गुणाः केचित् दोषाभावातिरेकिणो दृश्यन्त इति न युक्तम् (इति । तदुक्तम् ?)—भगवद्बोधयनादिपरमर्षिशतपरिचितसाङ्गवेद वेदान्तप्रस्थानयथात्म्यदेशिकैः शारीरकमीमांसाभाष्यकारैः “यथावस्थितपदार्थप्रतीत्यनुगुणस्वाभाव्याश्च ज्ञानतत्साधनयोरनुग्राहकस्य च तच्च स्वतःप्रामाण्यन्यायसिद्धमिति” । यदि सर्वज्ञानानां प्रामाण्यं स्वाभाविकं जायते अनुव्यवसायमात्रेण च ज्ञायते कथं तर्हि कचित्प्रामाण्यसन्देहो भव...[ताम् । न हि] निश्चितेऽप्यसौ सम्भवति नि...[यमेन] संशयप्रसङ्गादिति चेत् । तन्न ।

²अप्रामाण्येऽपवादे तु संशयोऽप्यवकाशवान् ।

निरस्ते पुनरेतस्मिन्प्रामाण्यं प्राच्यमेव नः ॥

यथा हि कारकान्तरेषु तत्कार्यसामर्थ्यं तद्गोचरप्रमाणमात्रेणाध्यवसितमपि कचिदपवादशङ्कया कुपिठतव्यवहारं तन्निरसनेन ³तस्मै कल्पते । ⁴न चापवादनिरासमपेक्षत इत्यनिश्चितमस्वाभाविकं वा भवति । न हि ईषदमिष्टमपि बीजतां विजहाति । न विलक्षणमीक्ष्यते । ततो भवत्येव ⁵शङ्का सामान्यदर्शनेऽपि । न च

1. व्यवसायविषयकज्ञानेनेत्यर्थः । ज्ञाततालिङ्गकानुमानेनेति यावत् । गुरु-मिथ-कुमारिष्मत्तसाधारण्यवैवमुक्तिः । मतत्रयेऽपि व्यवसायगतप्रामाण्यस्य क्रमात् व्यवसायानुव्यवसायानुमानप्राप्तत्वाभ्युपगमात् इति भावः । इदं ज्ञानं प्रमा न वा इति संशयस्य धर्मित्वेन ज्ञानसापेक्षतया संशयात्पूर्वमेव तेन तेन धर्मिसिद्धेरावश्यकतया तद्वत्प्रामाण्यस्यापि तद्वैव सिद्ध्या प्रामाण्यज्ञानसत्त्वेन संशयासंभव इत्यर्थः । मात्राया गुणज्ञानादिकं व्यवच्छिद्यते । मम तु गुणज्ञानाद्यभावदशायां संशयोपपत्तिरिति भावः ।

2. अपवादशङ्काकलङ्कारहितं प्रामाण्यज्ञानमेव संशयविरोधि । ईदृशमेव ज्ञानमुत्सर्गतः सर्वत्र जायते । कचिदेव सामग्रीवशात् सकलङ्कं भवतीति तत्र संशयस्सावकाश इत्यभिप्रायेण परिहरति—अप्रामाण्येत्यादिना । अप्रामाण्यस्यापवादत्वे सति तच्छङ्कया कचित्संशयसंभवः । अप्रामाण्ये अपवादे निरस्ते औत्सर्गिकं प्रामाण्यमेव स्थितमित्यर्थः ।

3. तस्मै = व्यवहाराय ।

4. न चाभिहितमस्वाभाविकं वेत्यन्वयः ।

5. शङ्का भवनकर्त्री ।

तत्राप्यभिसंयोगप्रागभाक्सहकृतस्य कार्यकरत्वमिति वाच्यम् । यतो बीजदोष एव तत्र प्रामाणिकः, न तु सहकारिविरहः । निश्शेषसहकारिसमवधानेऽपि बीजदोषादङ्कुरानुदयः तत्परीक्षकपरिष्प्रसिद्ध इति किं तत्समर्थनेन । तस्मान्नालौकिकं किञ्चिदेतत् यत्सामान्यप्रसिद्ध्या निश्चितमपवादशङ्कया सन्दिग्धप्रायं तत्परिहारेण स्थिरीभवतीति । कारकान्तराणि जातानि पश्चादप्यपोद्यन्ते । ज्ञानं तु जायमानमेवेति विशेषः ।

अप्रामाण्यं विरोधित्वान्न ज्ञानानां स्वतो भवेत् ।

न च तद्बाधकाभावे विज्ञानेनावसीयते ॥

न चाप्रामाण्यं स्वाभाविकमिति शक्यमुत्प्रेक्षितुमपि, विरोधिरूपत्वात् । अर्थोऽस्य बाधेन अप्रामाण्यं गम्यते । ¹येनार्थज्ञानं निरूप्यते तदभावेनेति यावत् । ततः कथं स्वाभाविकं भवति । तस्मात् ज्ञानानामविकलाङ्गत्वं ²प्रामाण्यम् । अङ्गैकदेशवैकल्यं ³प्रामाण्यमिति पूर्वं स्वत एव परं परत एवेति सिद्धम् ।

⁴अप्रामाण्यनिवृत्तिश्च दोषाभावेन गम्यते ।

योम्यस्यानुपलब्ध्या च दोषस्याभावनिर्णयः ॥

यावच्छक्ति विचिन्त्यैव यदि दोषं न पश्यति ।

निर्णयेत्तस्य सोऽभा...[वमिति] स्वाभाविकस्थितिः ॥

सर्वप्रतीत्यनुकूलमार्गोऽप्ययमेवेति नालौकिकं किञ्चिदत्रापि । एवं व्यवस्थिते लोकप्रस्थाने सकलेतरप्रमाणागोचरार्थस्य निश्शेषसूरिपरिषदनुष्ठानमूलभूतस्य मन्वाद्यव-

1. येन = अर्थेन ।

2. अविकलाङ्गत्वं = विशेषणविशेष्यसंसर्गरूपार्थत्रयनिरूपितत्वम् ।

3. वैकल्यं = संसर्गरहितम् ।

4. अप्रामाण्यरूपापवादनिरासकमाह—अप्रामाण्येत्यादिना ।

स्थापेक्षितानुभवस्मरणस्य कर्तुस्मरणात् अलिङ्गलोकप्रसिद्धैस्तैः निरङ्कुशातिशयज्ञान-
शक्तिभिः बहुभिः श्रीवेदव्यासपराशरादिभिरपौरुषेयतयैव परिगृहीतस्य व्याख्यातस्य
वेदराशेस्तु नित्यनिर्दोषतया दूरत एवाप्रामाण्यशङ्का सुनिरसेति स्वाभाविकप्रामाण्य-
साम्राज्यं विद्योततेतरामिति ॥

इति भगवद्रामानुजमुनिवरमतधुरंधरस्य अग्निगोत्रप्रदीपभीषन्ना-

भार्येनन्दनस्य वादिहंसनवाम्बुदाय भीमद्रामानुजाय नमः

कृती न्यायकुलिशे कौमारिलमतानुरोधेन स्वतः-

प्रामाण्यवर्णनवाद्यो द्वितीयः ॥

भीमते वादिहंसनवाम्बुदाय राजानुजाय नमः

1. वाक्यान्तरेऽप्युक्तरीत्या निराबाधं स्वतःप्रामाण्यम् कश्चिदेवापवादशङ्कायामप्रामाण्य-
संशयरूपामां जातायां योन्यानुपलब्ध्या दोषाभावनिर्णयेनापवादे निरस्ते औत्सर्गिकं स्वतः
प्रामाण्यं दृढीभवतीति तत्तत्र विद्योतत एव । वेदे तु दोषासंभवेनाप्रामाण्यशङ्काया एवानुदयप्रामा-
ण्यं विद्योततेतरामित्यर्थः ॥

॥ श्री गुरुभ्यो नमः ॥

॥ समासशक्तिविमर्शः ॥

(पूर्वतोऽनुवृत्तः)

॥ वे. सुब्रह्मण्यशास्त्री ॥

॥ अण्णामलैविश्वविद्यालयः ॥

यदपि राजपुरुष इत्यत्र राजपदलक्ष्यार्थराजसंबन्धिनः अमेदेन पुरुषपदार्थे अन्व-
यो न संभवति प्रातिपदिकार्थप्रकारकशाब्दबोधे प्रत्ययजन्योपस्थिते हेतुत्वादिति । तद-
पि न । तण्डुलकर्मकपाकान्वयबोधे द्वितीयान्ततण्डुलपदपचधानुसमभिव्याहारस्य
आकांक्षात्वेन तण्डुलः पचति इत्यत्र निरुक्ताकांक्षाया अभावादेव तादृशबोधापत्तेरसंभवेन
तद्वारणाय निरुक्तकार्यकारणभावकरूपनस्यानावश्यकत्वात् । अस्तु वा कार्यकारण-
भावः । तथापि कार्यतावच्छेदककोटौ भेदसंबन्धावच्छिन्नप्रकारता निवेशनीया । अन्यथा
नीलो घट इत्यत्र घटपदार्थे नीलपदार्थस्य अमेदान्वयबोधोदयेन व्यभिचारात् । नच
तत्रापि नीलपदोत्तरप्रथमार्थे अमेद एव नीलान्वय इति अमेदप्रकारकबोधस्यैवोपगमेन न
व्यभिचार इति वाच्यम् । अमेदस्य प्रकारतया भाने अमेदीयसंबन्धयोरपि शाब्दबोधे
भानेन अधिकावगाहियोग्यतातात्पर्यज्ञानादीनां तत्सामग्रीकोटौ निवेशे विभिन्नविषयक-
प्रत्यक्षादिप्रतिबन्धकतायामवच्छेदकगौरवात् । नच नीलतादात्म्याभाववान्घटः सुन्दरः
इति विशिष्टेवैशिष्ट्यावगाहिप्रत्यक्षे विशेष्यतावच्छेदकप्रकारकज्ञानविधया नीलतादा-
त्म्याभाववान्घटः इति ज्ञानं कारणम् । तच्च नीलतादात्म्यवान्घट इत्याकारकभेदप्रकारक-
शाब्दबोधे बाधज्ञानविधया प्रतिबन्धकम् । निरुक्तज्ञानाभावघटिता शाब्दसामग्री । निरुक्त-
ज्ञानघटिता प्रत्यक्षसामग्री । अतस्तयोः समावेशो न संभवति । एवञ्च शाब्दबोधसामग्री-
काले प्रत्यक्षसामग्र्यभावादेव प्रत्यक्षवारणसंभवात् निरुक्तप्रत्यक्षे अमेदप्रकारकशाब्द-
सामग्र्याः प्रतिबन्धकत्वं न कल्पनीयमिति लाघवम् । अमेदसंसर्गकबोधाङ्गीकारे तु

नीलतादात्म्याभाववान्घट इति ज्ञानस्य बाधज्ञानत्वाभावात् सामग्रीसमावेशेन प्रत्यक्षापत्ति-
वारणाय शाब्दसामग्र्याः प्रतिबन्धकत्वं कल्पनीयमिति गौरवमिति वाच्यम् । अभेदस्य
विशेषणविभक्त्यर्थत्वे प्रतियोग्यभावान्वयौ तुल्ययोगक्षेमौ इति न्यायेन घटो न नीलः इति
वाक्यात् नीलतादात्म्याभावस्यैव घटे बोधः स्यात् न नीलभेदस्य । नञ्घटितनिरुक्तवाक्यादी-
नाञ्च नीलभेदबोधकत्वं सर्वानुभवसिद्धम् । अतः निरुक्तलाघवमपि बाधित्वा वाक्यजन्य-
भेदानुभव एव विशेषणविभक्तेरभेदार्थकत्वमपाकरोति । तादात्म्यस्य संसर्गतया भाने तु प्रति-
योग्यभावान्वयाविति न्यायेन न नील इति वाक्यात् तादात्म्येन नीलाभावः बोध्यते ।
स एव चान्योन्याभाव इति भेदबोधकत्वं निर्वहति । अयञ्च पक्षः भवतामप्यभिमत एव
अनभिहितसूत्रे “ यथा ईश्वरसुहृदः स्वयं निर्धना अपि तदीयधनेनैव तत्फलभाजः एवं
गुणा अपि ” इति कैयटोक्तेः । ईश्वरः=राजा । गुणाः=विशेषणपदानि । ईश्वरस्था-
नापन्नघटपदसुहृत्त्वं नीलपदस्य अभेदेन तदर्थान्वयित्वम् । तस्य निर्धनत्वं स्वार्थान्व-
य्यर्थकविभक्त्यप्रकृतित्वम् ।

किञ्च चैत्रः इत्यादौ चैत्रस्य प्रथमार्थे चैत्रे अभेदेनान्वयो वाच्यः ।
स च न संभवति । तथान्वयप्रयोजिकाया विरूपोपस्थितेरभावात् । तथाच प्राति-
पदिकार्थप्रकारकेति कार्यकारणभावस्य नीलो घट इत्यत्र व्यभिचारात् कार्यतावच्छेदक-
कोटौ भेदसंबन्धावच्छिन्नप्रकारता निवेशनीया । एवञ्च प्रातिपदिकार्थनिष्ठभेदसंबन्धाव-
च्छिन्नप्रकारतानिरूपितविशेष्यतासंबन्धेन शाब्दबुद्धिं प्रति प्रत्ययजन्योपस्थितिर्विशेष्य-
तासंबन्धेन कारणमिति फलितम् । राजपुरुषः इत्यत्र च राजपदलक्ष्यार्थराजसंबन्धिनः
अभेदेनैव पुरुषपदार्थे अन्वयोपगमेन निरुक्तव्युत्पत्तिविरोधविरहात् ।

यदपि राजपदार्थपुरुषपदार्थयोरभेदान्वयबोधोपगमे राजपुरुष इत्यस्य कर्मधारयत्वा-
पत्तिरिति । तदपि न । विना लक्षणां अभेदान्वयबोधजनकत्वस्यैव कर्मधारयप्रयोजकसामा-
नाधिकरण्यरूपत्वाङ्गीकारात् । तत्पुरुषस्थले पूर्वपदलक्षणयैवाभेदान्वयबोधोपगमात् । न च
नीलघट इति कर्मधारयेऽपि नीलरूपे शक्तनीलपदस्य तद्विशिष्टे लक्षणां स्वीकृत्यैव अभेदा-
न्वयबोधनिर्वाह इति नोक्तस्य कर्मधारयप्रयोजकत्वमिति वाच्यम् । नीलः घट इति व्यस्त-

स्थलेऽपि तत्पदस्य लक्षणायाः सत्त्वेन तस्यास्सामासिकत्वाभावात् । विना सामासिकलक्षणां
अभेदान्वयबोधजनकत्वस्यैव कर्मधारयप्रयोजकत्वात् । अथवा तत्तद्विभक्त्यन्तार्थविशिष्टे
लक्षणां विना अभेदान्वयबोधप्रयोजकत्वमेव तथा । नीलघट इत्यत्र नीलपदस्य नीलवि-
शिष्टे लक्षणायामपि विभक्त्यन्तार्थविशिष्टे लक्षणाया अभावेन सामञ्जस्यात् । विशेषण-
पदोत्तरविभक्तेः साधुत्वमात्रार्थकत्वात् । राजपुरुषः इत्यादि तत्पुरुषे तु राजपदस्य
षष्ठ्यन्तराजपदार्थराजस्वत्वविशिष्टे लक्षणायाः स्वीकारात् । यद्यपि घनश्यामः इत्यादौ
घनशब्दस्य घनवृत्त्यसाधारणधर्मे लक्षणा । तस्य च अभेदेन श्यामपदार्थैकदेशश्यामरूपे
अन्वयः । घनशब्दस्य लक्षकत्वे तस्य उपमानबोधकत्वाभावेन उपमानानि सामान्यवचनैरिति
समासो न स्यादिति तु न शङ्क्यम् । प्राधान्येन उपमानाबोधकत्वेऽपि असाधारणधर्मनिष्ठाधेय-
त्वनिरूपकत्वेन उपमानघनबोधकत्वात् । स्पष्टा चेयं रीतिः पुत्रीयतीति वाक्यजन्यबोधि-
रूपणावसरे व्युत्पत्तिवादे । तथाच घनश्याम इत्यत्रापि लक्षणयैवाभेदान्वयबोधः । तथापि
घनपदस्य विभक्त्यन्तार्थविशिष्टे लक्षणाया अभावेन कर्मधारयप्रयोजकसामानाधिकरण्यम-
स्त्येव । एवञ्च राजपदलक्ष्यार्थभेदान्वयोपगमेऽपि न कर्मधारयत्वापत्तिः ॥

यदपि राजपदस्य संबन्धिलक्षकत्वे राज्ञः पुरुषः इति विग्रहवाक्यजन्यबोधसमा-
नाकारबोधजनकत्वं समासस्य न स्यादिति । तदपि न । समासविग्रहयोः समानप्रकार-
कबोधजनकत्वनियमो नास्ति । चित्राः गावः यस्य चित्रगुः इत्यादिवहुव्रीहिसमासे
व्यभिचारात् । तत्र विग्रहवाक्यजन्यबोधः यादृशविशेषणविशेष्यभावापन्नविषयकः
तद्विपरीतविशेषणविशेष्यभावापन्नपदार्थविषयकशब्दबोधस्यैव समासेन जायमानत्वात् ।
व्याकरणमधीते वैयाकरणः इत्यत्र व्यभिचारेण विवरणविनियमाणवाक्ययोरपि समानप्र-
कारकबोधजनकत्वानियमात् । तत्र विवरणवाक्यात् वैयाकरणनये धात्वर्थविशेष्यक-
बोधस्य ; विनियमाणपदात् व्याकरणाध्ययनकर्तृबोधस्य च जायमानत्वात् । यदि “ आख्यातं
तद्वितकृतोर्थत्रार्थस्योपदर्शकं । गुणप्रधानभावस्य तत्र दृष्टो विपर्ययः । ” इति हर्युक्तेः
विवरणवाक्यादपि अध्ययनकर्तुरेव बोध इत्युच्यते । तदा भवत्सिद्धान्तसिद्धस्य
धात्वर्थमुख्यविशेष्यकबोधजनकत्वनियमस्य भङ्गः । एवं कृष्णसर्पः गीष्पतिः धनाधिपः

इत्यादौ समासविग्रहयोरेकाकारबोधजनकत्वं नास्ति । कृष्णसर्पपदात् कृष्णसर्पस्वरूप-
जातिविशेषावच्छिन्नस्य कृष्णः सर्पः इति वाक्यात् कृष्णाभिन्नसर्पस्य च बोधात् ।
तस्मात्तादृशनियमे मानाभावात् न तदनुपपत्त्या राजपदस्य राजसंबन्धिलक्षकत्वानुपपत्तिः ।

यच्चोक्तम् राजपदस्य राजसंबन्धे लक्षणायाम् तस्य पुरुषे अभेदान्वयः स्यादिति ।
तदपि न । नामार्थयोरिति व्युत्पत्तेः समासस्थले संकोचेन राजसंबन्धवान्पुरुष इति भेदान्व-
यबोधे बाधकाभावात् । इदन्तु बोध्यम् । नामार्थयोरभेदान्वयव्युत्पत्तेः राजपदस्य राजसंबन्धि-
नि लक्षणां स्वीकृत्य तस्य पुरुषनामार्थे अभेदान्वयः भट्टाचार्यसमतः समीचीनः । समासस्थ-
ले निरुक्तव्युत्पत्तेः संकोचाङ्गीकारे विनैव राजपदे लक्षणां राजपदशक्यार्थस्य स्वत्वसंबन्धेन
पुरुषनामार्थे अन्वयः साधीयान् । नतु राजपदस्य राजसंबन्धे लक्षणां स्वीकृत्य नामार्थ-
योरिति व्युत्पत्तिसंकोचेन राजसंबन्धस्य पुरुषे भेदान्वयः इति ।

यदपि उपकुम्भमित्यादौ कुम्भपदस्य कुम्भसमीपे लक्षणायां द्योत्यार्थोपस्थितिः
द्योत्यार्थविशेषणकबोधजनकत्वनियमभङ्ग इति । तदपि न । प्रतिष्ठते इत्यत्र व्यभि-
चारेण तथानियमाभावात् । तत्र हि स्थाधातोः गत्यभावः अर्थः । प्रशब्देनतु गतिर्द्योत्यते ।
द्योत्यगतिश्च विशेष्यतया भासते । तस्मात्तत्र द्योत्यगतेरिव अत्र उपद्योत्यसामीप्यस्य कुम्भ-
विशेष्यतया बोधे बाधकाभावात् । किञ्च द्योतकत्वं तात्पर्यग्राहकत्वम् । तात्पर्यञ्च
विषयविशेषघटितशब्दबोधघटितमित्यननुगतम् । एवं द्योत्यत्वमपि । तथाच द्योत्या-
र्थविशेषणकशब्दबोधे द्योत्यार्थोपस्थितिः कारणमिति न अनुगतकार्यकारणभावः संभवति ।
अपितु पृथक् पृथगेव । प्रकर्षविशिष्टनमनविषयकशब्दबोधं प्रति प्रशब्दसमभिव्याहृतनम्-
धातुलक्षणाग्रहजन्यप्रकर्षविशिष्टोपस्थितिः कारणम्, उपकुम्भमित्यत्र कुम्भसमीपविषय-
कशब्दबोधं प्रति उपपदसमभिव्याहृतकुम्भपदलक्षणाग्रहजन्यकुम्भसमीपोपस्थितिः
कारणं इतिरीत्येति नापूर्वकार्यकारणभावकल्पनागौरवम् ।

तस्मात्समासघटकपदानां वृत्त्यैव विशिष्टार्थबोधसंभवात् न विशिष्टार्थबोधान्यथानु-
पपत्त्या समासशक्तिः सिद्ध्यति ।

(२) यदपि चित्रगुमानयेत्यादौ द्वितीयार्थान्वयानुरोधात्समासशक्तिः सिद्ध्यति
इति । तदपि न । प्रत्ययानां प्रकृतित्वाश्रयार्थान्वितस्वार्थबोधकत्वमेव स्वीक्रियते ।
एवञ्च गोपदस्य प्रत्ययविधानावधित्वरूपप्रकृतित्वस्य स्वरूपसंबन्धेनाश्रयत्वात्तदर्थेन चित्रगो-
स्वामिना द्वितीयार्थकर्मत्वान्वयस्संभवति । नच दण्डिनं पश्येत्यत्र दण्डे दर्शनकर्मत्वा-
न्वयापत्त्या नायं पक्षो युक्त इत्युक्तमेवेति वाच्यम् । संख्यातिरिक्तमुबर्थस्य प्रकृत्यर्थविशेष्य-
तया भाननियमात् दण्डिनं पश्येत्यत्र दण्डस्यैव द्वितीयार्थकर्मत्वे विशेषणतया अन्वयः आपा-
दनीयः । तच्च न संभवति दण्डपदार्थस्य इतिप्रत्ययार्थसंबन्धिविशेषणत्वेनोपस्थितत्वेन
'एकत्र विशेषणतयोपस्थितस्य अन्यत्र विशेषणतया अन्वयो न' इति व्युत्पत्तिविरोधात् ।
तथाच निरुक्तव्युत्पत्तिबलेन द्वितीयार्थान्वयः संभवति । अथवा प्रत्ययानां सन्नि-
हितपदार्थान्वितस्वार्थबोधकत्वव्युत्पत्तिः स्वीक्रियते । निरुक्तस्थले गोपदस्य द्वितीयाविभ-
क्तिसन्निहितत्वात्तदर्थेन चित्रगोस्वामिना विभक्त्यर्थकर्मत्वान्वयो न विरुद्धयते । उपकुम्भमि-
त्यत्र नवीनमते विभक्तिसन्निहितकुम्भपदस्यैव कुम्भसमीपे लक्षणास्वीकारात् तत्र व्यभि-
चारः । वस्तुतस्तु प्रकृतित्वं प्रत्ययत्वञ्च अनुगतानतिप्रसक्तं दुर्निर्वचम् । तथाहि
न तावत्प्रकृत्युत्तरत्वं प्रत्ययत्वं प्रकृतिपूर्वबहुजादिप्रत्ययेष्वव्यासेः । नापि उत्तरवृत्तित्व-
पूर्ववृत्तित्वान्यतरसंबन्धेन प्रकृतिविशिष्टत्वम् प्रकृतिमध्यवर्तिनि अकञ्चप्रत्यये अव्यासेः ।
प्रत्ययविधानावधित्वरूपप्रकृतित्वस्य प्रत्ययत्वघटितत्वेन प्रत्ययत्वस्य प्रकृतित्वघटितत्वेना-
न्योन्याश्रयाच्च । नापि प्रत्ययपदवाच्यत्वं तत् तत्र ईश्वरसंकेते मानाभावात् । नापि
पाणिनिसंकेतसंबन्धेन प्रत्ययपदवत्त्वं व्याकरणान्तरप्रणेतृपुरुषान्तरीयसंकेतसंबन्धेन-
प्रत्ययपदवत्त्वं, पुरुषविशेषीयसंकेतसंबन्धेन घटादिपदवत्त्वञ्चादाय विनिगमनाविरहात् ।
तथाच प्रत्ययत्वस्यानुगतस्याभावात् प्रकृत्यर्थेति अनुगतकार्यकारणभावासंभवेन
अर्थविशेषं निवेद्य घटपदार्थविषयतानिरूपितविषयतासंबन्धेन शब्दबोधं प्रति अमुप्रत्यय-
जन्यकर्मत्वोपस्थितिः विषयतासंबन्धेन कारणमिति रीत्या विशिष्य तत्र तत्र कार्यकारण-
भावो वाच्य इति चित्रगुमितिस्थले गोपदार्थचित्रगोस्वामिनिष्ठविषयतानिरूपितविषयतासं-
बन्धेन शब्दबोधे अमुजन्यकर्मत्वोपस्थितिर्विषयतया कारणमित्यङ्गीकारे गौरवस्याभा-
वात् । तस्मान्न प्रत्ययार्थान्वयानुरोधेन समासशक्तिः सिद्ध्यति ॥

(३) यदपि समासस्य प्रातिपदिकसंज्ञासिद्धये शक्तिस्वीकार आवश्यक इति । तदपि न । अनन्तसमासपदानां अप्रामाणिकानन्तशक्तिकल्पने गौरवात् अर्थवत्सूत्र-घटकार्थवत्पदस्य वृत्तिमदविषयकप्रतीत्यविषये लक्षणा स्वीक्रियते । तथा च प्रातिपदि-कसंज्ञाप्रयोजकमर्थवत्त्वं वृत्तिमदविषयकप्रतीत्यविषयत्वं वृत्तिमत्तद्वटितोभयसाधारणमिति वृत्तिमद्वटितसमासस्य प्रातिपदिकसंज्ञासिद्धिः ।

अथवा समासस्यार्थवत्त्वाभावेन अर्थवत्सूत्राप्रवृत्तावपि कृतद्वितसमा-साश्च इति सूत्रेण प्रातिपदिकसंज्ञा सिद्धयति । अर्थवच्छब्दस्वरूपस्य प्रातिपदिकसंज्ञामुत्तवा कृतद्वितसमासेति सूत्रकरणेनैव समासो न वृत्तिमानिति स्पष्टं प्रतीयते । नच कृतद्वितसूत्रस्य विधायकत्वे वाक्यस्य प्रातिपदिकसंज्ञाव्यवच्छेदः कथमिति वाच्यम् । पदार्थसंसर्गरूपवाक्यार्थस्य आकांक्षालभ्यतया वाक्ये तत्र शक्तिग्राहकप्रमाणाभावेन च वाक्यस्यार्थवत्त्वाभावेन अर्थवत्सूत्राप्रवृत्त्या प्रातिपदि-कसंज्ञायाः अप्राप्तेः तद्व्यवच्छेदस्यानावश्यकत्वात् । एवं कृतद्वितसंज्ञितान्तसमासानां पदसमुदायत्वेनार्थवत्त्वाभावात् पूर्वसूत्रेण प्रातिपदिकसंज्ञाया अप्रवृत्तौ कृतद्वितेति सूत्रेण तेषां प्रातिपदिकसंज्ञा विधीयते । नच कृत्, ह्यान् इत्यादीनां अर्थवत्त्वेन संज्ञा प्राप्तैवेति वाच्यं । तयोरर्थवत्त्वेऽपि प्रथमस्य धातुत्वेन द्वितीयस्य च प्रत्ययत्वेन अधातुः अप्रत्यय इति पर्युदासकरणेन संज्ञाया अप्राप्तत्वात् । नच संज्ञाविधौ प्रत्ययग्रहणे तदन्तग्रहणं नेति परिभाषया कृतद्वितान्तलाभो न संभवतीति वाच्यम् । परिभाषाया असार्वत्रिकत्वात् । नचैवमपि तद्वितान्तग्रहणे तद्वितपूर्वकस्य बहुपदशब्दस्य संज्ञा न स्यादिति तद्वितविशिष्टस्य संज्ञा विधीयत इति वक्तव्यम् । तथाच मध्यस्थिततद्वितस्य पच-तकि इति भागस्य प्रातिपदिकसंज्ञा स्यादिति वाच्यम् । सूत्रस्थतद्वितपदेन स्वाव्य-वहितोत्तरत्वसंबन्धेन तद्वितविशिष्टप्रकृतिघटितसमुदायतद्वितान्तान्यतरस्य विवक्षणेन सामञ्जस्यात् । अकचप्रकृतिभूतस्य पचतीति भागस्य तत्प्रत्ययोत्तरत्वाभावेन प्रथमद-ळस्य, तद्वितान्तत्वाभावेन द्वितीयदळस्य चाभावेन पचतकि इत्यत्रातिव्याप्तेरनवका-शात् । नच कृतद्वितस्य संज्ञाविधाने 'कृतद्वहणे गतिकारकपूर्वस्यापि ग्रहणम्' इति परि-

भाषया कारकपूर्वकृतद्वितस्य मूलकेनोपदेशेति भागस्य प्रातिपदिकसंज्ञापत्तौ सुपो धातु-प्रातिपदिकयोरिति तद्वटकसुपो लोपापत्तिरिति वाच्यम् । परिभाषाया असार्वत्रिकत्वेनादो-षात् । आकरादौ कृतद्वितसूत्रस्य नियमपरत्ववर्णनन्तु वाक्यशक्तिवादिमताभिप्रायेण । तस्मात् कृतद्वितसूत्रेण समासस्य प्रातिपदिकसंज्ञासंभवान्न सुबन्तसमासपदसाधुत्वाय शक्तिः स्वीकार्या ॥

(४) नापि पङ्कजपदप्रतिबन्धा समासशक्तिः सिद्धयति । पङ्कत्वेन रूपेणोपस्थि-तये समुदायशक्तेस्तत्रावश्यकत्वात् लक्षणया च तन्निर्वाहासंभवात् । तथाहि न तावत्पङ्क-जेति समुदायस्य लक्षणा संभवति समुदायस्याशक्तत्वे शक्याप्रसिद्ध्या तत्संबन्धरूपलक्ष-णाया असंभवात् । नापि इप्रत्ययस्य ; प्रत्ययानां प्रकृत्यर्थानन्वितस्वार्थबोधकत्वस्या-व्युत्पन्नत्वेन इप्रत्यये प्रकृतिभूतपदार्थानन्वितपङ्कत्वविशिष्टार्थबोधकत्वस्यासंभवात् । यदिच नैयायिकमते यथा कृतपाकः इति समासे पाककृतिमिति न पाकशब्दस्य लक्षणा घञन्त-स्यावाचकत्वात् । नापि घञप्रत्ययस्य प्रकृत्यर्थानन्वितार्थबोधकत्वस्याव्युत्पन्नत्वात् । अपितु पचधातोरेव तादृशार्थे लक्षणा । प्रत्ययानां प्रकृत्येकदेशार्थान्वितस्वार्थबोधकत्वस्य स्वीकारेण न तत्र सुबर्थान्वये विरोधः । तथा पङ्कजेत्यत्र पङ्कपदस्य तदुत्तरजनेर्वा पङ्कत्व-विशिष्टे लक्षणा संभवतीत्युच्यते । तदापि तत्र समुदायशक्तिरङ्गीकरणीया । पङ्कादि-पदशक्तिज्ञानाभावेऽपि पङ्कजपदात्पङ्कत्वविशिष्टोपस्थितिर्जायते । सा च लक्षणया न निर्व-हति । शक्यार्थज्ञानाभावे शक्यसंबन्धरूपलक्षणाग्रहासंभवात् । अतस्तत्र समुदायशक्तिः । समासे तु समासघटकपदशक्तिग्रहसत्त्वएव विशिष्टार्थबोधो जायत इति लक्षणया निर्व-हस्संभवति । समासशक्तिवादिवैयाकरणमतेऽपि समासघटकप्रत्येकपदशक्तिज्ञानम-पेक्षितम् । राजपुरुषसमासघटकराजपदस्य चन्द्रार्थकत्वज्ञानदशायां समासात् नृपपुरुष-बोधानुदयात् । अत एव भवतां निषादस्थपत्यधिकरणविरोधपरिहारोऽपि संगच्छते । तथाहि समासस्य शक्तत्वे निषादस्थपतिशब्दस्य निषादाभिन्नस्थपतौ निषादसंबन्धिस्थ-पतौ च शक्तत्वात् लक्षणाकल्पनादिगौरवानवकाशात् लाघवात्कर्मधारयाश्रयणमिति सिद्धान्तविरोधमाशङ्क्य, निषादस्थपतिशब्दस्य हर्यादिपदवज्ज्ञानार्थकत्वेन विधिवाक्यगत-

तच्छब्दस्य तात्पर्यसन्देहे सति, समासघटकप्रत्येकपदशक्त्युपस्थापितार्थातिरिक्ताविषयक-
त्वादन्तरङ्गः कर्मधारयीयशक्तिग्रहः । तदतिरिक्तार्थविषयकत्वेन तत्पुरुषीयशक्तिग्रहः
बहिरङ्गः । अन्तरङ्गशक्तिग्रहे लाघवात्कर्मधारयसमासः स्वीक्रियते इत्यर्थकेन “शक्तिग्रहेऽन्त-
रङ्गत्वबहिरङ्गत्वचिन्तनं” इति भागेन परिहार उक्तः । पदघटकवर्णानामिव समास-
घटकपदानामनर्थकत्वे उक्तपरिहारासंगतिः स्पष्टैव ।

अत एव भूतपूर्वगत्याश्रयणक्लेशं विनैव महाबाहुः इत्यत्रात्वं सिद्ध्यति । अन्यथा
समासघटकपदस्य अनर्थकत्वे अर्थवद्ग्रहणे नानर्थकस्येति परिभाषया आन्महतस्समा-
नाधिकरणेति सूत्रे अर्थवत् एव महच्छब्दस्य गृहीतत्वात् समासघटकमहच्छब्दस्यात्वं
न स्यात् । ‘जहत्स्वार्था तु तत्रैव यत्र रूढिर्विरोधिनी’ इत्युक्तेः विरोधिरूढ्यभावे अज-
हत्स्वार्थाया एव वृत्तेः स्वीकृतत्वात् । तथाच समासघटकपदशक्तिज्ञानं विना विशिष्टार्था-
बोधात् लक्षणया विशिष्टार्थबोधो निर्वहति । पङ्कजपदे तु प्रत्येकपदशक्तिज्ञानं विनापि
पद्मत्वविशिष्टोपस्थितिर्जायते इति विशेषः । तस्मान्न पङ्कजपदप्रतिबन्धा समासशक्तिः
सिद्ध्यति ॥

(५) यदपि पण्डितब्राह्मणः इति समासात् ब्राह्मणपण्डितयोर्लक्ष्यविधेयभावे-
नान्वयबोधवारणाय समासे शक्तिः स्वीकुर्येति । तदपि न । पृथगुपस्थितेः उद्देश्याव-
धेयभावेनान्वयबोधप्रयोजकत्वे नानार्थकहर्थादिपदात्प्रथगुपस्थितानां अश्वसूर्यादीनां
उद्देश्यविधेयभावेनान्वयापत्तिः । न च हरिपदात्कदाचिदेकस्यैवार्थस्योपस्थितिरिति
संभवति । तत्पदस्य यावत्सु अर्थेषु शक्तिर्गृहीता तावतां अर्थानां स्मरणस्य पदज्ञाने सत्य-
वर्जनीयत्वात् । परन्तु तात्पर्यानुरोधेन एकैकस्यार्थस्य शाब्दबोधे भानम् । नच
विभिन्नपदजन्योपस्थितिरेव पृथगुपस्थितिपदेन विवक्षितेति नोक्तदोष इति वाच्यम् । एकार्थी-
भाववादिनामपि समासघटकप्रत्येकपदशक्तिज्ञानस्य पूर्वोक्तरीत्या आवश्यकत्वेन पद-
ज्ञानस्य च एकसंबन्धिज्ञानविधयैव पदार्थस्मारकतया प्रत्येकपदार्थोपस्थितेः पृथगुपस्थि-
तिरूपायाः अवर्जनीयत्वात्तथान्वयबोधापत्तेर्दुर्वारत्वात् । यदिच समुदायशक्त्यधीनवि-
शिष्टार्थोपस्थित्यसमानकालीनाया एव पृथगुपस्थितेः तथाशाब्दबोधहेतुत्वोपगमेन परि-

सात् उद्देश्यविधेयभावेनान्वयापत्तिरित्युच्यते । तदा ब्राह्मणोद्देश्यकाभेदसंसर्गकपण्डित-
विधेयकशब्दबोधे प्रथमान्तब्राह्मणपदप्रथमान्तपण्डितपदसमभिव्याहारः आकांक्षा ।
तादृशकांक्षाज्ञानाभावाच्च न समासाद्विधेयत्वावगाहिबोधः इति कृतमनन्तसमासानां
शक्तिकल्पनया ।

(६) एवमेव वषट्कर्तुः प्रथमभक्षः इत्यत्र भक्षोद्देश्यकप्राथम्यविधेयकबोधो न संभव-
तीति प्राथम्यविशिष्टभक्षविधानोक्तिः संगच्छते । एकप्रसरताभङ्गापत्तिरित्यस्य समास-
घटकपदयोर्लक्ष्यविधेयभावेनान्वयाबोधकत्वव्युत्पत्तिभङ्गापत्तिरित्यर्थः । सा च व्युत्पत्तिः
पूर्वोक्ताकांक्षाज्ञानकारणतामूला । एवं समासघटकपदार्थनिष्ठविधेयतानिरूपि-
तोद्देश्यतासंबन्धेन शाब्दबोधं प्रति समासघटकपदजन्योपस्थितेः विशेष्यतया स्वातन्त्र्येण
प्रतिबन्धकत्वान्न तत्र तथान्वयबोधः संभवति । नचैवं सति एतादृशप्रतिबन्धप्रतिबन्धक-
भावकल्पनया गौरवमिति वाच्यम् । अनन्तसमासपदानां अनन्तशक्तिकल्पना-
पेक्षया गौरवविरहात् ॥

(७) यदपि विभाषासूत्रस्य, सविशेषणानां वृत्तिर्नेति वार्तिकस्य च विधित्व-
कल्पने गौरवमिति । तदपि न । राजसंबन्ध्यभिन्नः पुरुषः इति बोधविवक्षायां
राजपुरुष इति समासस्य राजनिरूपितस्वत्ववान्पुरुष इति बोधविवक्षायां राज्ञःपुरुष इति
व्यासस्य च सिद्धत्वेन विभाषासूत्रस्य नैयायिकमतेऽप्यनुवादकत्वात् । सविशेषणानामिति
वार्तिकस्यापि समर्थसूत्रभाष्यस्थेन सापेक्षमसमर्थवद्भवतीति वचनेन सिद्धस्यैवार्थस्यानुवाद-
कत्वान्न विधित्वकल्पनागौरवम् ।

वस्तुतस्तु अनन्तसमासपदानां अनन्तशक्तिकल्पनापेक्षया स्थितस्य सूत्रस्य
वार्तिकस्य च विधित्वकल्पने न गौरवमिति बोध्यम् ॥

अपिच समासस्य वाचकत्वे शशशृङ्गादिपदानां अर्थप्रसिद्ध्या वृत्तिमत्त्वाभावेन अर्थवत्सूत्राप्रवृत्त्या प्रातिपदिकसंज्ञानुपपत्तिः । नैयायिकमते तु अर्थवत्त्वाभावेऽपि प्रातिपदिकसंज्ञा उपपादितैव । नच बौद्धशशशृङ्गस्यार्थस्य प्रसिद्ध्या नार्थवत्त्वानुपपत्तिरिति वाच्यम् । बौद्धार्थे मानाभावात् तस्य चान्यत्र प्रपञ्चितत्वात् । तथाच समासघटकपदवृत्त्यैव विवक्षितार्थबोधसंभवात् समासे न शक्तिरिति व्यवस्थापयन्ति ॥

। इति समासशक्तिविमर्शः ।

Trimsacchloki
TIKASAHITA

प्रकृते तादृशव्युत्पत्तिसम्कोचकल्पने च तवैव गौरवमिति तृतीयपक्षे दूषणं मनसि निधाय प्रथमपक्षद्वये दूषणं प्रकाशयति समीचीनं न तदीति । बहु बहुपदघटितं वाक्यं । निरर्थकं स्यादिति शेषः । सम्भवति सार्थकत्वे निरर्थकत्वकल्पनाया अन्याय्यत्वादिति भावः । तस्मात्प्रथमोक्तस्वपक्ष एव समीचीन इति तात्पर्यम् । (१४)

ननु त्वन्मतेऽपि यदि वह्निर्न स्यात् तर्हि धूमोऽपि न स्यादिति वाक्यस्याप्रामाण्यापत्तिः । नचेष्टापत्तिः । तादृशवक्तरि आसत्त्वव्यवहारस्य सर्वानुभवसिद्धत्वात् । यदा पर्वते वह्निर्नास्तीत्यभिधानं पुमांसं प्रति पर्वतवर्तिनं धूममुपदर्शयन् यदि कश्चिद्ब्रूयात् यदि वह्निर्न स्यात् तर्हि धूमोऽपि न स्यादिति । तदा मध्यस्थः किमेनं सत्यवादिनमामनुते । इत्यत आह—

मू० अभिवेशाभियुक्तानां वाक्यानामप्रमाणता ।

तेषामवश्यवाच्यत्वात् प्रयोगो न विहन्यते ॥ १५ ॥

अभिवेशः आमहात्मको ज्ञानविशेषः । अप्रमाणता इष्टैवेति शेषः । तर्हि किमर्थं प्रयोक्तव्यमित्यत आह तेषामिति । तादृशवाक्यानामित्यर्थः । अवश्यवाच्यत्वादिति । पर्वते वह्निर्विरहमभिधानस्य पुंसः वह्निर्विरोधिबद्ध्यभावबुद्धिप्रतिबन्धकतदापादकक्रापत्तिरूपमानसज्ञानोपधायकस्वार्थबोधार्थत्वेनावश्यवाच्यत्वादित्यर्थः । तथाच मुख्यतात्पर्यविषयं पर्वते वह्निमत्त्वमुपादाय वक्तरि सत्यवादिताव्यवहार इति भावः । (१५)

प्रसङ्गादापत्तिवाक्यघटकलिङ्गाद्यर्थमाह ।

मू० प्रसङ्गवाक्ये चापत्तिर्लिङ्गादिभिरुदीर्यते ।

अन्ये वदन्त्यवाच्यत्वमयुक्तत्वं परे जगुः ॥ १६ ॥

आपत्तिर्लिङ्गाद्यर्थः तस्य धात्वर्थेऽन्वय इति स्वमते तत्रान्वयबोधः पूर्वोक्त एव । अवाच्यत्वमापत्तिवाक्यघटकलिङ्गाद्यर्थ इति केचित् । अवाच्यत्वमनिष्टापत्तित्वं । तच्च

स्वानिष्टत्वे सति स्वज्ञानकारणसमवहितत्वं । तस्य धात्वर्थेऽन्वयः । धूमविशेष्यकपर्वत-
वृत्त्यभावप्रतियोगित्वज्ञानं प्रति वह्निविशेष्यकपर्वतनिष्ठाभावप्रतियोगित्वज्ञानस्य धूमाभाव-
विशेष्यकपर्वतवृत्तित्वज्ञानं प्रति वह्निभावविशेष्यकपर्वतवृत्तित्वज्ञानस्य वा कारणत्वान्नानुपप-
त्तिरिति । बोधप्रकारस्तु पूर्ववत् । परेतु अयुक्तत्वमापत्तिवाक्यघटकलिङ्गार्थ इत्याहुः । अयु-
क्तत्वं युक्तिशून्यत्वम् । युक्तिः प्रमाणं । प्रमापकशून्यत्वं भ्रमविषयत्वमिति यावत् । तस्य
धात्वर्थेऽन्वयः ॥ १६ ॥

मू० बाधकाभावमन्ये तु लिङ्गार्थं प्रचक्षते ।
सत्यदप्रकृतिर्धर्ममाचष्टे तद्यथोचितम् ॥ १७ ॥

अन्ये तु बाधकाभाव एवापत्तिवाक्यघटकलिङ्गार्थ इत्याचक्षते । स च बाधकशून्य-
त्वेन संभाव्यमानत्वं । बाधकं च स्वज्ञानप्रतिबन्धकम् तच्छून्यत्वप्रकारकसंभावनाविषयत्वं
लिङ्गार्थः । तस्य धात्वर्थेऽन्वयः । युज्यते चैतत् । धूमाभावनिष्ठपर्वतवृत्तित्वज्ञानं प्रति हि पर्वते
धूमवत्त्वज्ञानं प्रतिबन्धकम् । तच्च पर्वते वह्निभावज्ञाने सति न संभवति व्यापकाभाव-
ज्ञाने व्याप्यज्ञानस्यासंभवादिति धूमाभावे पर्वतवृत्तित्वज्ञानप्रतिबन्धकं नास्तीति तच्छून्य-
त्वेन संभाव्यमानत्वं धूमाभावनिष्ठपर्वतवृत्तित्वादेरक्षतमिति । सच्छब्दपूर्वशब्दो भावं
बोधयति । सच्छब्दस्तु यथायोगं सन्तमर्थम् । स च यत्र सविषयकधातुना सह समभि-
व्याहियते । तत्र विषयत्वम् । यथा अभावस्य वैशिष्ट्यं संबन्धान्तरं सरिसङ्घटीति ।
संबन्धान्तरत्वप्रकारकसिद्धिविषयीभूतमित्यर्थः । यत्र भूतार्थप्रत्ययान्तेन तत्रोत्तरकालीनत्वम् ।
यथा अतिशयितः सन्निद्रातीत्यादौ शयनोत्तरकालीननिद्रावानित्यर्थः । यत्र भविष्यदर्शक-
प्रत्ययान्तेन तत्र पूर्वकालीनत्वम् । यथा तृप्तिं प्राप्स्यन् सन्नम्यवहरतीति । तृप्तिप्राप्ति-
पूर्वकालीनाभ्यवहारवानित्यर्थः । यत्र वर्तमानार्थकप्रत्ययान्तेन समभिव्याहियते तत्र समान-
कालीनत्वम् यथा दण्डमवलम्बमानः सन् गच्छतीति । दण्डावलम्बनसमानकालीनगमनवा-
नित्यर्थः । एवं गच्छन्तं सन्तं चैत्रं पश्येत्यादौ चैत्रविशेष्यकगमनप्रकारकदर्शनवांस्त्व-
मिति बोधः । दण्डवन्तं सन्तं गच्छन्तं चैत्रं पश्येत्यादौ दण्डावलम्बनसमानकालीन-

१. स्वपदार्थोऽत्र वक्ता ।

गमनविशिष्टचैत्रविषयकदर्शनवानिति बोधः । तृप्तिं प्राप्स्यन्तं सन्तमभ्यवहरन्तं चैत्रं
पश्येत्यादौ तृप्तिप्राप्तिपूर्वकालीनाभ्यवहारविशिष्टचैत्रविषयकदर्शनवानिति बोधः । शयितं
सन्तं निद्रावन्तं चैत्रं पश्येत्यादौ शयनोत्तरकालीननिद्राविशिष्टचैत्रविषयकदर्शनवानिति
बोधः । शयानं सन्तं निद्रावन्तं चैत्रं पश्येत्यादौ शयनसमानकालीननिद्राविशिष्ट-
चैत्रविषयकदर्शनवानिति बोधः इत्यादिकमूहनीयमिति ॥ १७ ॥

प्रसंगात्सच्छब्दप्रभावमाह ।

मू० असौ पट्टाभिषिक्तः सन्नितिसाम्राज्यकर्मणि ।
क्वचिद्भग्नोद्यमो जज्ञे बाधते तं स्वयं क्वचित् ॥ १८ ॥

असौ सच्छब्दः इतिशब्दस्य साम्राज्ये पट्टाभिषिक्तः तत्तुल्यप्रभाव इत्यर्थः ।
तत्तुल्यप्रभावत्वं च तत्प्रसक्तिकस्थलप्रसक्तिकत्वे सति तत्प्रयोज्यकार्यप्रयोजकत्वम् । यथा
घटो भूतलवृत्तिरिति ज्ञायत इत्यत्रेतिशब्दप्रसक्तौ सच्छब्दः प्रयुज्यते भूतलवृत्तिः
सन् ज्ञायत इति । क्वचिच्च भग्नोद्यमः संपद्यते । यथा भूतले घटो नास्तीति ज्ञान-
मस्य जातमित्यादावितिशब्दः प्रयुज्यते । सच्छब्दस्योद्यमः परं भज्यते । इत्येते
च क्वचित् इतिशब्दसंबन्धयोग्यताविधुरावेशः सच्छब्दः । यथा दण्डमवलम्बमानः
सन्नपयातीत्यत्र प्रयुज्यमानः सच्छब्दः तमितिशब्दं बाधते । प्रभवतश्च व्यक्तमुभावपि
संबन्धिपदं गौणतामापादयितुं सच्छब्दपूर्वपदस्य धर्मलाक्षणिकत्वात् । विपर्यासयति च
विषयतां सच्छब्दः । भूतलवृत्तिर्घटो ज्ञायत इति सच्छब्दवियुज्जाने वाक्ये भूतलवृत्तित्वं
धर्मितावच्छेदकतया भासते । घटो भूतलवृत्तिः सन् ज्ञायत इत्यत्र विषेयकोटिप्रविष्ट-
तया । संकुचन्ति च भूयस्यो व्युत्पत्तयः सच्छब्दसमभिव्याहारवशात् । न हि प्रथमाद्य-
न्तार्थस्य भेदसंबन्धेन साक्षान्नामार्थे धात्वर्थे वा अन्वयो व्युत्पत्तिसिद्धः । कल्पयति च
कांचन व्युत्पत्तिमधिकां सच्छब्दः । यथा गच्छन्तं सन्तं चैत्रं पश्येत्यादौ सच्छब्दोत्तरद्वि-
तीयायाः निरर्थकत्वेऽपि आवश्यकत्वम् । एवं गच्छत्यदोत्तरद्वितीयाया अपीत्यादिकं
चिरमालोकनीयम् ॥ १८ ॥

मू० आकारार्थो विषयिता शब्द इत्यपरे जगुः ।

इतिना पौनरुक्त्याश्च नाभेदार्थत्वमिष्यते ॥ १९ ॥

तादृशवाक्यजर्घीतुल्यविषयत्वार्थतापि नो ।

प्रत्यक्षाद्यव्यापकत्वाच्छब्देन पुनरुक्तिः ॥ २० ॥

भूतले घट इत्याकारकं ज्ञानमित्यत्राकारशब्दार्थो विषयिता । सा च वारद्वयं प्रतीयते । घटपदार्थो घटत्वावच्छिन्नः इतिशब्दार्थनिरूपितत्वद्वारा एकविषयिता-यामन्वेति । भूतल इत्यत्र सप्तम्यन्तार्थो भूतलवृत्तित्वमपि इतिशब्दार्थद्वारा अपरविषयितायामन्वेति । तयोरेकत्रापरस्यावच्छिन्नत्वसंबन्धेनान्वयः । तथाच भूतलवृत्तित्वविषयित्वावच्छिन्नघटविषयित्ववत् ज्ञानमिति घटविषयित्वावच्छिन्नभूतलवृत्तित्वविषयित्ववत् ज्ञानमिति वा बोध इति स्वमतम् । अपरे तु भूतले घट इत्येकं पदमव्ययं तादृशविलक्षणानुपूर्वीविशिष्टपरम् । इतिशब्दार्थोऽभेदः । आकारशब्दार्थो वाक्यम् । तत्कत्वं तज्जनकत्वं । तथाच तादृशविलक्षणानुपूर्वीविशिष्टवाक्यजनकं ज्ञानमिति बोधः । भूतले घट इत्येतादृशशब्दप्रयोगं प्रति भूतलवृत्तित्वप्रकारकघटविशेष्यकज्ञानस्य कारणत्वानुपपत्तिरित्याहुः । अत्र केचिदाचक्षते । एवं रीत्या भूतले घट इत्याकारकं ज्ञानं भूतले घट इति शब्दजनकम् इति वाक्ये पौनरुक्त्यापत्त्याऽप्रामाण्यापत्तिरिति । अन्येतु तत्रेष्टापत्तिमेव स्वीकुर्वन्ति । अत्र केचित् भूतले घट इत्येकं पदमव्ययं भूतलवृत्तित्वनिष्ठप्रकारतानिरूपितघटत्वावच्छिन्नविशेष्यताकार्थकम् । आकारशब्दार्थश्चाभेदः । तथाच भूतलवृत्तित्वनिष्ठप्रकारतानिरूपितघटत्वावच्छिन्नविशेष्यताकाभिन्नं ज्ञानमित्यन्वयबोधं स्वीकुर्वन्ति । तन्मतं दूषयति इतिनेति । आकारशब्दस्याभेदार्थकत्वञ्च संभवति इतिशब्दस्याभेदार्थकतया पौनरुक्त्यापत्तेः । इदमापाततः । इतिशब्दस्य यद्यभेदार्थकतामङ्गीकुर्मः तदा स्यादेवाकारशब्दस्येतिशब्दप्रतिपाद्यार्थप्रतिपादकत्वात्पौनरुक्त्यम् । परंतु इतिशब्दस्यार्थबोधकत्वमेव नाङ्गीकुर्मः । नचैवमितिशब्दस्य नैरर्थक्यात्प्रयोगानुपपत्तिरिति वाच्यम् । पूर्वशब्दस्याव्ययतात्पर्यग्रहणायेतिशब्दप्रयोगावश्यकत्वादिति । यदाच तात्पर्यग्राहकस्यैवेतिशब्दस्याभेदप्रतिपादकत्वमध्यवसीयते । तदा न प्रयुज्यत एवाकारशब्दः । भूतले घट इति

ज्ञानमित्येव तदानीं प्रयोगादित्यादि । केचित्तु भूतले घट इत्येकं पदं अव्ययं तादृशवाक्यपरम् । समानविषयकत्वमाकारशब्दार्थः । तादृशवाक्यसमानविषयकत्वं च तादृशवाक्यजन्यशब्दबोधसमानविषयकत्वमित्याचक्षते । तन्मतमुपन्यस्य दूषयति तादृशमिति । तादृक् तादृशानुपूर्वीविशेष्यविशिष्टं यद्वाक्यं तज्जन्या या धीः तत्तुल्यविषयत्वार्थकत्वमपि न संभवतीत्यर्थः । तत्र युक्तिमाह प्रत्यक्षाद्यव्यापकत्वादिति । प्रत्यक्षादावसंभवादित्यर्थः । अयं भावः । समवायसंबन्धावच्छिन्नघटत्वनिष्ठप्रकारतानिरूपितेदन्त्वावच्छिन्नविशेष्यताशालिप्रत्यक्षाद्यनन्तरं अयं घट इत्याकारकं ज्ञानमस्य जातमिति व्यवहियते सर्वैः । स चानुपपन्नः स्यात् । तादृशवाक्यसमानविषयकत्वस्य तत्रासंभवात् । तादृशवाक्याद्धि समवायसंबन्धावच्छिन्नघटत्वनिष्ठावच्छेदकताकाभेदसंबन्धावच्छिन्नप्रकारतानिरूपितेदन्त्वावच्छिन्नविशेष्यताशालिबोधो जन्यते । तादृशप्रत्यक्षादिकं तु समवायसंबन्धावच्छिन्नघटत्वनिष्ठप्रकारतानिरूपितेदन्त्वावच्छिन्नविशेष्यताशालि । कथंकारमनयोः समानविषयकत्वम् । ननु तद्वाक्यजन्यशब्दबोधसमानविषयकत्वं नाम तद्वाक्यजन्यशब्दबोधनिष्ठविशिष्टविषयिताघटितधर्मावच्छिन्नप्रतिबन्धकतानिरूपितप्रतिबन्धतावच्छेदकविशिष्टविषयिताघटितधर्मावच्छिन्नप्रतिबन्धकतानिरूपितप्रतिबन्धकतावच्छेदकविशिष्टविषयिताश्रयत्वमेव । भूतलवृत्तित्वप्रकारकघटविशेष्यकज्ञानस्य भूतले घट इति वाक्यजन्यभूतलवृत्तित्वप्रकारकघटविशेष्यकशब्दबोधनिष्ठा या भूतलवृत्तित्वविशिष्टघटत्वावच्छिन्ननिरूपितविषयिता तद्धटितधर्मावच्छिन्नप्रतिबन्धकतानिरूपितप्रतिबन्धतावच्छेदकविशिष्टविषयिताघटितधर्मावच्छिन्नप्रतिबन्धकतानिरूपितप्रतिबन्धकतावच्छेदकविशिष्टविषयिताकत्वेन तत्समानविषयकत्वोपपत्तिः । एवं विशेषणतासंबन्धावच्छिन्नघटभेदत्वावच्छिन्नप्रकारतानिरूपितेदन्त्वावच्छिन्नविशेष्यताशालिज्ञानं प्रति अभेदसंबन्धावच्छिन्नघटत्वावच्छिन्नप्रकारतानिरूपितेदन्त्वावच्छिन्नविशेष्यताशालिबुद्धेरिव समवायसंबन्धावच्छिन्नघटत्वप्रकारतानिरूपितेदन्त्वावच्छिन्नविशेष्यताशालिबुद्धेरपि प्रतिबन्धकत्वात् तादृशवाक्यजन्यशब्दबोधनिष्ठाभेदसंबन्धावच्छिन्नघटत्वावच्छिन्नप्रकारतानिरूपितेदन्त्वावच्छिन्नविशेष्यताघटितधर्मावच्छिन्नप्रतिबन्धकतानिरूपितप्रतिबन्धतावच्छेदकविशेषणतासंबन्धावच्छिन्नघटभेदत्वावच्छिन्नप्रकारतानिरूपितेदन्त्वावच्छिन्नविशेष्यताघटितधर्मावच्छिन्नप्रतिबन्धकतानिरूपितप्रतिब-

न्धकतावच्छेदकसमवायसंबन्धावच्छिन्नघटत्वनिष्ठप्रकारतानिरूपितेदन्त्वावच्छिन्नविशेष्यताया-
स्तत्राक्षतत्वात् । इत्यत आह शब्देन पुनरुक्तिरिति । तथाच यदि समानविषयकत्वमी-
दृशं स्यात् तदा अयं घट इत्याकारकं अयं घट इति वाक्यजन्यशब्दबुद्धिप्रतिबध्यतावच्छेदक-
विषयिताघटितधर्मावच्छिन्नप्रतिबध्यतानिरूपितप्रतिबन्धकतावच्छेदकविषयिताशालि प्रत्य-
क्षमस्य जातमिति (शब्दान्तरसमभिव्याहृतम्) वाक्यं यदा प्रयुज्यते तदा अयं घट इति
वाक्यजन्येत्यादेः पौनरुक्त्यापत्तिः अयं घट इत्याकारकमित्यनेनैव तत्सिद्धेरित्यर्थः ।

अत्र वदन्ति । घटत्वनिष्ठप्रकारतानिरूपितेदन्त्वावच्छिन्नविशेष्यताशालीत्यर्थकतास्वी-
कारपक्षेऽप्ययं दोषः समानः । तादृशविषयिताया एव तथाविधप्रतिबन्धकतावच्छेदकत्वादिति ।
नच तादृशविषयितात्वेनायं घट इत्याकारकमित्यनेन बोधः । अयं घट इति वाक्यजन्येत्यनेन तु
प्रतिबन्धकतावच्छेदकत्वेनेत्येकरूपेण वारद्वयं भानाभावाच्च पौनरुक्त्यमिति वाच्यम् ।
एवमपि अयं घट इत्याकारकसमवायसंबन्धावच्छिन्नघटत्वनिष्ठप्रकारतानिरूपितेदन्त्वावच्छि-
न्नविशेष्यताशालिप्रत्यक्षमस्य जातमिति वाक्ये तव पौनरुक्त्यापत्तिः तादृशविषयितायाः
तादृशविषयितात्वेनैव वारद्वयं भानात् । एवं अयं घट इत्याकारकमयं घट इति शब्द-
जनकं प्रत्यक्षमस्य जातमिति वाक्ये तादृशजनकतात्वेन तादृशशब्दजनकतायाः वारद्वयं
भानात्पौनरुक्त्यम् । तत्रेष्टापत्तौ ममापि प्रकृतवाक्ये तुल्यमिति । अनुभवविरोधस्तूभयोः
समान इति ॥ २० ॥

मू० घटकत्वं ददात्यर्थस्तद्धीविषयतापि वा ।

निर्धारणविभक्त्यर्थो मध्येशब्दार्थ उच्यते ॥ २१ ॥

प्रथमस्योदाहरणम् । तदान्यावयवित्वे सतीति विशेषणं शरीरलक्षणे देयमिति ।
शरीरलक्षणनिरूपितघटकत्वाश्रयीभूतमिति तन्निरूपितघटकत्वप्रकारकज्ञानविषयीभूतमिति
वा बोधः । निर्धारणविभक्त्या योऽर्थः प्रतिपाद्यते स एव मध्येशब्देनापि प्रतिपाद्यते
इत्यर्थः । निर्धारणविभक्त्यर्थोऽन्यत्र प्रतिपादितोऽपि न्यूनताभङ्गाय प्रकृते किञ्चित्प्रति-
पाद्यते । तत्र निर्धारणविभक्तिः पुरुषाणां विष्णुरुत्तम इत्यत्र । पुरुषाणामित्यत्र षष्ठ्यर्थो

मेदोऽमेदश्च । तत्र पुरुषपदार्थस्यामेदे निरूपितत्वसंबन्धेनान्वयः । अमेदस्य चानुयोगितासंब-
न्धेन विष्णुपदार्थे उद्देश्यतावच्छेदकघटकतयान्वयो विष्णोः पुरुषाणामित्यत्र षष्ठ्यर्थमेदे
प्रतियोगितयान्वयः । तस्य चानुयोगितया पुरुषेऽन्वयः । पुरुषस्य च पुनर्मेदे प्रतियोगिता-
संबन्धेनान्वयः । तस्य चानुयोगितासंबन्धेनोत्तमपदार्थेऽन्वयः । तस्य चाभेदसंबन्धेन
विष्णुपदार्थेऽन्वयः । तथाच पुरुषाभिन्नो विष्णुः विष्ण्वन्यपुरुषान्योत्तमाभिन्न इति बोधः ।
अत्रामेदमात्रस्य निर्धारणविभक्त्यर्थत्वे विष्ण्वन्यपुरुषस्योत्तमस्य सत्त्वेऽपि पुरुषाणां विष्णु-
रुत्तम इति वाक्यस्य प्रामाण्यापत्तिः । पुरुषाभिन्ने विष्णौ उत्तमाभेदसत्त्वात् । अतो
मेदार्थकत्वं स्वीकृतम् । नच भक्षितेऽपि लशुने न शान्तो व्याधिः विष्ण्वन्यपुरुषोत्तमस्य
सत्त्वेऽपि विष्ण्वात्मकोत्तमपुरुषे विष्ण्वन्यपुरुषान्यत्वस्य सत्त्वेन तादृशवाक्यप्रामाण्यापत्ते-
र्दुर्वारत्वादिति वाच्यम् । विष्ण्वन्यपुरुषान्यत्वस्योद्देश्यतावच्छेदकीभूतोत्तमत्वावच्छेदेना-
न्वयस्वीकारेण विष्ण्वन्यपुरुषोत्तमस्य सत्त्वे तादृशवाक्यस्य प्रामाण्यविरहात् इदानीं विष्ण्व-
न्यपुरुषान्यत्वस्योद्देश्यतावच्छेदकव्यापकत्वाभावादिति । अथ विष्ण्वन्यपुरुषस्योत्तमत्व-
संभावनादशायां पुरुषाणां विष्णुरुत्तम इति वाक्यस्य प्रामाण्यापत्तिवारणाय निर्धारणवि-
भक्तेर्मेदार्थकत्वमपि स्वीकृत्य तादृशमेदस्य प्रातिलोम्यानुलोम्याभ्यां वारद्वयं भानस्वीकार-
प्रयासस्तु नादर्थव्यः । किन्तु पुरुषाणामुत्तम इत्यत्र षष्ठ्यर्थमेदस्योत्तमपदार्थेऽन्वयं
स्वीकृत्य पुरुषाणामुत्तम इत्यस्योद्देश्यत्वं विष्णुरित्यस्य विधेयत्वमित्युद्देश्यविधेयभाववैपरीत्य-
मेव स्वीकार्यम् । तावता विष्ण्वन्यपुरुषस्योत्तमत्वसंभावनायां पुरुषाणां विष्णुरुत्तम इति
वाक्यस्य प्रामाण्यवारणसंभवात् । तदानीमुद्देश्यविधेयभावमहिम्ना पुरुषाभिन्नोत्तमत्वव्याप-
कत्वस्य विष्णुत्वे लाभेन विष्ण्वन्यपुरुषस्याप्युत्तमत्वे तादृशव्यापकभावबाधात् । नचैवमपि
पुरुषोत्तमो विष्णुरिति वाक्यस्य पुरुषाणामुत्तमो विष्णुरिति वाक्यस्य च परस्परवैलक्षण्यानु-
पपत्तिः । उभयत्रापि पुरुषाभिन्नोत्तमत्वावच्छेदेन विष्णुतादात्म्यस्य बोधेन विषयवैल-
क्षण्यभावादिति वाच्यम् । पुरुषोत्तमो विष्णुरित्यत्र पुरुषोत्तमपदार्थयोरभेदः संसर्गमर्या-
दया भासते पुरुषाणामुत्तमो विष्णुरित्यत्र प्रकारतयेति विषयतावैलक्षणेन, पुरुषपदा-
र्थेऽभेदसंबन्धस्य प्रतियोगित्वस्योत्तमपदार्थेऽनुयोगित्वस्य भानेन विषयवैलक्षणेन च
वैलक्षण्योपपत्तेरिति । नच पुरुषाणां विष्णुरुत्तम इत्यत्र विष्णुपदार्थस्योद्देश्यत्वमुत्तमप-

दार्थस्य विधेयत्वञ्चानुभवसिद्धमिति वाच्यम् । तादृशानुभवस्य निर्मूलत्वादिति चेन्न । एवं सति प्रमेयानामभिधेयं द्रव्यमिति वाक्यस्य प्रामाण्यापत्तेः । अथ तद्वारणाय पुरुषाभिन्नोत्तमत्वावच्छिन्नविष्णुत्वावच्छिन्नयोः प्रमेयाभिन्नद्रव्यत्वावच्छिन्नाभिधेयत्वावच्छिन्नयोश्च मिथः उद्देश्यविधेयभावः स्वीक्रियताम् । तेन च परस्परोद्देश्यविधेयभावमहिम्ना परस्परव्याप्यव्यापकभावो लभ्यते । तथाच प्रमेयाभिन्नद्रव्यत्वव्यापकत्वस्याभिधेयत्वे सत्त्वेऽप्यभिधेयत्वव्यापकत्वस्य प्रमेयाभिन्नद्रव्यत्वेऽसत्त्वात् न प्रमेयानामभिधेयं द्रव्यमिति वाक्यस्य प्रामाण्यापत्तिरिति चेत् । एवं सत्यपि पदार्थानामभिधेयं प्रमेयमिति वाक्यस्य प्रामाण्यापत्तेर्दुर्वारत्वात् । पदार्थाभिन्नप्रमेयत्वव्यापकत्वस्याभिधेयत्वे अभिधेयत्वव्यापकत्वस्य पदार्थाभिन्नप्रमेयत्वे च सत्त्वात् । ममत्वप्रामाण्यं स्फुटमेव । अथ प्रकृते व्यापकत्वं न समानाधिकरणाभावप्रतियोगितानवच्छेदकधर्मावच्छिन्नत्वरूपम् । किंत्वभाववदवृत्तितत्त्वमेव । एवञ्चाभिधेयत्वाभावस्य पदार्थाभिन्नप्रमेयत्वाभावस्य चाप्रसिद्धत्वाच्च तादृशवाक्यस्य प्रामाण्यापत्तिरिति चेत् ; एवमपि द्रव्याणां गुणाधिकरणं समवायिकारणमिति वाक्यस्य प्रामाण्यापत्तिः । द्रव्याभिन्नसमवायिकारणत्वाभाववदवृत्तित्वस्य गुणाधिकरणत्वे, गुणाधिकरणत्वाभाववदवृत्तित्वस्य द्रव्याभिन्नसमवायिकारणत्वे च सत्त्वेन तादृशार्थबाधाभावात् ।

यत्तु लघुधर्मसमनियतगुरुधर्मस्याभावप्रतियोगितावच्छेदकत्वानङ्गीकारमते निर्धारणविभक्तेः भेदार्थकत्वस्वीकारप्रयासो न कर्तव्यः । किन्तु परस्परोद्देश्यविधेयभावलभ्यव्याप्यव्यापकभावः । व्यापकत्वं च स्वाभाववदवृत्तितत्त्वम् । तत्समानाधिकरणाभावप्रतियोगितावच्छेदकत्वावच्छिन्नभेदवद्धर्मकत्वं वा । उभयथापि न क्षतिः । तथाहि स्वाभाववदवृत्तितत्त्वं स्वनिष्ठान्वयितावच्छेदकावच्छिन्नप्रतियोगिताकाभाववदवृत्तितत्त्वम् । अन्यथा अतिप्रसंगात् । एवञ्च प्रमेयानामभिधेयं द्रव्यमिति वाक्यस्य न प्रामाण्यापत्तिः । न वा द्रव्याणां गुणाधिकरणं समवायिकारणमिति वाक्यस्य । तस्य द्रव्याभिन्नत्वविशिष्टसमवायिकारणत्वत्वस्य समनियतशुद्धसमवायिकारणत्वत्वापेक्षया गुरुत्वेनाभावप्रतियोगितानवच्छेदकतयान्वयितावच्छेदकीभूततादृशगुरुधर्मावच्छिन्नस्वनिष्ठप्रतियोगिताकाभाववदवृत्तिगुणाधिकरणत्वत्वरूपगुणाधिकरणत्वव्यापकत्वाप्रसिद्ध्या तद्वोधकत्वासंभवात् । नन्वेवम् ।

पुरुषाणां विष्णुरुत्तम इति वाक्यस्य प्रामाण्यानुपपत्तिः । पुरुषाभिन्नोत्तमत्वत्वस्य समनियतशुद्धोत्तमत्वत्वापेक्षया गुरुत्वेनाभावप्रतियोगितानवच्छेदकतया तदवच्छिन्नप्रतियोगिता-निरूपकाभाववदवृत्तिविष्णुत्वकत्वरूपविष्णुत्वव्यापकत्वाप्रसिद्ध्या तद्वोधकत्वासंभवादिति चेन्न । यत् उत्तमत्वत्वं उत्कर्षत्वम्, तथाच पुरुषाभिन्नोत्तमत्वत्वं सामानाधिकरण्यघटितसामानाधिकरण्यसंबन्धेन पुरुषाभिन्नत्वविशिष्टोत्कर्षत्वम् । तत्समनियतत्वं न शुद्धोत्कर्षत्वस्य तस्य सिंहादिनिष्ठभृगोत्कर्षेऽपि सत्त्वात् तत्र निरुक्तविशिष्टोत्कर्षत्वस्यासत्त्वादिति ।

तच्च । एवमपि पदार्थानां गुणाधिकरणं समवायिकारणमित्यादिवाक्यानां प्रामाण्यानुपपत्तेर्वज्रलेपायितत्वात् । तस्माभिर्धारणविभक्तेः भेदार्थकत्वं स्वीकृत्य प्रातिलोभ्यादिप्रयासोऽवश्यादर्तव्यः । भेदार्थकत्वमात्रस्वीकारे घटानां विष्णुरुत्तम इति वाक्यस्य प्रामाण्यापत्तिः विष्ण्वन्यघटान्योत्तमाभेदस्य विष्णौ सत्त्वात् । अतोऽभेदार्थकत्वस्वीकारः । अथ लघुसमनियतगुरुधर्मस्याभावप्रतियोगितानवच्छेदकत्वे निर्धारणविभक्तेरभेदार्थकत्वस्वीकारमन्तरेणापि घटानां विष्णुरुत्तम इति वाक्यस्य प्रामाण्यं शक्यते वारयितुम्, उद्देश्यान्वितभेदविशेष्यतापक्षस्य प्रकृत्यर्थस्यान्वयितावच्छेदकावच्छिन्नप्रतियोगिताकत्वसंबन्धेनैव भेदान्वयस्वीकारेण विष्ण्वन्यत्वविशिष्टघटत्वस्य समनियतघटत्वापेक्षया गुरुत्वेनाभावप्रतियोगितानवच्छेदकतया तदवच्छिन्नप्रतियोगिताकभेदाप्रसिद्ध्या तद्वोधकत्वासंभवादिति चेन्न । लघुधर्मसमनियतगुरुधर्मस्याभावप्रतियोगितावच्छेदकत्वमनङ्गीकृत्यान्वयितावच्छेदकावच्छिन्नप्रतियोगिकत्वसंबन्धेन प्रकृत्यर्थस्य भेदेऽन्वयस्वीकारे समवायिकारणानां पृथिवी गन्धवतीति वाक्यस्य प्रामाण्यानुपपत्तिः । पृथिव्यन्यत्वविशिष्टसमवायिकारणत्वावच्छिन्नप्रतियोगिताकभेदवद्वन्धावच्छिन्नाभिन्ना पृथिवीत्यन्वयबोधो वक्तव्यः । सच्च न संभवति । पृथिव्यन्यत्वविशिष्टसमवायिकारणत्वस्य स्वसमनियतपृथिव्यन्यत्वविशिष्टद्रव्यत्वापेक्षया गुरुत्वेनाभावप्रतियोगितानवच्छेदकतया तदवच्छिन्नप्रतियोगिताकभेदस्याप्यप्रसिद्धत्वेन तद्वोधकत्वासंभवात् । अतो न प्रकृत्यर्थस्यान्वयितावच्छेदकावच्छिन्नप्रतियोगिताकत्वसंबन्धेन विभक्त्यर्थभेदेऽन्वयः स्वीकर्तव्यः । किन्तु अन्वयितावच्छेदकसमव्यापकरूपावच्छिन्नप्रतियोगिताकत्वसंबन्धेनैव । एवं च समवायिकारणानां पृथिवी गन्धवतीत्यत्र पृथिव्यन्यत्वविशि-

ष्टसमवायिकारणत्वस्याभावप्रतियोगितानवच्छेदकत्वेऽपि तत्समव्यापकस्य पृथिव्यन्यत्वविशिष्टद्रव्यत्वस्यावच्छेदकतया तदवच्छिन्नप्रतियोगिताकभेदमादाय तादृशवाक्यस्य प्रामाण्यमिति वाच्यम् । एवं च घटानां विष्णुरुत्तम इत्यत्रापि विष्ण्वन्यत्वविशिष्टघटत्वस्याभावप्रतियोगितानवच्छेदकत्वेऽपि तत्समव्यापकस्य शुद्धघटत्वस्यावच्छेदकतया तदवच्छिन्नप्रतियोगिताकभेदमादाय तादृशवाक्यस्य प्रामाण्यापत्तेर्दुर्वारत्वात् विभक्तेरभेदार्थकत्वमावश्यकमिति । एवं च निर्धारणविभक्तेरभेदो भेदश्चार्थ इति सिद्धे यत्र पुरुषाणां मध्ये विष्णुरुत्तम इति प्रयुज्यते तत्र मध्येशब्दस्यैवाभेदो भेदश्चार्थः । अन्वयस्तु पूर्ववदिति । श्लोकार्थस्तूक्तः । अत्र केचित् । मध्येशब्दः षष्ठ्यादेः निर्धारणार्थत्वस्फुटीकरणार्थ एवेत्यपि प्राहुः इत्यास्तां विस्तरः ॥ २१ ॥

मू० अवधित्वमपेक्षार्थस्तद्दीविषयताऽपि वा ।

भेदश्च वर्जयित्वादेर्यथार्थविवक्षितः ॥ २२ ॥

उदाहरणञ्च प्रथमस्य कुलालत्वमपेक्ष्य कुलालपितृत्वस्य कारणतावच्छेदकत्वे गौरवमिति । अत्र कारणतावच्छेदकत्वपदं कारणतावच्छेदकत्वप्रकारकज्ञानपरम् । विरोधिज्ञानविषयत्वं सप्तम्यर्थः । अन्वयश्चास्य गौरवे । तथाच कुलालपितृत्वनिष्ठं कुलालत्वमपेक्ष्य गौरवं कुलालपितृत्वविशेष्यकारणतावच्छेदकत्वप्रकारकग्रहविरोधिग्रहविषयीभूतमित्यन्वयबोधः । अथवा कारणतावच्छेदकत्व इत्यनन्तरं संभाव्यमाने सतीति पूरणीयम् । सतिसप्तम्याः प्रयोज्यत्वमर्थः । संभाव्यमानाभिन्नकारणतावच्छेदकत्वप्रयोज्यत्वं कारणतावच्छेदकत्वसंभावनाप्रयोज्यत्व एव पर्यवस्यति । यद्वा कारणतावच्छेदकत्वपदं कारणतावच्छेदकत्वसंभावनापरम् । प्रयोज्यत्वं सप्तम्यर्थः । गौरवमित्यनन्तरं संभाव्यत इति पूरणीयम् । तत्र संभावनायां कारणतावच्छेदकत्वसंभावनाप्रयोज्यत्वमन्वेति । तथाच कुलालपितृत्वनिष्ठं कुलालत्वमपेक्ष्य गौरवं कारणतावच्छेदकत्वसंभावनाप्रयोज्यसंभावनाविषयीभूतमित्यन्वयबोधः । युज्यते चैतत् । कुलालपितृत्वस्य प्रथमतः कारणतावच्छेदकत्वमसंभाव्य गौरवं न केन चिदुद्गावयितुं शक्यमिति । अत्र कुलालपितृत्वमपेक्ष्येत्यत्रापपूर्वकेश्वात्तर्थाः अवधित्वं अवधिमत्त्वम् अवधितानिरूपकत्वं । अवधित्वं चेदम-

स्माद्भुविंति प्रतीतिसाक्षिकस्वरूपसंबन्धविशेषः । अथवा अवधित्वं निरूपितत्वम् । तथाच कुलालत्वमपेक्ष्य कुलालपितृत्वस्य गौरवमित्यस्य कुलालत्वनिरूपितकुलालपितृत्वनिष्ठगौरवमित्यर्थः । प्रकृते गौरवमवच्छेदकगौरवम् । तच्चाधिकपदार्थघटितत्वम् । कुलालत्वघटकपदार्थपर्याप्तसंख्याधिकसंख्यापर्याप्त्यधिकरणपदार्थघटितत्वमिति यावत् । अत्र कुलालत्वनिरूपितत्वमव्याहृतमेव । नच कुलालत्वघटकपदार्थाप्रसिद्धिः तस्याखण्डपदार्थरूपत्वादिति वाच्यम् । स्वस्यैव स्वघटकत्वोपगमात् । तत्पर्याप्तसंख्या एकत्वसंख्येति नानुपपत्तिः । नचैवं रीत्या गौरवनिरुक्तौ कुलालत्वस्य कारणतावच्छेदकत्वमपेक्ष्य कुलालपितृत्वस्य कारणतावच्छेदकत्वे गौरवमित्यत्रानुपपत्तिः । तत्र निरुक्तीत्या शाब्दबोधाङ्गीकारासंभवादिति वाच्यम् । तत्र गौरवपदस्य स्वाश्रयघटकपदार्थपर्याप्तसंख्याधिकसंख्यापर्याप्त्यधिकरणपदार्थघटितधर्मवृत्तित्वरूपत्वात् । तथाच कुलालत्वनिष्ठकारणतावच्छेदकत्वाश्रयधर्मघटकपदार्थपर्याप्तसंख्याधिकसंख्यापर्याप्त्यधिकरणपदार्थघटितधर्मवृत्तित्वं कुलालपितृत्वनिष्ठकारणतावच्छेदकत्वनिष्ठमित्यन्वयः । संख्यायाः न्यूनत्वाधिकत्वे चानुपदमेव निर्वक्ष्येते । अत्र कारणतावच्छेदकत्वस्य कुलालपितृत्वनिष्ठत्वांशेऽप्रामाण्यमिष्टमेव । उक्तवाक्यस्याभिनिवेशमयुक्तत्वादित्यवसेयम् । एवं कुलालत्वमपेक्ष्य कुलालपितृत्वस्य कारणतावच्छेदकत्वं गुर्वित्यत्र कुलालत्वपदं कुलालत्वनिष्ठकारणतावच्छेदकत्वपरम् । तेन कुलालत्वनिष्ठकारणतावच्छेदकत्वाश्रयधर्मघटकपदार्थपर्याप्तसंख्याधिकसंख्यापर्याप्त्यधिकरणपदार्थघटितधर्मवृत्तित्वाश्रयीभूतं कुलालपितृत्वनिष्ठकारणतावच्छेदकत्वमित्यन्वयबोधः । धर्मितावच्छेदकत्वांशे भ्रमत्वानङ्गीकारे तु कुलालपितृत्वस्येत्यत्र षष्ठ्यर्थो न वृत्तित्वं किन्तु वृत्तित्वेन संभाव्यमानत्वम् । अस्य वाक्यस्य प्रामाण्यग्रहे तु गुरुपदमपि यथोक्तगुरुत्वेन संभाव्यमानपरं द्रष्टव्यम् । कुलालपितृत्वमपेक्ष्य कुलालत्वस्य कारणतावच्छेदकत्वे लाघवमित्यत्र तु कुलालत्वनिष्ठं कुलालपितृत्वघटकपदार्थपर्याप्तसंख्यान्यूनसंख्यापर्याप्त्यधिकरणपदार्थघटितत्वं कुलालत्वविशेष्यकारणतावच्छेदकत्वप्रकारकसंभावनाप्रयोज्यसंभावनाविषयीभूतमित्यन्वयबोधः । कुलालपितृत्वस्य कारणतावच्छेदकत्वमपेक्ष्य कुलालत्वस्य कारणतावच्छेदकत्वे लाघवमित्यत्र तु कुलालपितृत्वनिष्ठकारणतावच्छेदकत्वाश्रयधर्मघटकपदार्थपर्याप्तसंख्यान्यूनसंख्यापर्याप्त्यधिकरणपदार्थघटितधर्मवृत्तित्वम् कुलालत्वनिष्ठकारणतावच्छे-

दकत्वनिष्ठमित्यन्वयबोधः । यत्रतु अपेक्षयेत्येव श्रूयते तत्रापेक्षाशब्दार्थो निरूपितत्वम् ।
तृतीयार्थो वैशिष्ट्यम् । अन्वयश्च पूर्ववदित्यवसेयम् । एवं दण्डमपेक्ष्य दण्डरूपस्य
कारणत्वे गौरवमित्यत्र दण्डनिष्ठकारणतावच्छेदकसंबन्धघटकपदार्थपर्याप्तसंख्याधिकसंख्या-
पर्याप्त्यधिकरणपदार्थघटितसंबन्धावच्छिन्नत्वं दण्डरूपनिष्ठकारणत्वनिष्ठमित्यन्वयबोध
इत्यादिकं स्वयमूहनीयम् । वर्जयित्वेत्यत्र तु भेदो धात्वर्थः । आदिपदात् विहाये-
त्यादेः परिग्रहः । यथा नित्यद्रव्याणि विहाय वृत्तिमत्त्वं साधर्म्यमिति । अत्र पदार्थानामित्य-
ध्याहार्यम् । नित्यद्रव्याणीत्यत्र प्रतियोगितानिरूपकत्वं द्वितीयार्थः । विपूर्वकधात्वर्थो भेदः ।
रूपबर्थश्चाविवक्षितः । अन्वयश्चास्य पदार्थे । तथाच नित्यद्रव्यप्रतियोगिकान्योन्या-
भाववत्पदार्थनिरूपितसाधर्म्यत्ववत् वृत्तित्वमित्यन्वयबोधः ॥ २२ ॥

मू० न्यूनाधिकत्वे संख्याया व्याप्यव्यापकत्वे न हि ।

सामानाधिकरण्यादेर्विरहेऽप्यवगाहनात् ॥ २३ ॥

द्रव्याण्यपेक्ष्य पार्थिवानि न्यूनसंख्याकानीत्यत्र शाब्दबोधो विचार्यते । अत्र
द्रव्यपदं द्रव्यत्वावच्छिन्नपर्याप्तसंख्यापरम् । निरूपितत्वमपेक्ष्यार्थः । तस्य न्यूनत्वेऽन्वयः । एवं
पार्थिवाण्यपेक्ष्य द्रव्याण्यधिकसंख्याकानीत्यत्र पार्थिवपदं पार्थिवत्वावच्छिन्नपर्याप्तसंख्यापरम् ।
निरूपितत्वमपेक्ष्यार्थः । तस्याधिकत्वेऽन्वयः । तथा च द्रव्यत्वावच्छिन्नपर्याप्तसंख्यान्यूनसंख्या-
पर्याप्त्यधिकरणानि पार्थिवानि, पार्थिवत्वावच्छिन्नपर्याप्तसंख्याधिकसंख्यापर्याप्त्यधिकर-
णानि द्रव्याणीति च बोधो जायते । तत्र पार्थिवत्वावच्छिन्नपर्याप्तसंख्यायां द्रव्यत्वाव-
च्छिन्नपर्याप्तसंख्यान्यूनत्वम् द्रव्यत्वावच्छिन्नपर्याप्तसंख्यायां पार्थिवत्वावच्छिन्नपर्याप्तसंख्या-
धिकत्वं च किमिति संदेहः । अत्र न्यूनत्वं व्याप्यत्वम् । तच्च तत्समानाधिकरणभेदप्रति-
योगितावच्छेदकत्वे सति तत्समानाधिकरणत्वम् । द्रव्यत्वावच्छिन्नपर्याप्तसंख्याधिकरणे
जलादौ पार्थिवत्वावच्छिन्नपर्याप्तसंख्याबद्धेदस्य पृथिव्यां तत्समानाधिकरणत्वस्य च सत्त्वा-
न्नानुपपत्तिः । नच द्रव्याण्यपेक्ष्य समवायिकारणानि न्यूनसंख्याकानीति वाक्यस्य
प्रामाण्यापत्तिः संख्याया व्यासज्यवृत्तित्वेन द्रव्यत्वावच्छिन्नपर्याप्तसंख्याधिकरणे पृथि-

व्यादौ प्रत्येकं समवायिकारणत्वावच्छिन्नपर्याप्तसंख्याबद्धेदस्य सत्त्वादिति वाच्यम् ।
समवायसंबन्धावच्छिन्नप्रतियोगिताकभेदस्यैव विवक्षितत्वात् । द्रव्यत्वावच्छिन्नपर्याप्तसं-
ख्याधिकरणे समवायिकारणत्वावच्छिन्नपर्याप्तसंख्यानिष्ठसमवायसंबन्धावच्छिन्नप्रतियोगिता-
वच्छेदकताकभेदस्यासत्त्वेनानुपपत्त्यभावात् । एवमधिकत्वं व्यापकत्वम् । तच्च
तत्समानाधिकरणान्योन्याभावप्रतियोगितानिरूपितसमवायसंबन्धावच्छिन्नावच्छेदकताशून्यत्वे
सति तन्निष्ठसमवायसंबन्धावच्छिन्नप्रतियोगितावच्छेदकताकभेदसमानाधिकरणत्वम् ।
तादृशश्च पार्थिवत्वावच्छिन्नपर्याप्तसंख्याव्यापकत्वं द्रव्यत्वावच्छिन्नपर्याप्तसंख्याया-
मव्याहतमेवेति केषां चिन्मतम् । तदनेन दूष्यते । यद्येवं न्यूनत्वाधिकत्वे
संख्यायां स्यातां तदा यत्र भूतले दश घटाः सन्ति पटाश्च षट् तत्रैतान्वटानपेक्ष्यैते पटा
न्यूनसंख्याका इति सर्वैर्व्यवहियते । स च व्यवहारो नोपपद्यते । तावद्धटत्वावच्छिन्न-
पर्याप्तसंख्यायाः तावत्पटत्वावच्छिन्नपर्याप्तसंख्यायाश्च परस्परसामानाधिकरण्याभावात् ।
एवमेतान् पटानपेक्ष्यैते घटा अधिकसंख्याका इति सर्वैर्व्यवहियते । सोऽपि न स्यात् ।
तावद्धटत्वावच्छिन्नपर्याप्तसंख्यायास्तावत्पटत्वावच्छिन्नपर्याप्तसंख्याधिकरणपटवृत्तिभेदप्रतियो-
गितानिरूपितसमवायसंबन्धावच्छिन्नावच्छेदकतावत्त्वेन तच्छून्यत्वाभावादित्यर्थः । ननु
किमिदमारोप्य शिरश्छेद्यते । यतो न्यूनत्वशरीरे सामानाधिकरण्यं अधिकत्वशरीरे च
समानाधिकरणभेदप्रतियोगितानवच्छेदकत्वं च निवेश्य वर्यं दूष्यामहे । यद्येवं विशेषणं
नोपाददामः तदा कस्य कक्षमवलम्बस इति चेत् । तर्हि यत्र दश घटाः सन्ति पटाश्च
दश तत्र तावद्धटत्वावच्छिन्नपर्याप्तसंख्यायां तावत्पटत्वावच्छिन्नपर्याप्तसंख्यायाश्च परस्परन्यु-
नाधिकभावव्यवहारः स्यात् । परस्परसमानाधिकरणान्योन्याभावप्रतियोगितावच्छेदकत्वात्
परस्परावच्छिन्नप्रतियोगिताकान्योन्याभावसमानाधिकरणत्वाच्च । अतः सामानाधिकरण्या-
दिनिवेशेनैव बोधो वक्तव्य इति । (२३)

मू० न न्यूनाधिकसंख्यत्वे यत आत्माश्रयो भवेत् ।

तत्रान्यथा निरुच्येते किमत्रैवापराध्यते ॥ २४ ॥

अत्र केचित् द्रव्याण्यपेक्ष्य पार्थिवानि न्यूनसंख्याकानीत्यत्र द्रव्यत्वावच्छिन्नसमवेत-

संख्यान्यूनसंख्याकसंख्यावन्ति पार्थिवानीति बोधः । द्रव्यत्वावच्छिन्नेषु प्रत्येकं समवेत-
यावत्य एकत्वादिसंख्याः तावन्न्यूनसंख्याकत्वस्य पार्थिवत्वावच्छिन्नसमवेतसंख्यासु विद्य-
मानत्वानुपपत्तिः । एवं पार्थिवत्वावच्छिन्नसमवेतसंख्याधिकसंख्याकसंख्यावन्ति द्रव्याणी-
त्येव पार्थिवान्यपेक्ष्य द्रव्याण्यधिकसंख्याकानीत्यत्र बोध इति न कदाचिदनुपपत्तिरिति
वदन्ति । तन्मतमनेन दूष्यते । पार्थिवत्वावच्छिन्नसमवेतसंख्यानिष्ठसंख्यायाः द्रव्यत्वाव-
च्छिन्नसमवेतसंख्यानिष्ठसंख्यान्यूनत्वस्यापि तन्न्यूनसंख्याकत्वरूपस्य, द्रव्यत्वावच्छिन्नसम-
वेतसंख्यानिष्ठसंख्यायां पार्थिवत्वावच्छिन्नसमवेतसंख्याधिकत्वस्य च तदधिकसंख्याकत्व-
रूपस्यैव निर्वाच्यतया आत्माश्रयप्रसङ्गात् । अनवस्थापत्तेश्च । यदि च तत्र न्यूनत्वाधि-
कत्वे अन्यथा निरुच्येते तर्हि प्रकृत एव तथा निरुच्येतां । किं तावत्पर्यन्ताक्रमणेने-
त्यर्थः ॥ २४ ॥

मू० व्याप्यव्यापकते याभ्यां निरूप्येते विशेषतः ।

तद्रूपवत्त्वरूपे तु ते स्यातामिति मन्महे ॥ २५ ॥

तद्रूपावच्छिन्नपर्याप्तसंख्यानिष्ठसंख्यात्वव्याप्यधर्मावच्छिन्नपर्याप्तसंबन्धावच्छिन्नव्या-
पकतानिरूपितपर्याप्तसंबन्धावच्छिन्नव्याप्यत्वम् । तद्रूपावच्छिन्नपर्याप्तसंख्यानिष्ठसंख्या-
त्वव्याप्यधर्मावच्छिन्नव्याप्यतानिरूपितपर्याप्तसंबन्धावच्छिन्नव्यापकत्वं च । विशेषतः संख्या-
त्वव्याप्यव्यापकरूपाभ्यां याभ्यां धर्माभ्यां निरूप्येते अवच्छिद्येते । तद्रूपवत्त्वरूपे तादृश-
व्याप्यतावच्छेदकव्यापकतावच्छेदकधर्मवत्त्वरूपे ते संख्यानिष्ठन्यूनत्वाधिकत्वे स्यातामित्यक्ष-
रार्थः । द्रव्याण्यपेक्ष्य पार्थिवानि न्यूनसंख्याकानीत्यत्र द्रव्यत्वावच्छिन्नपर्याप्तसंख्यानिष्ठसंख्या-
त्वव्याप्यधर्मावच्छिन्नपर्याप्तसंबन्धावच्छिन्नव्यापकतानिरूपितपर्याप्तसंबन्धावच्छिन्नव्याप्य -
तावच्छेदकसंख्यात्वव्याप्यधर्मावच्छिन्नसंख्यापर्याप्त्यधिकरणानि पार्थिवानीत्यन्वयबोधः । पा-
र्थिवान्यपेक्ष्य द्रव्याण्यधिकसंख्याकानीत्यत्र तु पार्थिवत्वावच्छिन्नपर्याप्तसंख्यानिष्ठसंख्यात्वव्या-
प्यधर्मावच्छिन्नपर्याप्तसंबन्धावच्छिन्नव्याप्यतानिरूपितपर्याप्तसंबन्धावच्छिन्नव्यापकताव -
च्छेदकसंख्यात्वव्याप्यधर्मावच्छिन्नसंख्यापर्याप्त्यधिकरणानि द्रव्याणीत्यन्वयबोधः । एवं च यत्र
भूतले दश घटाः सन्ति पटाश्च षट् तत्रैतान् घटानपेक्ष्य एते पटा न्यूनसंख्याकाः, एतान् पटा-

नपेक्ष्य एते घटा अधिकसंख्याका इति व्यवहारश्चोपपद्यते । एवं तद्धर्मावच्छिन्नपर्याप्तसं-
ख्यानिष्ठसंख्यात्वव्याप्यधर्मावच्छिन्नपर्याप्तसंबन्धावच्छिन्नव्यापकतानिरूपितपर्याप्तसंबन्धाव-
च्छिन्नव्याप्यतावच्छेदकत्वं नाम, तद्धर्मावच्छिन्नपर्याप्तसंख्यापर्याप्त्यवच्छेदकधर्मसमानाधिक-
रणान्योन्याभावप्रतियोगितावच्छेदको यो धर्मः तदवच्छिन्नपर्याप्तसंख्यापर्याप्त्यवच्छेदकधर्मा-
धिकरणमात्रवृत्तिः, तदवच्छिन्नपर्याप्तनिरूपकतावच्छेदकत्वम् । तावद्धटत्वावच्छिन्नपर्याप्ता या
दशत्वसंख्या तत्पर्याप्त्यवच्छेदकीभूतो यस्तावद्धटान्यतमत्वरूपो धर्मः तत्समानाधिकरणा-
न्योन्याभावप्रतियोगितावच्छेदकः तादृशधर्माधिकरणमात्रवृत्तिश्च षड्घटान्यत्वरूपो धर्मः, तद-
वच्छिन्नपर्याप्तनिरूपकतावच्छेदकः षट्त्वरूपसंख्यात्वव्याप्यधर्मः तदवच्छिन्नसंख्यापर्याप्त्य-
धिकरणत्वं षण्णां घटानामस्तीति नैतान् घटानपेक्ष्य एते पटा न्यूनसंख्याका इति प्रयोगानुप-
पत्तिः । एवं तद्धर्मावच्छिन्नपर्याप्तसंख्यानिष्ठसंख्यात्वव्याप्यधर्मावच्छिन्नपर्याप्तसंबन्धावच्छि-
न्नव्याप्यतानिरूपितपर्याप्तसंबन्धावच्छिन्नव्यापकतावच्छेदकत्वं नाम, तद्धर्मावच्छिन्नपर्याप्त-
संख्यापर्याप्त्यवच्छेदकधर्मावच्छिन्नप्रतियोगिताकान्योन्याभावसमानाधिकरणो यः, तद्धर्माव-
च्छिन्नपर्याप्तसंख्यापर्याप्त्यवच्छेदकधर्मसमानाधिकरणान्योन्याभावप्रतियोगितानवच्छेदकस्त -
दवच्छिन्नपर्याप्तनिरूपकतावच्छेदकत्वम् । षट्पटनिष्ठा या षट्त्वसंख्या तत्पर्याप्त्यवच्छेदकी-
भूतो यः षट्पटान्यतमत्वरूपो धर्मः तदवच्छिन्नप्रतियोगिताकान्योन्याभावसमानाधिकरण-
तद्धर्मसमानाधिकरणान्योन्याभावप्रतियोगितानवच्छेदकश्च तावत्पटेतरचतुर्व्यक्तितदन्यतमत्व-
रूपो धर्मः, तदवच्छिन्नपर्याप्तनिरूपकतावच्छेदकीभूतो यो दशत्वरूपसंख्यात्वव्याप्यधर्मः
तदवच्छिन्नसंख्यापर्याप्त्यधिकरणत्वस्य दशघटेषु विद्यमानत्वान्नैतान् घटानपेक्ष्यैते घटा
अधिकसंख्याका इति प्रयोगानुपपत्तिरिति सर्वं समञ्जसम् । अथैतच्छाखात्रयारोहो
निरर्थकः । सर्वत्र न्यूनत्वमपकर्षः, अधिकत्वमुत्कर्षः षट्पटनिष्ठबहुत्वसंख्यापेक्षया दशघटनि-
ष्ठबहुत्वसंख्यायामुत्कर्षस्य, दशघटनिष्ठबहुत्वसंख्यापेक्षया षट्पटनिष्ठबहुत्वसंख्यायामपकर्षस्य
च सकलानुभवसिद्धत्वात् । नच त्रयाद्यपेक्षया एकस्य द्वयोश्च न्यूनसंख्याकत्वं न
स्यादिति वाच्यम् । एकत्वे द्वित्वसंख्यायां च बहुत्वत्वशून्यत्वस्यैव न्यूनत्वरूपत्वात् ।
नचैवं द्वाद्यपेक्षयैकस्मिन् न्यूनसंख्याकत्वं न स्यादिति वाच्यम् । तत्रैकत्वसंख्यायामने-
कत्वत्वशून्यत्वस्यैव न्यूनत्वरूपत्वादिति चेन्न । अननुगमापत्तेः । किञ्च इदमस्माद्बहुतर-

३६

त्रिशच्छ्लोकी

मित्यादिप्रतीतौ निरुक्ताधिकसंख्याकत्वस्यैव विषयत्वसंभवेन संख्यायामुत्कर्षापकर्षस्य-
जातिसद्भावे मानाभावः । बाधकश्च तादृगुत्कर्षापकर्षयोः सांकर्यप्रसंगः । तथाहि । चतुर्नि-
ष्ठसंख्यावधिकोत्कर्षं विहाय षण्णिष्ठसंख्यावधिकापकर्षः त्रिनिष्ठसंख्यायां, षण्णिष्ठसंख्याव-
धिकापकर्षं विहाय चतुर्निष्ठसंख्यावधिकोत्कर्षः सप्तनिष्ठसंख्यायां, उभयोश्च पञ्चनिष्ठसंख्या-
यां समावेश इति । अपिचैतादृशोत्कर्षापकर्षाभ्यां द्रव्यनिष्ठसंख्यासु न्यूनाधिकभावनि-
र्वाहसंभवेऽपि गुणादिनिष्ठसंख्यासु न्यूनाधिकभावस्य निर्वाहयितुमशक्यत्वात् अयमारंभः
सार्थकएव ॥ २५ ॥

मू० समव्याप्यव्यापकते निरूप्येते यतस्तदा ।

तद्वत्त्वरूपे ते स्यातामर्धत्वेन विशेषिते ॥ २६ ॥

यत्र दश घटाः सन्ति पटाः पञ्च तत्रैतान् घटानपेक्ष्यैते पटा अर्धन्यूनसंख्याकाः,
एतान् पटानपेक्ष्यैते घटा अर्धाधिकसंख्याका इति व्यवहियते । तत्र किमिदमर्धत्व-
विशिष्टन्यूनत्वार्धत्वविशिष्टाधिकत्वं वेति प्राप्ते अभिधीयते । समव्याप्यव्यापकत्वे यतः
संख्यात्वव्याप्यतादृशरूपाभ्यां निरूप्येते अवच्छिद्येते । तद्वत्त्वरूपे तादृशव्याप्यत्व-
यापकत्वावच्छेदकधर्मवत्त्वरूपे अर्धत्वेन विशेषिते अर्धन्यूनत्वाधिकत्वे स्यातामित्यक्षरार्थः ।
अयमर्थः । तद्वर्मावच्छिन्नपर्याप्तिसंख्याधर्मन्यूनत्वनाम तद्वर्मावच्छिन्नपर्याप्तिसंख्यासमव्या-
प्यतावच्छेदकधर्मवत्त्वम् । तच्च तद्वर्मावच्छिन्नपर्याप्तिसंख्यापर्याप्त्यवच्छेदकधर्मसमानाधि-
करणो यो धर्मः स्वावच्छिन्नपर्याप्तिनिरूपकतावच्छेदकत्वस्वाधिकरणधर्मावच्छिन्नपर्याप्ति-
संख्यापर्याप्त्यवच्छेदकधर्माधिकरणमात्रवृत्तिधर्मावच्छिन्नपर्याप्तिनिरूपकतावच्छेदकत्वोभयसं-
बन्धेन तद्विशिष्टसंख्यात्वव्याप्यधर्मवत्त्वम् । दशघटपर्याप्तदशत्वसंख्यापर्याप्त्यवच्छेदकद-
शघटान्यतमत्वसमानाधिकरणो यः पञ्चघटान्यतमत्वरूपो धर्मः तदवच्छिन्नपर्याप्तिनि-
रूपकतावच्छेदकत्वस्य पञ्चत्वत्वे सत्त्वात्तादृशोभयसंबन्धेन तावद्वद्वान्यतमत्वावच्छिन्नपर्याप्ति-
संख्यापर्याप्त्यवच्छेदकधर्मसमानाधिकरणधर्मविशिष्टो यः पञ्चत्वत्वरूपो संख्यात्वव्याप्यधर्मः,
तदवच्छिन्नसंख्यापर्याप्त्यधिकरणत्वस्य पञ्चघटेषु सत्त्वान्नानुपपत्तिः । एवं तद्वर्मावच्छि-
न्नपर्याप्तिसंख्याधर्माधिकत्वनाम तद्वर्मावच्छिन्नपर्याप्तिसंख्यासमव्यापकतावच्छेदकसंख्यात्व-

व्याप्यधर्मवत्त्वम् । तच्च स्वाधिकरणस्वभिन्नस्वावच्छिन्नपर्याप्तिनिरूपकतावच्छेदकतद्वर्मा-
वच्छिन्नपर्याप्तिसंख्यानिष्ठसंख्यात्वव्याप्यधर्मावच्छिन्ननिरूपितपर्याप्त्यवच्छेदकयत्किंचिद्वर्माधि-
करणैतदुभयमात्रवृत्तित्वसंबन्धेन यत्किंचिद्वर्माविशिष्टधर्मावच्छिन्नपर्याप्तिनिरूपकतावच्छेदकसं-
ख्यात्वव्याप्यधर्मवत्त्वम् । एवं पञ्चघटान्यतमत्वम् । तदवच्छिन्नपर्याप्तिनिरूपकतावच्छे-
दकत्वम् पञ्चनिष्ठपञ्चत्वसंख्यावृत्तिपञ्चत्वत्वस्यास्ति । पञ्चत्वत्वस्य सर्वत्रैकत्वात् ।
तदवच्छिन्ननिरूपितपर्याप्त्यवच्छेदकधर्मः प्रागुक्तपञ्चघटव्यतिरिक्तपञ्चघटमात्रनिष्ठतावद-
न्यतमत्वमपि । एवं च स्वाधिकरणे स्वभिन्नतादृशधर्माधिकरणेचैतदुभयमात्रे
वृत्तित्वम् दशघटान्यतमत्वस्येति निरुक्तसंबन्धेन यत्किंचिद्वर्माविशिष्टधर्मो दशघटान्यतम-
त्वम् । तदवच्छिन्नपर्याप्तिनिरूपकतावच्छेदकीभूतो यो दशत्वरूपसंख्यात्वव्याप्यधर्मस्त-
दवच्छिन्नसंख्यापर्याप्त्यधिकरणत्वस्य दशघटेषु विद्यमानत्वान्नानुपपत्तिरित्यादिकं सुदूरतर-
मालोचनीयम् ॥ २६ ॥

मू० गुणादौ द्वित्वमेकत्वमथ द्वित्वादिकं पुनः ।

वृत्तित्वविशिष्टान्यतरत्वादि प्रकीर्तितम् ॥ २७ ॥

द्वौ वा त्रयो वा चत्वारो भेदा यत्र निवेशिताः ।

द्वित्वत्रित्वचतुष्टवादिसंज्ञास्तेषां प्रकीर्तिताः ॥ २८ ॥

ननु गुणादावयमेक इत्यादिशब्दः प्रयुज्यते । तत्रैकशब्दस्य कोऽर्थः । न तावदे-
कत्वसंख्याविशिष्टः, गुणे गुणानङ्गीकारात् । अथ सामानाधिकरण्यसंबन्धेनैकत्वसंख्या-
विशिष्ट एव एकशब्दार्थः, घटनिष्ठैकत्वसंख्यायाः सामानाधिकरण्यसंबन्धेन घटरूपे
सत्त्वादेकमिदमिति प्रयोगोपपत्तिः । अथ सामानाधिकरण्यसंबन्धेन संख्याविशिष्टस्या-
प्येकशब्दार्थत्वे इमौ रूपरसावेक इति प्रयोगापत्तिः । एतद्वूपरसयोरुभयोरपि सामाना-
धिकरण्यसंबन्धेनैकत्वसत्त्वादिति चेन्न । प्रत्येकं वर्तमानसामानाधिकरण्यस्यैव वृत्तिनि-
यामकत्वस्वीकारात् । फलानुरोधित्वात्कल्पनायाः । यथा स्फटिके लोहितप्रतीत्या स्फटिक-
निष्ठलौहित्यसामानाधिकरण्यस्यैव संबन्धता न तु भूतलादिनिष्ठसामानाधिकरण्यस्येति ।
अथ प्रत्येकवृत्तिलौहित्यसामानाधिकरण्यमादाय यथेमौ स्फटिकौ लोहितावित्येकमेव जपाकु-

सुमगतं लौहित्यमुभयोरवभासते । एवं रूपरसयोः प्रत्येकं वर्तमानमेकत्वसामानाधिकरण्यमादाय इमौ रूपरसावेक इत्येकमेवाश्रयगतमेकत्वमुभयोरवभासतां । प्रत्येकवृत्तिसामानाधिकरण्यस्य प्रत्येकस्मिन् वृत्तिनियामकतायाः त्वयापि वाच्यत्वादिति चेत् । एक इत्याकारकप्रतीतानुद्देश्यतावच्छेदकावच्छिन्नसामानाधिकरण्यस्यैकत्वांशे संबन्धत्वोपगमात् । तथाचैकस्मिन् रूपे इदमेकमिति प्रतीत्या रूपनिष्ठतद्व्यक्तित्वावच्छिन्नसामानाधिकरण्यस्यैव वृत्तिनियामकत्वम् । नतु रसनिष्ठतद्व्यक्तित्वावच्छिन्नसामानाधिकरण्यस्यापि वृत्तिनियामकत्वं स्वीक्रियते । एवञ्चैमौ रूपरसावेक इत्यत्र नास्मत्कृतवृत्तिनियामकयोः प्रत्येकवृत्तिसामानाधिकरण्ययोः संबन्धभावः । तयोर्लक्ष्यतावच्छेदकीभूतरूपरसव्यक्तिनिष्ठबक्ष्यमाणद्वित्वानवच्छिन्नत्वात् । किन्तु द्वित्वावच्छिन्नसामानाधिकरण्यस्यैव संबन्धत्वं संभावनीयम् । तस्य च वृत्तिनियामकत्वन्नास्माभिरुपकल्प्यते फलबलात् । स्फटिकादौ तु इमौ द्वौ स्फटिकौ लोहिताविति प्रतीतेः प्रत्येकवृत्तिसामानाधिकरण्यस्य तादृशस्फटिकद्वयवृत्तिसामानाधिकरण्यस्य वा संबन्धतास्वीकारेणोपपत्तिः । अथैवमेकं गुणत्वमित्यत्र कथमुपपत्तिः सामानाधिकरण्यसंबन्धेनापि गुणत्वे एकत्वसंख्याविरहादिति चेन्न । तत्र सामानाधिकरण्यघटितसामानाधिकरण्यसंबन्धेनैव गुणत्वे एकत्वस्य विषयत्वाङ्गीकारादतिप्रसक्तेश्च पूर्वोक्तदिशैव वारणीयत्वात् । अथैवमपि घटात्यन्ताभावः एक इति प्रत्ययानुपपत्तिः । तत्रोभयत्र समवायघटितसामानाधिकरण्यविरहादिति चेन्न । तत्र विशेषणतासंबन्धघटितसामानाधिकरण्यस्यैव संबन्धत्वोपगमात् । अथ भावत्वाभाव एक इति प्रत्ययानुपपत्तिः । तत्र विशेषणताघटितसामानाधिकरण्यस्याप्यभावादिति चेन्न । तत्र समवायविशेषणताद्वयघटितसामानाधिकरण्यविशेषणत्वोभयघटितसामानाधिकरण्यस्यैव संबन्धत्वोपगमात् । अथैवमपि आश्रयनाशजन्ययत्किंचिद्रूपनाशं विषयीकृत्यायं नाश एक इति प्रत्ययानुपपत्तिः तत्र निरुक्तसंबन्धस्य कस्याप्यसंभवादिति चेन्न । तत्र कालिकसंबन्धघटितसामानाधिकरण्यस्यैव संबन्धत्वोपगमादित्यादिकं स्वयमूहनीयम् । स्यादेतत् । एक इत्याकारकप्रतीतौ कचित्समवायः कचित्समवायघटितसामानाधिकरण्यं कचिदुभयत्र समवायघटितसामानाधिकरण्यसमवायैतदुभयघटितसामानाधिकरण्यं कचित्समवायविशेषणताद्वयघटितसामानाधिकरण्यं कचित्समवायविशेषणताद्वयघटितसामानाधिकरण्यं

प्यविशेषणत्वैतदुभयघटितसामानाधिकरण्यं कचितु समवायकालिकविशेषणत्वोभयघटितसामानाधिकरण्यमित्यादिनानासंबन्धानां संबन्धत्वाङ्गीकारे गौरवमिति चेन्न । न हि तावत्संबन्धानां तत्तत्संबन्धत्वेन संबन्धता स्वीक्रियते येन गौरवं स्यात् । किन्तु समवायस्यैकसंबन्धता । सामानाधिकरण्यानां तु सर्वेषां सामानाधिकरण्यत्वेनापरसंबन्धेत्याशयेन गौरवाभावात् । अथैवं रूपरसगन्धस्पर्शसंख्यापरिमाणसंयोगेति विभागवाक्ये रूपमेकं रस एकः गन्ध एकः स्पर्श एकः एवं क्रमेण सर्वैरपि विद्वद्भिः शिष्याणां बोधनं क्रियते । तत्रैकपदस्य का गतिः । नच तत्र रूपत्वावच्छिन्नं यदेकत्वसामानाधिकरण्यं तदेव संबन्धतया स्वीकार्यमिति वाच्यम् । तथा सति यत्र रूपत्वेन रूपेण घटपटकुड्यकुसूलादिनानापदार्थगतनानारूपाणि विषयीकृत्य रूपाण्येकमिति प्रयुज्यते । तदा तादृशवाक्यस्य प्रामाण्यापत्तेरिति । नैष दोषः । तत्रैकपदस्यैकधर्मावच्छिन्नार्थकत्वात् । स च धर्मो रूपत्वं रूपत्वनिष्ठं यदेकत्वसामानाधिकरण्यघटितं सामानाधिकरण्यं तस्यैकं रूपत्वमिति प्रतीत्यनुरोधेन संबन्धतायाः स्वीकर्तव्यतया रूपत्वस्यैकत्ववत्त्वेऽविवादात् । तदेतत्सर्वमभिप्रेत्य एकार्थसमवायादिनैव तादृशव्यवहारोपपत्तौ गुणे गुणानङ्गीकारादिति दीपिकायां स्थितमिति चेन्न । एतद्वटरूपमेकमिति वाक्यजन्यप्रतीतौ यद्येतद्वटरूपत्वावच्छिन्नसामानाधिकरण्यसंबन्धेनैतद्वटनिष्ठैकत्वविशिष्टमेवावभासते । तदैकस्मिन् घटे द्वे रूपे उत्पन्ने इत्याद्यभिधानं पुमांसं प्रति एतद्वटवृत्तिरूपमेकमिति वाक्यं न प्रयुज्जीरन् । न हि ततो जायमाना धीस्तथाविधसंशयं निवर्तयितुमीष्टे । परिभाषयतु तावदिदं स्वयमेव नयने निमील्य मनसा अन्नंभट्टः घटे वर्तमानं रूपं तद्वृत्येकत्ववत्त्वेन विद्वानोऽपि कश्चित्पुमान् अस्मिन् रूपान्तरोत्पत्तिं संशेते न वेति । एवं रूपत्वादावेकत्वादिसामानाधिकरण्यज्ञानेऽपि रूपत्वान्तरसंभावनाविरोधाभावाद्रूपत्वान्तरं संदिहानं प्रति एकं रूपत्वमिति प्रयोगानुपपत्तिरिति । न हि रूपत्वमेकत्वसामानाधिकरणतया अजानानो रूपत्वान्तरसंभवं किमिति संदिग्धे । तस्मादनुभवविरोधादन्नंभट्टवचनमनादरणीयम् । यद्येतद्वटवृत्तिरूपमेकमित्यस्य भिन्नरूपासमानाधिकरणमित्यर्थः रूपत्वमेकमित्यस्य स्वाश्रयप्रतियोगिकान्योन्याभावासमानाधिकरणरूपत्वकमित्यर्थः । तथाप्येकं रूपं ज्ञातं एकं रूपं जानामीत्यादावेकपदं तद्व्यक्तित्वावच्छिन्नपरमावश्यकम् । न हि तत्र स्वभिन्नरूपासमानाधिकरणत्व-

रूपमेकत्वं विषयः रूपान्तरस्यापि तद्भूतले तदानीं सत्त्वात् । ज्ञानमात्रं त्वेकरूपस्यैवेति । एकस्मिन् घटे द्वे रूपे उत्पन्ने एकं शुक्लमपरं नीलमित्यत्रैकपदस्य तद्व्यक्तित्वावच्छिन्नार्थ-
कत्वमावश्यकमिति सर्वत्रैव तथास्त्वित्याशयेनाह गुणादाविति । गुणादिनिष्ठं यदेकत्वं
तत्तद्व्यक्तित्वादिरूपमित्यर्थः । ननु यत्र रूपमेकं रस एक उत्पन्न इत्यत्रेभौ रूपरसौ
द्वाविति सर्वैर्व्यवहियते । तत्र किमदं द्वित्वं न तावत्संख्यारूपं गुणादौ तदसंभवात् ।
आश्रयगतद्वित्वादिभानन्तु पूर्ववदेव निरसनीयम् । अथापेक्षाबुद्धिविशेषविषयत्वमेव
द्वित्वमिति चेत् । विषयतायाः व्यासज्यवृत्तित्वे मानाभावेन प्रत्येकमपि द्वित्वादिप्रत्ययापत्तिः ।
अत आह द्वित्वादिकं पुनारित्यादि । तत्तदिति । यादृशव्यक्तीनां द्वित्वादिकं वक्तव्यं
तत्तद्व्यक्तिवृत्तित्वविशिष्टतावदन्यतरत्वादिकमेवेत्यर्थः । अयं भावः । यत्र रूपरसौ द्वाविति
प्रयुज्यते तत्रैतद्रूपरसवृत्तित्वविशिष्टैतद्रूपरसान्यतरत्वावच्छिन्नत्वं द्वित्वमिति यत्रैतद्रूपरस-
शस्त्रय इति प्रयुज्यते तत्रैतद्रूपरसस्पर्शवृत्तित्वविशिष्टतावदन्यतमत्वत्वावच्छिन्नत्वं त्रित्वमिति
संज्ञेत्यादिकं स्वयमूहनीयम् ॥ २८ ॥

मू० वैलक्षण्ये भवेत् यद्वापदमप्यथवेति च ।

परन्त्वपितुकिन्तूनां वैलक्षण्यमुदीरितम् ॥ २९ ॥

विरुद्धत्वं च भिन्नत्वं वैलक्षण्यं द्विधा मतम् ।

विरोधिज्ञानविषया विकल्पोत्तरसप्तमी ॥ ३० ॥

प्रथमस्योदाहरणं यथा न च यत्र शरीरे चेष्टा न जाता तत्राव्याप्तिरिति वाच्यम्
तादृशे प्रमाणाभावादित्यनन्तरं, अथवा चेष्टावदन्त्यावयववृत्तिद्रव्यत्वव्याप्यजातिमत्त्वं
तदिति । तादृशे प्रमाणाभावादित्यत्र तादृश इत्यनन्तरं शरीर इति पूरणीयम् । शरीर इत्यत्र
सप्तम्यर्थो विशेष्यत्वम् । तादृशपदं चेष्टानधिकरणत्वपरं, प्रकारित्वं सप्तम्यर्थः । तथाच
शरीरविशेष्यकचेष्टानधिकरणत्वप्रकारकप्रमाणाभावज्ञानज्ञाप्याप्रामाण्याश्रयीभूतं तादृश-
वाक्यमित्यन्वयबोधः । अथ तादृशप्रमाणविरहज्ञानज्ञाप्याव्याप्तिविरहकं शरीरलक्षणमिति
सामान्यतः शरीरलक्षणत्वावच्छिन्नविशेष्यकमानसबोधो जायते । अथवेत्यनेन पूर्वोक्ता-

धैवलक्षण्यं प्रतिपाद्यते । पूर्वोक्तार्थबोधोत्तरतादृशमानसज्ञानविषयीभूताव्याप्तिविरहज्ञाप-
कातिरिक्तज्ञापकज्ञाप्याव्याप्तिविरहकत्वं तत् । अन्वयश्चास्य तत्पदार्थे शरीरलक्षणत्वाव-
च्छिन्ने । यद्वा पूर्वोक्तचेष्टाधिकरणत्वलक्षणभिन्नत्वमर्थः । तस्यापि तत्पदार्थे अन्वय
इति ॥ द्वितीयस्योदाहरणम् । न हि दृश्यत्वमदृश्यत्वं वा कस्य चित्स्वभावादाच-
क्षमहे । परन्तु महत्त्वोद्भूतरूपादिकारणसमुदायवशाद्दृश्यत्वं तदभावे चादृश्यत्वमिति ।
अत्र स्वभावादित्यनन्तरमिति शब्दः पूरणीयः । तथा अदृश्यत्वमित्यनन्तरमपि । अत्र
परन्तुशब्देन पूर्वोक्तवैलक्षण्यमुत्तरोक्तौ प्रतीयते । तच्च तद्विरुद्धार्थकत्वमिति ॥ तृतीयस्यार्थः
विकल्पसूचकपदादुत्तरा या सप्तमी सा विरोधिज्ञानं विषयः स्वप्रतिपाद्यं यस्याः सा तथा
उदाहरणश्चास्य—तस्य नित्यत्वे भूतले घटाभावबुद्धिप्रसङ्गादिति । अत्र तत्पदमभाव-
वैशिष्ट्यपरम् । विशेष्यत्वं षष्ठ्यर्थः । नित्यत्वपदं नित्यत्वज्ञानपरम् । विरोधिज्ञानविष-
यत्वं सप्तम्यर्थः । घटानयनानन्तरमपीत्यपिशब्दस्वारस्यात्स्वाव्यवहितोत्तरघटाभावोत्तरकाली-
नत्वं सूच्यते । तथाचाभाववैशिष्ट्यविशेष्यकनित्यत्वप्रकारकज्ञानविरोधिज्ञानविषयो यो
घटानयनोत्तरकालीनघटाभावबुद्धिप्रसङ्गस्तस्मादित्यर्थः ॥ ३० ॥

मू० ज्ञानज्ञाप्यत्वविषया सेति कचिन्प्रचक्षते ।

समानयुक्तिकत्वार्था कचिदेषा विलोक्यते ॥ ३१ ॥

अत्र प्रथमस्योदाहरणम् इदमेव पूर्वोक्तं । तस्येत्यत्र षष्ठ्यर्थो विशेष्यत्वम् । नित्यत्व-
पदं नित्यत्वज्ञानपरम् । ज्ञाप्यत्वं सप्तम्यर्थः । तस्य प्रसंगेऽन्वयः । ज्ञानं च संभाव-
नात्मकं बोध्यम् । ज्ञायते हि तस्य नित्यत्वं संभावयतो यथोक्तातिप्रसङ्ग इति । द्वितीय-
स्योदाहरणम्—समवायस्यातिरिक्तत्वे अभावस्यापि वैशिष्ट्यं संबन्धान्तरं सिद्ध्येदिति ।
अत्र समवायस्येत्यत्र षष्ठ्यर्थो विशेष्यत्वं, अतिरिक्तत्वपदमतिरिक्तत्वसिद्धिपरम् । समा-
नयुक्तिकत्वं सप्तम्यर्थः । तच्च स्वजनकसमानजनकत्वं स्वं समवायातिरिक्तत्वसिद्धिः तज्ज-
नक यल्लाघवज्ञानं तत्समानजनकत्वं संबन्धान्तरत्वप्रकारकसिद्धेरिति अत्रापि लाघवज्ञान-
संभवादिति भावः । यदि चात्र सिद्ध्येदित्यत्र स्यादिति प्रयुज्यते तदा समवायस्येत्यत्र

षष्ठ्यर्थो निष्ठत्वम् । अतिरिक्तत्वपदं यथाश्रुतार्थकमेव । समानयुक्तिकत्वं सप्तम्यर्थः । तच्च स्वज्ञापकज्ञाप्यत्वम् । अन्वयश्चास्य संबन्धान्तरघटकभेद इत्यवसेयम् ॥ ३१ ॥

म० अयोगं योगपरैरत्यन्तायोगमेव च ।

व्यवच्छिनत्ति धर्मस्य निपातो व्यतिरेचकः ॥ ३२ ॥

व्यतिरेचको निपात एवकारः कचिदयोगं व्यवच्छिनत्ति अयोगव्यवच्छेदबोधं जनयति । अयोगः उद्देश्यतावच्छेदकसमानाधिकरणाभावप्रतियोगित्वम् । तस्य व्यवच्छेदोऽभावः व्यापकत्वमिति यावत् । यथा अयं शङ्खः पाण्डुर एवेति विशेषणसंगतैवकारेण शङ्खत्वसमानाधिकरणात्यन्ताभावप्रतियोगित्वाभावः पाण्डुरत्वे बोध्यते । कचिदत्यन्तायोगं व्यवच्छिनत्ति अत्यन्तायोगव्यवच्छेदबोधं जनयति । अत्यन्तः उद्देश्यतावच्छेदकव्यापको योऽयोगः अभावः तद्व्यवच्छेदः तदप्रतियोगित्वम् । यथा सरोजं नीलं भवत्येवेत्यादौ क्रियासंगतैवकारस्थले सरोजत्वव्यापकात्यन्ताभावाप्रतियोगित्वं नीलभवनरूपधात्वर्थे बोध्यते । कचिदपरैर्योगं व्यवच्छिनत्ति अपरयोगव्यवच्छेदबोधं जनयति । अपरैर्विशेषान्यैर्योगं योगस्तादात्म्यादिसंबन्धः तद्व्यवच्छेदस्तदभावः । यथा पार्थ एव धनुर्धर इत्यादौ विशेष्यसंगतैवकारस्थले पार्थान्यतादात्म्याभावो धनुर्धरे बोध्यत इत्यादि यद्यपि बहु वक्तव्यम् । तथापि ग्रन्थान्तरेषु बहुशः प्रपञ्चितत्वात् विस्तरभयाच्च विरम्यते ॥ ३२ ॥

श्रीत्रिशच्छ्लोकीटीका सेयं पट्टाभिरामेण ।

क्षिता वक्षसि साक्षात् कौसुममालेव दक्षिणामूर्तेः ॥

पट्टाभिरामपोतग्रथिता सेयं प्रसूनमालेव ।

त्रिशच्छ्लोकीटीका प्रियतां पुरमुन्दरी देवी ॥

शुभमस्तु

इति तार्किकचूडामणिपट्टाभिरामशास्त्रिकृता त्रिशच्छ्लोकीटीका समाप्ता

॥ समाप्तोऽयं ग्रन्थः ॥

University Notes

CONFERENCES

The Rt. Hon'ble V. S. Srinivasa Sastriar, P.C., C.H., LL.D., Vice-Chancellor of the University, opened the proceedings of the Eleventh All-India Educational Conference held at Nagpur in December, 1935.

The following members of the Staff attended as delegates of the University and read papers at the Conferences noted against their names.

Professor K. Rama Pisharoti & Professor C. S. Srinivasachariar	The Eighth All-India Oriental Conference at Mysore.
Mahavidwan R. Raghava Ayyangar	The First All-India Oriental Poets' Conference at Mysore.
Professor A. Narasinga Rao & Mr. B. Ramamurti	The Mathematical Conference, Delhi.
Professor S. Ramachandra Rao	The Annual Meeting of the Indian Academy of Science, Bombay.
Professor B. V. Narayanaswami & Mr. M. K. Muniswami.	The Nineteenth All-India Economic Conference, Dacca.

SPECIAL LECTURES

The following special lectures were delivered since the publication of the last issue.

Mr. K. R. Subrahmanyam, Professor, Maharajah's College, Vizianagaram.	The Ikshvakus of Andhra (3 lectures).
Mr. A. Gopala Menon, Professor, Maharaja's College, Trivandrum.	Agricultural Indebtedness and some remedies (3 lectures).
Dr. B. L. Manjunath, Professor of Chemistry, Mysore University.	The chemistry of Plant Products (3 lectures).
Swami Vipulanandaji, Ramakrishna Mission, Ceylon.	The Art of rhetoric in Tamil (3 lectures).
Professor Noguchi, Japan.	Japanese Art and Poetry (3 lectures).

TECHNOLOGY

The Syndicate has appointed a special committee to investigate the possibilities of starting at an early date a department of Oil Technology in this University.

TITLES

The University of Madras has conferred the Degree of Master of Oriental Learning on Mr. P. Panchapakesa Sastriar, Pandit in Samskrit, and the Bharata Mahamandal, the title of Mimamsaratnakara on Mr. V. A. Ramaswami Sastriar, Lecturer in Samskrit.

* * * * *

RESEARCH

Besides a large number of extension lectures delivered by the members of the Teaching Staff the following members have submitted papers to various conferences and Journals.

Rao Sahib Prof. C. S. Srinivasachariar.	The Genesis of the Diversion on Arcot in 1751.	All-India Modern History Congress, Poona.
	The Kaval System in the Tamil Country.	All-India Oriental Conference, Mysore.
	Edition of Bell's Empire in India.	
	Chapters XIV and XV of Historical material in the Diary of Ananda Ranga Pillai (1736-1761).	Journal of Indian History.
	Tamil Weights, Measures and Currency.	The Ardra.
Mr. S. K. Govindaswami.	A Pala image of Ganapati.	} Journal of Indian History.
	Some problems relating to the reign of Kulottunga III.	
Dr. B. V. Narayanaswami Nayudu.	Agricultural Marketing.	The Madras Agricultural Journal, Vol. XXIII, No. I, 1935,
	Rural Debt Relief.	The Indian Co-operative Review, Vol. II, No. 4.
	Land Tenures in South India.	19th All-India Economic Conference.
Mr. V. G. Ramakrishna Ayyar.	Comments on the New Indian Constitution and Finance.	The Economic Journal, Vol. XLV, No. 178, 1935.

Mr. M. K. Muniswami.	Central Banking Technique.	Twentieth Century.
	Financial Future of the Indian Federation.	19th All-India Economic Conference.
Prof. A. Narasinga Rao.	Papers to the 9th Conference of the Indian Mathematical Society.	..
Dr. S. Sivasankaranarayana Pillai.	Paper to the 9th Conference of the Indian Mathematical Society.	..
Mr. B. Ramamurti.	On Rational Normal ruled surfaces.	Math. Annalen. Bd. III, Heft 4.
	A Geometric Interpretation of a theorem on Skew Symmetric functions.	Konin Akad. Van. Wetenschappen, Amsterdam, Vol. 37, No. 10.
	Linear Complexes related to a Rational Normal-curve.	Proc. of the Ind. Acad. of Sc. Vol. I.
	On the Osculating spaces of a Rational Norm-curve which cut a linear complex in null-variant complexes.	Journal. Ind. Math. Soc. Vol. I (New Series).
	On the Rational Norm-curve.	do. (Joint paper) with Dr. Vaidyanathaswami
	Paper to the 9th Conference of the Indian Mathematical Society.	..
Mr. S. Subrahmanian.	On a Property of Partial Correlation.	Jour. Royal Statistical Soc. Part I. '35.
	The Closure Property of 3-curves.	Proc. of the U. P. Academy of Sciences, Sept. 1935.
Dr. S. R. Rao.	Colloidalisation and cold-working of metals.	Current Science, Vol. 4, p. 24.
	Diamagnetism of Copper.	Proc. Ind. Acad. Sciences, Vol. 2, p. 249.
	Magnetism of Copper.	Nature, Vol. 136, 436.
	The Magnetic properties of colloidal powders of Metals.	Annual Meeting of the Indian Academy of Sciences. Bombay, Dec. 1935.
Mr. N. S. Subba Rao.	Nature of Atmospherics.	Nature, Vol. 136, p. 683.

- Dr. S. R. Rao and K. C. Subrahmanian (Research student). Diamagnetism of thallium single crystals. *Nature*, Vol. 138, p. 336.
- Dr. S. N. Chakravarti. A note on the nitration of Methyl Salicylaldehyde. *Current Science*, 1935, IV, 26-28.
- Dr. S. N. Chakravarti and M. Swaminathan. A new synthesis of 3:11 dimethoxy oxy-protoberberine and Synthesis of 2:3 methylene dioxy-11:12-dimethoxyoxy-protoberberine and 2:3:11:12-tetramethoxyoxyprotoberberine. *J. Ch. Sc. London*, 1935, 293-95.
- O-aldehydo-carboxylic acids. —Part II.
- A synthesis of 4-methoxy-phthalaldehydic acid and a new synthesis of opianic acid. *J. Ind. Chem. Soc.*
- Mr. T. S. Raghavan and Mr. K. R. Venkatasubban. A note on the abnormal flowers of *Cassia fistula*. *Current Science*.
- Mr. A. Ramakrishna Reddy. A note on the Collection of Paguridea from Porto Novo. *Current Science*, Vol. III, No. 2.
- The Structure, Mechanism and Development of the Gastric Armature in Stomatopoda with a discussion as to its Evolution in Decapoda. *Jour. Ind. Acad. Sciences*, Vol. I, 650-75.

TRANSLATIONS.

- Prof. K. Rama Pisharoti. (i) Bālacarita. *Journal of the Mythic Society*.
- (ii) Vāstuvidya (in collaboration with Mr. V. K. R. Menon). *Calcutta Oriental Journal*.
- (iii) Tantrasamuccaya. *Journal of Indian Art, Calcutta*.

PAPERS.

- (i) Āmalaka. *Calcutta Oriental Journal*.
- (ii) Yavana—A Note. *Indian Culture, Calcutta*.
- (iii) Cults and Cult-acts in Kerala. *Indian Historical Quarterly, Calcutta*.

- (iv) Aesthetic Pleasure in Drama. *Calcutta Review*.
- (v) Dohada. *Journal of Indian Art, Calcutta*.
- (vi) Sikhara. *do.*
- (vii) Vatsabhatti's Prasasti—A Fresh Study. *All-India Oriental Conference*.
- (viii) An Interpretation of a Text from the Dhvanyāloka.
- Mimāmsaratna V. A. R. Sastri. (i) Batrihari—a Bauddha?
- Mr. B. N. K. Sarma. Catussūtrabhasya of Madhvacharya.
- (i) Ancient Gita Commentary. A rejoinder to Prof. Otto Schrader (I.H.Q.)
- (ii) The Underground Library at Kattatāla. (A.B.O.R.I.)
- Mr. P. S. Naidu. (i) Hormic Doctrine and the Gita. *Indian Philosophic Congress, 1935*.
- (ii) Heisenburg's principle of uncertainty and its metaphysical implication. *Do.*

PUBLICATIONS

The following books are expected to be published during this year:

Tattvabindhu with Tattvavibhavana by M.R.Ry. V. A. Ramaswami Sastriar, Avl.

Svarasiddhantacandrika by M.R.Ry. K. A. Sivaramakrishna Sastriar, Avl.

A book in Tamil on 'Acoustics' by M.R.Ry. R. K. Viswanathan, Avl.

MUSIC CONFERENCE

A Music Conference was held under the auspices of the Annamalai University, which was opened on the 15th February, 1936, by the Rt. Hon'ble V. S. Srinivasa Sastriar P.C., C.H., LL.D., Vice-Chancellor of the University. The Hon'ble Dr. Rajah Sir Annamalai Chettiar, Kt., LL.D. was the President of the Conference and Mr. T. S. Sabhesa Ayyar, the Chairman of the Reception Committee. Prof. S. Somasundra Bharathiar, M.A., B.L., delivered the Inaugural Address. A large number of Musicians, Vidvans and Lovers of Music from various parts of the Madras Presidency attended the Conference.

Reviews

Dashopanishads, Vol. I, pp. i-xxxii, 1-45, 457-485. Published by the Theosophical Publishing House for the Adyar Library, 1935. Price Rs. 4.

The Theosophical Publishing House, Adyar, has added one more work to their very useful series of publications and this is a welcome addition to the existing *Upaniṣadic* literature. The value of the edition is enhanced by the publication of the commentary by Śri Upaniṣad-Brahma-Yogin, which follows the teachings of the *Advaita* school. The name and word indexes that have been added at the close are very useful, while the printing and get-up leave nothing to be desired. The Pandits of the Library deserve to be heartily congratulated.

One has to confess to a sense of disappointment on reading through the preface of the volume. One expects that some light is thrown on the age and personality of Upaniṣad-Brahma-Yogin and that an estimate is given regarding the value of the commentary to the student of *Upaniṣads*. The writer, however, hazards a conjecture in the preface that 'Śamkara too had commented the text from the first chapter' of the second *Āraṇyaka* of the *Aitareya*. This seems to be an idle conjecture, for this goes against the tradition of the commentators on Śamkara. It is surprising that it should have escaped the notice of the writer that the commentator is following the *Mādhva* tradition in treating the first three chapters of the second *Āraṇyaka* also as part of the *Upaniṣad*. These and other subjects, it is hoped, will find adequate treatment in the second volume.

K. R. P.

The Great Temple at Tanjore. By Mr. J. M. Somasundaram, Tanjore. (Price Re. 1 or 2 sh. net.).

I read with real pleasure and much profit the monograph of the Advocate Mr. J. M. Somasundaram on "The Great Temple at Tanjore".

It is as informing as it is interesting. It gives in a nutshell all that is of abiding interest and of inspiring instruction about the genesis and development of this gem of medieval Tamilian architectural talent and genius. The temple at Tanjore is generally acknowledged to be the greatest and one of the finest in all the East. The brochure of

Mr. Somasundaram extracts the essence of all the literature and traditions bearing on this living monument of the Chola potentates in the art of architecture. It garners and marshals all the facts winnowed out of the chaff of fabled legends and fanciful fictions relating to this famous institution from its very inception down to the days of the last Mahratta prince, with whom perhaps its evolution has stopped so far.

The plans and plates of this great temple with several views of its shrines and quadrangles of annexes present to us picturesquely and perspicuously all that is presentable and of absorbing and abiding interest in the design, execution and finish of the several parts of this temple, sacred both to the pious pilgrims and to the reverent visitors, in short, to all those that worship at the altar either of religion or of Fine Arts. The superb smaller shrine of Sri Subrahmanyaswami in this temple-court is a marvellous work of perfect finish that poetises in stone the arts of architecture and statuary to the eternal wonder and glory of civilised humanity. The references to the monoliths such as that of the great carved Nandhi weighing over 25 tons, and of the dressed gneiss-pedestal of the gilded octagonal cupola on the top of the tall tower rising to a height of 250 feet above ground-level are aptly described in this book. The episodes of the old woman who piously and freely gave the famous monolith of the tower, and of the master architect who lavished voluntarily all his talent and expert-skill on the superb shrine of Subrahmanya for pure love of art, are appropriately touched by the author in this interesting brochure.

The appendices to this monograph afford a wealth of information to the students of South Indian Institutions. They present a magnificent picture of genuine piety and munificence of the potentates, princes, queens and princesses as well as of the distinguished nobility of the medieval Tamilaham in all their splendour. Mr. Somasundaram with a trained lawyer's insight has skilfully negotiated the cobwebs and 'cul de sacs' of fanatic fervour, and has wisely banked on all the trustworthy traditions and literature in choosing, classifying and co-ordinating all the facts and figures for his appendices, which considerably enhance their value, and greatly add to the merit of the monograph. I commend the book to all that are interested in South Indian Temples.

S. S. B.

A Survey of the Marketing of Fruit in India. By Messrs. O. R. Gadgil and V. R. Gadgil.

Considering the area which a single investigator had to cover, this work is an extremely creditable one and there are a number of interesting observations concerning all operations in the fruit trade of Poona from grower to the ultimate consumer.

We are told, that the majority of holdings under fruit, are comparatively small; "fruit production is mostly in the nature of a joint crop of the cultivator together with other crops."

The existence of a chain of middlemen between the grower and the consumer is indicated and the comparative helplessness of the grower himself, in the hands of these middlemen alluded to. The system of selling the standing crop to the pre-harvest contractor—the Khotidar—seems to be widely spread in the Poona district. The investigators emphasise, that in case of any dispute between the Khotidar and the grower, the latter is helpless: they therefore recommend that a proper agreement form should be evolved, which the contractors and the buyers, should be asked to sign. The Khotidar himself does not sell the fruits to the consumers, but entrusts the work to commission salesmen (Dalals). Commission is charged very often in the form of a flat rate per package. In Bombay, we are told, the salesman's commission comes to 42% of the total sale price; in Poona, it amounts to 11%. Often the Khotidar is a man of no means, and he obtains his finance from Marwaris at fairly high rates of interest. His business is often risky, and if he does not discharge all the instalments due to the actual growers, the latter are often unable to recover any money from him.

Apart from middlemen, Railways also come in for criticism, at the hands of the authors. They remark that "they had direct evidence from merchants and forwarding agents, (p. 118) to show that railway employees handle fruits very carelessly." But it must be admitted, that Railways are taking some steps to put down this evil.

Interesting statistical tables have been prepared by the authors, which support the views of the Royal Commission on Agriculture in India: "Freight rates are the heaviest single addition to the prime cost of produce, exported by rail from the area of production." (Not discriminating between different kinds of fruits, and being levied at a flat rate per package, very often, the rates work out very high, in the case of low priced fruits, e.g., bananas: most of such fruits are transported on country carts.) We however feel that there is some repetition in the book, and the addition of an index would enhance the value of the book.

M. K. M.

Defective Sight: its cause and cure. By L. Kamesvaran, B.Sc., (Hons.). Published by The Nature-Cure Publishing House, Pudukotah, 1935.

This nicely got-up booklet of 36 pages is by Mr. L. Kamesvaran, an alumnus of this University, and the son of that veteran Naturopath Dr. K. L. Sarma of Pudukotah. He traces all eye-defects as Naturopaths do all diseases of the body, to fundamental constitutional disharmony; he recommends a change of diet, suitable baths, sun-gazing, massaging of the neck, palming, etc. Eye-glasses, he declares to be mere eye-crutches, and he says that they only make the defects worse in course of time. He claims to have treated granules and long-sight successfully by these methods; he is hopeful that all eye-troubles could be effectively cured if the rules he lays down in the pamphlet are observed carefully. It is written in a simple and easy manner; it is a welcome addition to Naturopathic literature.

C. R. M.

Cheap and Healthy Homes for the Middle Classes of India. By R. S. Deshpande, B.E., A.M.I.E., Engineer, Bombay P.W.D., Aryabushan Press, Bombay. Price Rs. 3.

This book seeks to place before the owner-builder helpful information relating to the construction and sanitary fittings of a cottage, house or mansion. It should prove particularly valuable in cases where professional experts are not available, as the author has incorporated the latest advances in the construction of walls, floors, roofs, etc.

The lay house-builder is somewhat apt to be puzzled by the chapter on Foundations and damp proof courses below the basement level. It is not clear whether the author considers concrete or Cuddapah slabs as efficient load distributors and damp proof material. The practice, long in vogue, of having a middle course of stone slabs, cement brick-work or Cuddapah slab at floor level seems to achieve both the aims to a great extent. The problem of preventing the ravages of white ants is a problem of great importance for which no practical solution is offered. The only effective method would be the location and destruction of the Queen Ant, and the laying of a layer of arsenic compounds mixed with mortar near ground level after clearing roots and other vegetation.

The author recommends a more general use of cement block walls, concrete staircases, roofs, lintels, etc., but the question of cost, the availability of materials and above all, of experienced artisans are likely to stand in the way.

Many may not also agree with the author regarding the reduction of the heights and widths of doors and windows from considerations of economy, for aesthetic as well as sanitary considerations have also to be taken into account.

It is to be regretted that with the spreading craze for novelty, brick arches, brick terraces which can be built efficiently and cheaply by the local artisan are suffering an undeserved neglect, and are not more commonly used by the professional expert.

With regard to plastering, a cement and sand preparation in the ratio of 1:12 with neat cement grout of 20 lbs. per 100 sq. ft. will prove an economic damp proof material and will strengthen walls of brick in mud. A cheap and efficient mode of flooring commonly in use, consists in placing a layer of brick jelly concrete and rubbing the surface smooth with 20 lbs. of cement per 100 sq. ft. after roughening the top surface. As regards the roof, the flat roof of a Madras terrace is found to be quite cool and free from leaks, though the author does not recommend them.

The book is a very helpful one, and will, let us hope, stimulate other publications on buildings, sanitation and water supply written with special reference to Indian conditions.

S. P. R.

Srimad Bhagavadgītā. Chapter I. Translation of text and summary of the Commentary of Sri Hamsa Yogin. By R. Vasudeva Rao. Published by T. M. Janardhanam, the Suddha Dharma office, Mylapore. Pages 60.

This edition of the *Bhagavadgītā* presents a text extending over twenty-six chapters and including seven hundred and forty-five verses. Another feature of special interest in this work is it gives an abstract of an early and comparatively unknown commentary on the *Bhagavadgītā* written by Hamsa Yogin. Who this commentator was and when he flourished are questions yet unsettled. He thinks that the twenty-

four chapters of this text, excluding the first and the last entitled 'Gītāvatāra' and 'Brahmastuti', constitute the Gītā proper and that they give an exposition of the twenty-four dharmas of the Gāyatri. These twenty-four chapters are divided into four śatkas—the jñāna-śakta, the Chakhi-śakta, the kriyā-śakta and the yoga-śakta,—and these correspond to the four feet of the Gāyatri. Hamsa Yogin then goes on to describe the contents of the chapters of the Gītā one by one. The six chapters of the jñāna-śakta deal respectively with the over-lordship of Nārāyaṇa, the manifold incarnations of the divinity, the system of hierarchs for the moral governance of the world, the disciplines which aid spiritual evolution, the supreme cause of the manifest world, and the essential nature of that cause. Bhakti-śakta treats of the nature of the evolving entity, the means such as, yajña, dāna and tapas, sattva, rajas and tamas, the twin methods of pravṛtti and nivṛtti, the infinity of divine manifestations intuited by the ideal bhakta, and the highest excellences of some of these manifestations. The karma-śakta inquires into the conditions governing the practice of concentration of mind, the goal of the aspirant after mukti, the path to realisation, the theory and practice of meditation, the nature of the paramahansa, one who has mastered all the foregoing dharmas, and the clear vision of such an individual. The last śakta refers to the supremacy of the Ātma, the manifestation of prakṛti, the nature of the activity which leads to attainment, and of devotion, the excellence of synthetic knowledge and the transcendental state. A comparison of this novel interpretation of the message of the Gītā with the interpretations offered by the three great ācāryas is bound to be interesting. Mr. R. Vasudeva Rao has done a great service in placing before the English-knowing public this summary of the interesting commentary by Hamsa Yogin. The further instalments of this work are eagerly awaited. The author will do well to use the accepted transliteration of the Sanskrit words and the recognised diacritical marks.

R.R.

The Uṇādisūtras in Various Recensions. Madras University Sanskrit Series, No. 7, Parts I, II and VI. Edited by Dr. T. R. Chintamani, M.A., Ph.D., Senior Lecturer in Sanskrit, University of Madras, Madras.

Parts I and II contain the Uṇādisūtras of Pāṇiniyan School with the commentaries thereon by Śvetavanavāsin and Nārāyaṇa respectively. As the editor says in his introduction, the commentators use their texts

that have been accepted by eminent commentators like Ujjvaladatta and Bhaṭṭoji Dikṣita, and in addition, comment on the 14 sūtras dealing with the origin of the Sanskrit alphabet, which Ujjvaladatta and Bhaṭṭoji Dikṣita have not considered. The editor has taken pains (a) to note the variations in the number of sūtras as commented (1) by Ujjvaladatta and Śvetavanavāsin and (2) Śvetavanavāsin and Nārāyaṇa, (b) to show the noteworthy differences in the commentaries of Śvetavanavāsin and Nārāyaṇa, and (c) to incorporate in the text the two recensions of Śvetavanavāsin's commentary from the sūtra 4—147 to the end; and these, we hope, are of importance and value for a critical student of grammar at the present day.

The authorship of these sūtras which are generally known as the *Pañcapādī*, is a matter of learned controversy, and the editor promises to discuss it in all detail in his General Introduction, which will appear in the last part of this series. The commentator Śvetavanavāsin has been assigned too cautiously by the editor to a period between 10th and 16th centuries before Nārāyaṇa (the author of the *Prakriyāsarvasva*) whose date has been definitely fixed as the latter half of the 16th century (and the former half of the 17th century).

Part VI comprises the *Uṇādisūtras* of two schools other than Pāṇinīyan, each with a commentary thereon. The first section of this part containing 795 sūtras is taken from Bhoja's great treatise on grammar called *Sarasvatikaṇṭhābharāṇa*, which, as later references show, was originally known as *Śabdānuśāsana*. It seems that since the title *Sarasvatikaṇṭhābharāṇa* is more fascinating, it had a wider approbation even in the days of Bhoja, with the result that his *Parīṣad Hall*, some *Paṇḍit* of his court, one of his cowherds and two of his works—a treatise on the *Alaṅkāra Śāstra* and the great *Śabdānuśāsana*—all bore the title *Sarasvatikaṇṭhābharāṇa*—the necklace of (Goddess) *Sarasvatī*. The most important thing about Bhoja is that he 'has succeeded remarkably well in presenting in a cogent form what is found distributed in different works like the *Aṣṭādhyāyī*, *Vārtika* and *Bhāṣya*', so that his work was largely used by later writers like Nārāyaṇa who has been said to have incorporated in his *Prakriyāsarvasva* explanations of such words also as are not found in the original *Uṇādisūtras* but found in Bhoja's celebrated treatise.

The second section of this part containing 399 sūtras belongs to *Kātantra* school. The editor, on the authority of the commentator *Durga Siṃha*, rightly observes in his introductory note that these *Uṇādi sūtras* which are a part of the *Krt.* section in *Śarvavarman's Kātantra*—

vyākaraṇa, were originally composed by *Vararuci* alias *Kātyāyana*, and that *Śarvavarman* later on incorporated them in his work.

We heartily congratulate the learned editor on his stupendous task which, we eagerly hope, will be completed by the publication of the other parts and of his General Introduction.

V. A. R.

Planned Economy for India. By Sir M. Visvesvaraya (Bangalore Press.)

This book is an earnest and courageous attempt to set forth clearly the fundamental facts of Indian economic conditions and to suggest the lines on which Indian Economy should be organised and improved. The book is cyclopoedic in the range of its information and will no doubt be found a valuable *vade mecum* to the student as well as the general reader. The general plan of the book consists of first a survey of Indian economic conditions regarding Agriculture, Industries, Trade, Transport and Tariffs, Finance, Currency and Banking; and the second part of the book which is constructive elaborates a Ten-Year Plan for India. The plan and programme is elaborately set forth. Though the Ten-Year Plan put forward in the book is by its very nature tentative, it will be found sufficiently precise to form the basis of a working plan. While European countries have adopted a vigorous national economic policy, the Government of India have been content with merely maintaining law and order, policing the country and gathering the taxes, and in all important matters, the real economic interests of the country have been subordinated to the powerful vested interests of Great Britain, e.g., the constitution of the Reserve Bank, Exchange Ratio, Statutory Railway Board, Protection, Coastal Shipping Reservation, etc.

The author points out that India's political status as a dependency of Great Britain has stood in the way of formulation of sound administrative and business policies on national lines. The total neglect of Indian industries and the crowding into agriculture of about twice the population that it can reasonably bear have created a number of problems which can be solved only by the adoption of a comprehensive programme of economic reconstruction. Though it has become the fashion with some people to decry plans and planners, there have not been wanting careful thinkers both among professional economists and

trained administrators who urge the need for a planned economy in modern economic life. The old dogmatic faith in extreme *laissez faire* has lost its validity, and state intervention of one kind or another in economic life is now admitted to be both practicable and desirable. Attention may be drawn in particular to chapters 14, 15 and 16 of the book which set forth in detail the plan and programme of economic reconstruction. Whatever might be said about the merits of the scheme adumbrated in the book there is no doubt that it deserves the careful consideration of those who care for India's economic welfare, and cannot be put on the shelf as not practicable. Few men are better qualified to propound a scheme than the author of this book whose theoretical knowledge is enriched by his experience as a great administrator. The comparative statistical tables at the end of the book give us in a nutshell a good deal of information which would otherwise have to be delved in the pages of Blue Books. There is a very detailed index and the get up of the book leaves nothing to be desired.

V. G. R.

ACKNOWLEDGMENTS

Über Die Gruppen Birationaler Transformationen Der Elliptischen Und Der Hyper Elliptischen Kurven In Sich.

*Eine Methode Zur Approximativen Berechnug Einseitig.
Eingespannter Druckstabe Mit Veranderlichen Querschnitt.*

*The Twelfth Annual Report of the East India Cotton Association,
Limited, Bombay.*

Report of the Southern India Chamber of Commerce.

War Cry.

The Salem District Urban Bank, Limited, Jubilee Souvenir.

Qutbshāhi of Golcondā in the Seventeenth century.

Staats-und Universitäts-Bibliothek : Hamburg.

1. Lenz: *Für die Hamburgische Universität 1918.*
2. Forster: *Zehn Jahre Hamb. Vorlesungswesen 1906.*
3. Klusmann: *Die Entwicklung des Hamb. Vorlesungswesen 1901.*
4. Hamburg, *Her Political, Economic and Cultural Aspects 1912.*

Kungl. Universitetes Bibliotek : Uppsala.

Four mathematical dissertations by

1. Matell 1924.
2. Matteson 1905.
3. Stenstorm 1925.
4. Varmon.

*The Studies of Old and Modern India (Alt-und Neu-Indische Studien)
by Professor Skhubring, Hamburg.*

1. *Die Rama-Sage beiden Malaien, Ihre Herkunft und Gestaltung.*
2. *Der Kumarapalapratibodha.*
3. *Sayast-ne-sayast.*

Annual Report of the Indian Central Cotton Committee.

Bharat Itihas Sanshodapika Mandala.

Infant Welfare Society, 1932.

The Madras Law College Magazine.

ACKNOWLEDGMENTS (Continued)

Rektorwechsel ander Universitet Leipzig

Verzeichniss Der Vorlesungen Winter-Halbyahr 1932-33

"	"	Sommer	1933
"	"	Winter	1933-34
"	"	Sommer	1934
"	"	Winter	1934-35
"	"	Sommer	1935

Ethnology, Folklore and Archaeology in the U.S.S.R.

E. A. Weiss : Einfuhrung In Die Linien Geometrie Und Kinematik

Proceedings of the Durham Philosophy Society Volume 3 Parts 4-5

4	3-5
5	1-5
6	1-5
7	2-4
8	1-5
9	1-2

Osaka Imperial University : Collected papers from the Faculty of Science
Series A Mathematics Vols. I & II

B Physics " " "
C Chemistry " " "

Man in India Volume XV No. 1 (January-March)

Spolia Zeylanica.

Bulletin of the Calcutta Mathematical Society.

Scripta Mathematica.

Philosophy—the Journal of the British Institute of Philosophy.

Hamburgische Universitat-Keden.

Report of the South Indian National Association and Ranade Library.

Financia Experts, Udipi.

The Orient Gong.

Kungl Sveuska Veteuskaspsakademiens Handlingar Tredje Serien Band
14 Nos. 1 to 3.

1. *Das Wachstum Der Korper Lange Des Menschen.*
2. *Studies in the Gems Astelia Banks Et Solander.*
3. *Examen Rosarum Sneciae Granskringauden Sveuska*
Florans Rosa-Former.

Etudes Sur Un Probleme De Majoration.

Government Victoria College Magazine, Palghat.

EXCHANGE LIST

The Servant of India Society.

Hindustan Review.

Half Yearly Journal of the Mysore University.

Economica, London.

Philosophical Quarterly.

Journal of the Indian Chemical Society.

Reading University Gazette.

Mysore Economic Journal.

Chemical Abstracts, Easton P.A.

The Punjab University Gazette.

Journal of the Bombay University.

Quarterly Journal of the Mythic Society.

Publications by the Oriental Library, Baroda.

Publications by Kungl. Universitetes Bibliotek, Uppsala, Sweden.

Publications by Tohoku Imperial University, Sendai, Japan.

Journal of the Madras University.

Bulletin de L'Ecole Francaise d'Extreme-Orient—Ecole Francaise
d'Extreme-Orient, Hanoi (Indo-China).

Djwa—Java-Institute, Kweekschoolaan, Jogajkarta, Java

Varendra Research Society, Rajshahi, Bengal—Annual Report and
Monographs

Quarterly Journal of the Kannada Literary Academy.

Journal of the Andhra Historical Research Society.

Indian Culture.

Scripta Mathematica.

Indian Historical Quarterly, Calcutta.

Publications of the Bombay Royal Asiatic Society.

The Indian Library Journal.

Review of Philosophy and Religion.

U.S.S.R. Society for Cultural relations with foreign countries, Russia.

'Drama' published by the British Drama League, London.

Proceedings of the Durham Philosophical Society, Newcastle.

Collected papers from the Faculty of Science, Osaka.

Bulletin of the Calcutta Mathematical Society.

Science and Culture, Calcutta.

Indian Co-operative Review, Madras.

Epigraphica Indica.

Spolia Zeylanica.

Publications of the R. Swedish Academy of Sciences, Stockholm.

Bijendragen Tet De Taal, Land-En Volken Kunde Van Nederland
Sch-Indie-s-Gravenhage.

Monthly Weather Report, Poona.

Scientific Reports of the Imperial Institute of Agricultural Research.

UNIVERSITY PUBLICATIONS

Names of Publications	Price Rs. A. P.	Where available.
1. Factory Labour in India By Prof. A. Mukhtar ..	3 0 0	Messrs. C. Coomaraswami Naidu & Sons., 27 and 35, Chinnatambi St., Madras.
2. Bhoja Raja By Prof. P. T. Srinivasa Ayyangar ..	1 8 0	
3. Swaramelakalanidhi By Mr. M. S. Ramaswami Ayyar ..	2 0 0	
4. Naveena Tarkam By Mr. K. R. Applachariar ..	2 0 0	
5. Text and commentary of Tattvavibhavana by Parameswara, a commentary on Vacaspati Misra's Tattvabindu. By Mr. V. A. Ramaswami Sastriar ..	3 0 0	do.
6. Sri Mukundamala By Prof. K. Rama Pisharoti ..	3 0 0	do.
7. The Annamalai University Miscellany—Per year	1 0 0	The Editor, The Annamalai University Miscellany, Annamalainagar.
8. The University Journal Published by the University—Annual Subscription	7 0 0	

(Internal)
10s. (Foreign)

IN THE PRESS

1. A critical edition of *Swarasiddhantachandrika* by Srinivasasankhyavan.
2. A Text-book in Tamil on Chemistry.
3. A Text-book in Tamil on Acoustics.

PUBLICATIONS

OF

The Inter-University Board, India.

1. Handbook of Indian Universities .. 2 0 0 or 3s.
2. Facilities for Oriental Studies and Research at Indian Universities .. 0 8 0
3. Facilities for Scientific Research at Indian Universities .. 0 12 0
4. Bulletin of the Inter-University Board, India, No. 1 to 12 .. 1 0 0 each
5. Biological Outlook on life and its Problems.—By J. Arthur Thomson, M.A., LL.D., Regius Professor of Natural History, University of Aberdeen .. 0 2 0
6. Second Conference of Indian Universities .. 0 12 0

POSTAGE AND V. P. CHARGES EXTRA.

Available from this office :

A. R. WADIA,

Secretary, Inter-University Board, India,
Mysore.

MYSORE ECONOMIC JOURNAL.

The only Journal of its kind published regularly on the 7th of each month for over twenty years. Has a number of contributors and reviewers attached to it. Bright and topical in its contents, it has ever stood out for progressive and suggestive comments on public affairs and well being. Sir Roper Lethbridge called it the "Most admirable Journal". Annual subscription Rs. 6.

From the Book Department, books on economic matters can be always ordered. The following books are available for sale from stock :

PLANNED ECONOMY FOR INDIA by Sir M. Visvesvaraya, K.C.I., LL.D. Price Rs. 6.

MADURA SOURASHTRA COMMUNITY by K. R. R. Sastry, M.A., F.R. Econ. S. Price Re. 1.

INDIAN CASTE SYSTEM by C. Hayavadana Rao, B.A., B.L., F.R. Econ. S. Price Re. 1.

STUDIES IN RURAL ECONOMICS by S. Kesava Iyengar, M.A. Price Rs. 8.

TOWARDS NATIONAL SELF SUFFICIENCY by Dr. P. J. Thomas, M.A., B.Litt., Ph.D. Price As. 4.

MYSORE GAZETTEER (3 VOLS.). Edited by C. Hayavadana Rao, B.A., B.L. Price per set Rs. 20. Can also be had in parts at prices varying from Rs. 2 to Rs. 8 per volume.

Postage extra in all cases

Apply to :—

MANAGER, "Mysore Economic Journal",
No. 19, Gundopunt Buildings, Siddicutta,
BANGALORE CITY.

The Indian Library Journal, Bezwada.

The official organ of the All-India Public Library Association. Expounds the various phases of Library Science and the Library Movement in India.

Annual Subscription Rs. 3.

RATES OF ADVERTISEMENT

PARTICULARS.	PER ISSUE.	PER TWO ISSUES.
	Rs. A. P.	Rs. A. P.
Back Cover	15 0 0	28 0 0
Inside Back Cover	10 0 0	18 0 0
Inside Page	8 0 0	15 0 0
Inside Half Page	4 0 0	8 0 0