

Volume XI, No. 1]

[January 1939

JOURNAL

OF THE

MADRAS UNIVERSITY

Editor

K. A. NILAKANTA SASTRI, M.A.

Editorial Board

SRI V. K. AIYAPPAN PILLAI

SRI R. GOPALA AYYAR

DR. M. O. PARTHASARATHY
 AYYANGAR

DR. M. DAMODARAM

DR. P. J. THOMAS

SRI S. S. SURYANARAYANA
 SASTRI



PUBLISHED BY THE UNIVERSITY

MADRAS

PRINTED AT THE G. S. PRESS, MOUNT ROAD,

1939

TABLE OF CONTENTS

	PAGE
1. SHELLEY AS THE POET OF LOVE. By V. A. THIYAGARAJAN	.. 1
2. MAṆḌANA AND SUREŚVARA. By S. S. SURYANARAYANA SASTRI	.. 30
3. MA'BAR FROM 1323 TO 1371 A.D. By DR. N. VENKATARAMANAYYA	.. 41
4. SOME THOUGHTS ON BRITISH FOREIGN POLICY. By E. J. BINGLE	.. 66
5. THE TOTALITARIAN STATE. By DR. E. ASIRVATHAM	.. 82
6. URBAN CENTRES IN KERALA. By GEORGE KURIYAN	.. 90
7. A NATIONAL HEALTH POLICY. By DR. V. KRISHNA ROW	.. 112
8. REVIEWS :—	.. 123
1. The Secret of Recognition (<i>Pratyabhijñā-hṛdayam</i>) with an English Translation By KURT F. LEIDECKER, M.A., PH.D.	
2. Le Prākṛtānuśāsana De Puruṣottama, Par Luigia Nitti-Dolci, Paris—1938.	
3. Annual Report of the Archaeological Department, Baroda State, for 1936-7, By JNANARATNA DR. HIRANANDA SASTRI.	
4. The Samgraha Cūḍāmaṇi of Govinda and the Bhattara- Melakarta of Venkata-Kavi, EDITED BY PANDIT S. SUBRAHMANYA SASTRI, F.T.S.	
5. Robert J. T. Bell : Co-ordinate Solid Geometry, being Chapter I to IX of "An Elementary Treatise on Co-ordinate Geometry of Three Dimensions".	
9. <i>Principal Miller Endowment Lectures (1938-39)</i> — INDIVIDUAL AND SOCIAL PROGRESS. By H. D. BHATTACHARYYA	.. 1

TABLE OF CONTENTS

		PAGE
1.	STUDIES IN SORGHUM By G. N. RANGASWAMI AYYANGAR	131
2.	COMMODITY PRICES IN S. INDIA 1918-1935 By DR. P. J. THOMAS & N. SUNDARARAMA SASTRY	144
3.	THE GENERAL SALES TAX By B. TIRUMALACHAR	167
4.	SOCIOLOGY By DR. KEWAL MOTWANI	189
5.	LOGICAL ANALYSIS OF THE THREE PROBABLE STAGES IN THE EVOLUTION OF PIE COMPOUNDS By C. R. SANKARAN	200
6.	THE CLUSTER PHONEMES -SK- AND -SKH- IN PRE- HISTORIC GREEK AND THEIR RELATION TO ACCENT By C. R. SANKARAN	202
7.	THE RELIGION OF THE GITA By P. NAGARAJA RAO	210
8.	HISTORY AND DEVELOPMENT OF THE MUSICAL COMPOSITIONS OF SOUTH INDIA By M. A. SARADAMBAL	213
9.	REVIEWS :—	261
1.	The Successors of the Sātavāhanas in Lower Deccan By DINESCHANDRA SIRCAR, M.A., Ph.D.	
2.	Founders of Vijayanagara By S. SRIKANTAYA	
3.	Manu : A Study in Hindu Social Theory By KEWAL MOTWANI	
4.	The Gita : A critique By P. NARASIMHAM, M.A., L.T.	
5.	The Yoga Upanishads translated into English By T. R. SRINIVASA AYYANGAR, B.A., L.T., and edited By S. SUBRAHMANYA SASTRI, F. T. S.	
6.	The Bhavasamkranti Sūtra, The Bhavasamkranti Śāstra of Nāgārjuna and Maitreyanāth's Bhava-	

CONTENTS (Contd.)

	PAGE
samkranti Ṭikā-English translations and Indexes by PANDIT N. AIYASWAMI SASTRI.	
7. Introductory School Mathematics by L. CROSLAND, M.C., B.Sc.	
8. Bulletin of League of Nations Teaching. The Teaching of the principles and facts of the Inter- national co-operation No. 5, December 1938.	
EXTRACTS	.. 273
UNIVERSITY NOTES	.. 278
ACKNOWLEDGEMENTS	.. 284

SHELLEY AS THE POET OF LOVE

BY

V. A. THIYAGARAJAN

“Shelley never mentioned love but he shed a grace borrowed from his own nature that scarcely any other poet has bestowed on that passion. When he spoke of it as the law of life, which in as much as we rebel against we err and injure ourselves and others, he promulgated that which he considered an irrefragable truth. By reverting in his mind to this first principle, he discovered the source of many emotions, and could disclose the secret of all hearts.” In these words of Mrs. Shelley we have the “Open Sesame” that will unlock for us the treasure house of this king of thought, but it is for us to choose what treasures we will from his inexhaustible storehouse. Shelley claims to have read deeply in the book called Nature which God in heaven has written above, and in that book he has read how the fountains mingle with the river, and the river with the ocean. There he learnt that nothing in the world remains isolated.

“All things by a law divine
In one spirit meet and mingle.”

Such mingling is not annihilation. The truth of it is the reverse of it. It is only by knowing that they are aspects of one spirit that they know themselves fully. The one and the many are like the subject and predicate of a logical proposition, and can be understood only in relation to each other. The unity that Shelley predicates of life is not a single-toned and unvarying monotony like the siren of a factory, but it is rather like music with its harmonious modulation, with its difference without discord. It is to the authority of Socrates, ‘the Jesus Christ of Greece’, and of Jesus Christ himself, as well as to his own inner conviction that he turns for the ethical and aesthetic implications of his philosophy of love.

In a prose fragment *On Love*, Shelley tells us that he repeatedly tried to feel his common humanity and unburden his soul to fellow men, but that he found his language misunderstood, as if he were in a distant and savage land, and that he was thrown back in the

rebound in the arms of mother Nature. But the love of Nature alone does not fill the aching void in the human heart. What the heart requires is fellowship with its spiritual counterpart, for there alone is love in all its fulness. Such love comes to us like a ray of light, or like Ariadne's thread guiding us through the dark and labyrinthine ways of our earthly life.

In the preface to *Alastor* Shelley says that there is a curse of God, as it were, which makes those who neither weep nor rejoice with their fellow men to perish morally. If they can be neither friends nor lovers, neither fathers nor citizens, they cease to be even men. Among them, while the wicked perish because they are anti-social, even the better sort perish because they are unsocial. Alastor is the type of the better sort of young men, a youth very much like Shelley himself, with a noble passion for all that is good and lovely, but doomed to solitude. The fate of Alastor is a warning to all those who seek self-satisfaction in voluntary and complete isolation. The dream woman of his imagination whom he seeks is only himself. That is why, though he wanders in the midst of the most beautiful and sublime aspects of Nature, the hunger of his soul is not filled. He is like a man who has lost himself in Fairyland, and forgotten the return half of his ticket. Alastor is a modern Narcissus. He wastes away startled by his own thoughts, and he turns to be the shadow of himself. 'Ruin calls his brother death', but the passing away of Alastor, though 'it is a woe too deep for tears', is still inevitable. The doom of Alastor is foreshadowed by the very moral law which is recognised in a passage in *Queen Mab* :

"Were it virtue's only meed to dwell
In a celestial palace, all resigned
To pleasurable impulses, immured
Within the prison of itself, the will
Of changeless nature would be unfulfilled." (II. 59-64).

Just as Goethe overcame the Werther mood in himself when he shot his hero dead, so also Shelley overcame the mood that drove him into the wilds when he brought Alastor to his lone and unwept death. In either case we have what Croce calls a vaccination fever rather than a fever after real infection. While solitude is essential for a man to know himself, the social impulse is also necessary because society is the arena of character. "Isolation", says Adler, "is the sorry fate of those who are satisfied with their tiny cosmos. They are deserters from society." (*Understanding Human Nature*. P. 235).

The florescence of human personality is however no more automatic than the blossoming of a flower. How many ages of struggle must have gone on in Nature, before Nature converted starlight into that frail and perfect thing of beauty, a flower. Human character too may grow as spontaneously lovely as a flower, but such a perfect development still lies on the anvil of time. Men are still imperfect, and therefore it is, that where there are two or three, the evil principle also gets among them.

But what is first is not also last. Plotinus truly observes "Each of us is an intellectual cosmos linked to this world by what is lowest in us, but by what is highest to the divine intellect." (Turnbull. P. 90) When the soul awakens from the sleep of the senses it comes to see in love the diviner aspect of the social impulse. There are therefore two aspects of Shelley, the one that is personified by the Mighty Mother who is the Aphrodite of the heavens; the other is the Aphrodite of the common ways. Bergson says that there are two forces in life, an upward and a downward, acting and reacting from mind to matter. May we not then say that there is a similar duality in our emotional life also? We read in *The Symposium*, "That Pandemic lover who loves rather the body than the soul is worthless, nor can be constant and consistent, since he has placed his affections on that which has no stability. But he who is the lover of virtuous manners is consistent during life, since he has placed himself in harmony and desire with that which is consistent with itself." (*Shelley's translation.*) The gift of Venus Pandemos does not fill the hunger of the soul, because what she gives is excitement. It is like the gift of the demons in Christina Rossetti's *Goblin Market*, a gift that increases the appetite it caters to, and makes the soul wither in the absence of it. It is only spiritual love that can calm the soul. The lower aspect of love is not really opposed to the higher. The truth of it is absorbed in the higher even as the significance of human personality is most clearly brought out only in human society. The truth is, the lower aspect is the crude ore of personality, gold and dross mingled together. Such love contains in it large dashes of fury, discord and jealousy. In *Prince Athanase* Shelley shows to us the futility of this aspect of love. Prince Athanase is like Alastor an incarnation of Shelley. He is 'philosophy's accepted guest'. He has a passion for justice, and he loves good for itself alone. He is something more than the shadowy figure of Alastor because there is a second person now, the generous Zonoras, who has shaped his character and his mind. And yet Prince Athanase sits alone among men because there is no harmony between his heart and his mind. It

is true that he owns no higher law than love, but in the pursuit of that love he is led as if by a mirage, by Venus Pandemos and not by Venus Uranus. It is only on his death bed that he realises his mistake. Gilbert Canan truly observes, "Hatred and bitterness will disguise themselves as love and go out among men and women demanding that they shall love with a like ferocity and the end will be ashes and destruction and egoism quivering and naked." (*The Release of the Soul*, P. 17). There is in such love an incipient form of madness. The mad man in *Julian and Maddalo* is one to whom love has become the fuel of hell, envenomed by hate and scorn, by remorse and despair. Prince Athanase was Shelley in love with Harriet Grove. The mad man in *Julian and Maddalo* was Shelley as he looked back upon his first marriage. He is unwilling to talk of his past, but when the flood gates of his emotion are released, he talks on with a free communicativeness. But out of the ashes of the old, a new Shelley has risen.

"Most wretched men
Are cradled into poetry by wrong,
They learn in suffering what teach in song."

(*Julian and Maddalo*, 544-546.)

There is at once a negative and a positive aspect to what they learn. They learn that it is futile to seek in hate and scorn a medicine for the heart lacerated by hate and scorn. The waters of life can run clear only when there is no one to agitate them. "There is one road to peace, and that is truth". This is the positive side. The truth of a thing is its ultimate nature and the truth of love is, in the words of *The Symposium*, that good shall be ever present to us. But the good that is now sought is what is intellectual, and therefore what can be held only in a community of intellects. The Physical body nourishes this intellectual love, just as darkness nourishes a dying flame, but it does not form part of it. Every soul that has sought its spiritual counterpart has found its intellectual rest in *The Symposium* of Plato, which is as it were a bridge thrown across the gulf of ages, and has participated of the feast of Agathon and drunk deep of the wisdom of Diotima as she instructed the instructor. Her words of wisdom linger in the memory like the recollected impression of moonlight on a rainy afternoon.

"Thou art the wine whose drunkenness is all
We can desire, O love!"

The wine of love is immortality, because otherwise the good cannot be ever present to us. While the lower aspect of love is like the tumultuous waves on the bosom of a restless sea, this higher

aspect of love is like a deep tidal current that sweeps one's entire nature onward. As Shelley says in his fragment on love, "The gratification of the senses soon becomes a very small part of that profound and complicated sentiment which we call love. It is that powerful attraction towards all we conceive or fear or hope beyond ourselves when we find within our own thoughts the chasm of an insufficient void, and seek to awaken in all things that are a community with what we experience within ourselves." It is a bond that connects not only man with man, but also man with Nature, by a perception of what is excellent in all things. That is why under the influence of great love man is reborn. It reorients a man's nature, and sets him a goal towards which all the fragmentary strivings of his life get integrated. Under its influence, life assumes order out of chaos.

"Alas! What are we? clouds
Driven by the wind in warring multitudes,
Which rain into the bosom of the earth
And rise again, and in our death and birth
And through our restless life, take as from heaven
Hues which are not our own, but which are given,
And then withdrawn, and with inconstant glance
Flash from the spirit to the countenance.
There is a power, a love, a joy, a God
Which makes in mortal hearts its brief abode,
A Pythian exhalation, which inspires
Love, only love.

(Fragment of Epipsychidion).

Shelley realises that there is eternity in these fleeting moments. "Life and love are twins." The love that Shelley celebrates must be taken as an exalted kind of friendship. It is based on a disinterested love of virtue, of 'loving virtue for virtue's own loveliness.' Hence it is that it shares with friendship its beneficial effect. It is 'a dear balm and an auspicious bird of calm.' But it is also something more than friendship, for under its influence everything familiar becomes wonderful, as if the essence of the immortality of this great world has passed into it.

"It floats with rainbow pinions over the stream
Of life, which flows like a dream
Into the light of morning",

(Fragment of Epipsychidion)

and 'we become one being with the world we see.'

When we understand life as love, using the word love in this superior and unattached sense, we take life by the right handle. If all things that are fine and beautiful partake of the eternity of love, every aspect of Nature becomes a symbol of love, and love in turn becomes

“A metaphor of spring and youth and morning,
A vision like incarnate April”.

It becomes ‘an image of some bright eternity,’ ‘a veiled glory of this lampless universe,’ ‘a shadow of some golden dream.’ Just as night leads us to day, or winter to spring, so also love leads life into the light and peace of God.

Let us not say that such love comes as an influence from outside. It is, really speaking, but an expression of our inmost nature. The moon of love not only hides darkness from the earth, but it also expels darkness from itself. In *The Hymn to Intellectual Beauty*, where we have the earliest clear expression of Shelley’s idea of love, there is a recognition of this two-fold aspect of love. It is not merely the shadow of some unseen power, but is also the consecrated essence of human endeavour. That is why it gives grace and strength to life, and that is why, in the absence of love, men become wicked and perfidious, and their lives become terrible as a nightmare. The voluntary dedication of Shelley to love is based on a conscious perception of the law that animates all life, the law which he calls elsewhere the evanescent visitation of the divine, and it gives us the poetry of life which is but translating into action the noble sentiment that we feel.

II

There are, said Carlyle, heights in man as high as heaven, and depths as low as hell. This is true in a peculiar measure of men of genius.

“Genius is to madness near allied
And thin partitions do their bounds divide.”

If there were neither heights nor depths in their making they would be just ordinary men. We see it in the life of Nature also. The highest mountain in the world was at one time under the sea. It has been shot up as if by a sort of over-compensation. If the idea of love takes the central place in Shelley’s view of life, may it not be because he missed it so much as a child, and if the love that he delineates becomes sublimated and cosmic in his

poetry, may it not be because of certain psychic complexes in "Mad Shelley" of which his contemporaries were only too well aware? If there is a better side to a thing, it requires a good look at the bad. Life can be explained not only in terms of action, in terms of what we strive for, but also in terms of reaction, as what we flee from. We see entire nations react to this law. The literature of chivalry was a reaction to the taboo of sex that the church imposed, and the 'return to Nature', a reaction to 'the Industrial Revolution'. The ancient Greeks who lived in the midst of Nature and knew no sex taboo had neither the poetry of Nature nor the poetry of secular or sacred love. The Lotus is born of the slime, and into the slime of Freudian psychoanalysis we must enter if we wish to understand Shelley fully and rightly.

Laon and Cythna is a dream story. It is a familiar fact of psychology that it is in the dream life that an individual comes to reckon with his sub-conscious, and solve a problem which he represses in his waking moments. The problem of brother and sister lovers that Shelley introduces here, and which repeatedly haunts his later works with a kind of morbid persistence, as if it had a fearful fascination for him, is inexplicable in any normal way. Here he enunciates his thesis.—

"Man and woman,
Their common bondage burst, may freely borrow
From lawless love a solace for their sorrow."

(*Laon and Cythna*, V, song in stanza 4).

In Canto 11, stanza xxv, Laon says of his sister Cythna,

"Once she was dear, now she was all I had
To love in human life—this sister sweet,
This child of twelve years old."

Their love grows with the growing years.

"And warm and light I felt her clasping hand
When twined in mine. She followed where I went
With looks entreating to abide,
Too earnest and too sweet ever to be denied."

(II. xxvi.)

So great is her love for Laon that she calls him in her sleep 'sweet brother of my soul'. It is true that Shelley calls it a spiritual comradeship, but there is also something more.

"I felt the blood that burned
Within her frame mingle with mine, and fall
Around my heart like fire."

(VI. xxxiv).

It is curious to note that Shelley does not contemplate this perversion with any kind of dislike. In Canto II, xxxv, it is on other kinds of love, which minister to lust a forlorn joy, that he pours his contempt. He seems to relish depicting calmly the details of this unholy love.

"What are kisses whose fire clasps
The failing heart in languishment, or limb
Twined with limb, or the quick dying grasps
Of the life meeting, when the faint eyes swim
Through tears of a wide mist boundless and dim
In one caress?"

(VI. xxxiv).

In the next stanza Shelley describes how

"from that geen
And lone recess, where lapt in peace did lie
Our linked frames, till, from the changing sky
That night and still another day had fled".

Shelley then goes on to invent a metaphysical justification for incest.

"Such is Nature's modesty, that those
Who grow together cannot choose but love,
If faith or custom did not interpose,
Or common slavery mar what else might make
All gentlest thoughts as in the sacred grove
Which shades the springs of Aetheopian Nile
That living tree, which if the arrowy dove
Strike with her shadow, shrinks in fear awhile
But its own kindred leaves clasp while the sun-beams
smile."

Later, when Cythna becomes the mother of a child, it is in these terms that she speaks of it:—

"It was like thee, dear love, its eyes were thine,
Its brow, its lips, and so upon the earth
It laid its fingers, as now rest on mine
Thine own, beloved."

(VII. xviii.)

The explanation that Shelley offered to Thomas Moore, in his letter dated Dec. 23, 1817, complicates the situation by making it worse.

"The present edition of *Laon and Cythna* is to be suppressed, and it will be republished in about a fortnight under the title of *The Revolt of Islam*, with some alterations which consist in little else than the substitution of the words *friend* or *lover* for that of *brother* or *sister*. The truth is that the seclusion of my habits has confined me so much within the cycle of my own thoughts, that I have formed to myself a very different measure of approbation or disapprobation for actions than that which is in use among mankind, and the result of that peculiarity contrary to my intention revolts and shocks many who might be inclined to sympathise with me in my general views."

The story itself gives no clue to the sub-conscious of Shelley. The only thing we can do is to keep an eye on it as symptoms of the disease reveal themselves in other works so that we may find there the explanation that we have missed here. The next work that we shall have to refer to is *Rosalind and Helen* which might be regarded as something in the nature of a reverie, something like Charles Lamb's *Dream Children*, a possibility of what might have been, and like all such possibilities placed in imagined time. There is however this difference. Charles Lamb looks back on his past and contemplates it without much grief, for the past is far remote. But in *Rosalind and Helen* Shelley contemplates his recent past. The wound is still raw. He has to be persuaded by Mary to complete the poem, and then he refers to it as a very nothing, which is one way of a man trying to hide from himself what he does not want to remember. But the poem was published along with *Julian and Maddalo*, which represents a conversation between Shelley and Byron. The third man that figures in it, the mad man, was, we saw, the dead self of Shelley, and it is the disintegrated personality of this man that is embalmed in *Rosalind and Helen*. A lyric poet embodies himself in many ways. This is particularly true of Shelley who was in many respects like a child, always the hero of his own story, and like a child identifying himself with more than one person at the same time. The exiled Rosalind meets her sister Helen in a fearful place in Italy, a place over which hangs an ancient curse.

"For here a sister and a brother
Had solemnised a monstrous curse,
Meeting in this fair solitude :

For beneath yon very sky
 Had they resigned to one another
 Body and soul." (156-161)

Once again the incest motive. In the main story again, the child that plays with a leaf for a boat, and a feather for a sail is Shelley himself. He also identifies himself with Rosalind, the victim of a harsh and selfish husband, who was a coward to the strong, and a tyrant to the weak, but who when her husband dies finds herself worse off, left poor and fallen on evil days, and bereft of the care of her child, because she holds in secret that the Christian religion is false. The will is read.

"My friend, I tell thee, even the dead
 Have strength, their putrid shrouds within,
 To blast and torture. Those who live
 Still fear the living, but a corse
 Is merciless."

The sallow lawyer who reads the will scans her face to see how she receives it. And then we have these very significant lines :

"Well thou knowest a mother never
 Could doom her children to this ill." (482-483.)

Are we wrong in identifying Shelley with Rosalind in all her troubles, and finding here a regret for the mother love that he missed ? In the story again Rosalind wants to marry one whom she loves, and he comes after three years' absence. But at the altar when the priest is about to get them married, her father rushes in, and cries out,

"Hold, hold,
 I tell thee 'tis her brother",

and the youth falls dead on the pavement. It is afterwards that she marries that other husband with whom she walks beneath the night of life. Here again the incest motive in Shelley's poetry. We shall leave it as a loose end, and proceed further. There is Helen, her sister. She loves Lionel, a youth filled with eager enthusiasm for liberty. 'Sunlike truth flashed on his visionary youth', and he used to plead for it, 'secure as on a rock built tower.' All love him though few approve. The ministers of misrule take him away because he talked against the gods. 'A trial men called it.' He is put in jail. Under his influence even his jailors

grow mild, as if he were Socrates or Condorcet, but destined to a better fate, for he is released from jail, and he is reunited to Helen. To the last he never gives up hope. On his death bed he prophesies what poets know :—

“Fear not the tyrants shall rule for ever,
Or the priests of the bloody faith.
They are standing on the brink of a river
Like wrecks in the surge of eternity.”

At last the parted sister meets in Italy, and Helen's son marries Rosalind's daughter, and all are happy. We have recognised Shelley in Rosalind. May we not recognise in Lionel who is in many respects a counterpart of Rosalind, Shelley's friend Hogg of whom he had such a high opinion, and in Helen, his own sister, Helen Shelley? We know how much Shelley wished that his friend Hogg should marry his sister Helen. We remember the sort of estrangement that grew up between Shelley and the members of his family. Did he not write to Helen Shelley, (Dec. 16, 1811) “I need not tell you how I love you. I know all that is said of me, but do not you believe it. Perhaps you will think I'm the devil, but no, I am only your brother.” Shelley describes his *Rosalind and Helen* as a very nothing. May we not consider it as a sort of phantasia or a day dream of what might have been? If Shelley had been happy in his marriage with Harriet, and if Hogg had married his sister Helen and had a son, would he not have married Shelley's daughter Ianthe, and would not Shelley, as heir to a large estate, have settled it on his daughter and son-in-law? It is the sort of thing that happens in a dream, in the land of what might have been. In the first half of *Rosalind and Helen*, we have the all too bitter reality, whereas the happy end that was to reunite them was relegated to the land of imagination. We get a clue to this again in his unwillingness to dwell on his bitter past, and his unwillingness to complete the story. We remember that the first half of the story was written in England, and the second half was completed early in his Italian exile.

Let us approach the problem from a different side. To understand Shelley's idea of love, let us see what Shelley hated. The most vicious character in all Shelley is old Count Francesco Cenci, and Count Cenci's hatred is directed against his children. Count Cenci exults over the death of his children.

“My disobedient and rebellious sons are dead
And they will need no food or raiment more.”

The wicked old man celebrates the event by giving a feast to his friends. He lifts his cup of Greek wine and drinks it as if it were the mingled blood of his dead children, as a sacrament and pledge to the devil in hell. He does not feel himself to be a man, but a fiend come to punish the world for some unremembered deed. It is curious that he should delight in depicting the details of their death. One is cut off in a quarrel while the other dies by the fall of a building, as if the father wished that they should die in some such manner, and he be rid of them. He tramples his remaining children under his feet, and gives them ditch water to drink, and the fever stricken flesh of buffaloes to eat. He would fain be rid of them but he would follow them even beyond life, so that their souls might kneel plague spotted with a father's curse even while kneeling before the judgment throne of aweless God.

His anger against Beatrice is merely because she stands and opposes him. He has on his side the church and the state. The Holy Father of the church thinks that parental authority is a shadow of God's, and does not want to intervene. Meanwhile with his gold he buys perilous impunity from the secular arm of the state. All the opposition that he encounters is from one frail girl, Beatrice,

“Who in the gentleness of her sweet soul
Hast never trodden on a worm, or bruised
A living flower, but hast pitied it
With needless tears,”

becomes in this tragedy of hate a frail form against whom victorious wrong hurls itself.

“Father, never dream that you may overbear.
Ill must come of ill—frown not on me.”

And then there are conflicts in the mind of Beatrice. What if he were her father? The father is bound to nourish her, not trample upon her. Is not a father the image of God? And so she excuses much, doubts much, prays to God and endures all, hoping to turn his wrath by silent suffering. But it is all in vain. At times she longs for death. But other thoughts grow in her mind, as well as in the mind of her brother, though the man shapes his thoughts in words more clearly.

“No more, as once, parent and child,
But man to man, the oppressor to the oppressed

The slanderer to the slandered. Foe to foe
 He has cast Nature off, which was his shield
 And Nature casts him off, who is her shame."

(III i. 283-288).

Thoughts of parricide shape themselves in the mind of Beatrice also. 'O world! O, life! O, day! O, misery!' One of them must die to be rid of this living hell. But who? What stands between them is the sense of blood.

"O blood, which art my father's blood,
 Circling through these contaminating veins."

But how can that be helped? Beatrice asks herself:

"Am I not innocent? Is it my crime
 That one with white hair and imperious brow
 should call himself
 My father and yet should be?"

Once again the sense of blood.

"The beautiful blue heaven is flecked with blood
 The sunshine on the floor is black."

The more resolutely she fights against the misty thoughts of parricide the more clearly they rise, and she prays to God to guide her will aright. All that she desires is to be a sword in the hand of justest God, and the deed is done out of 'piety to God, brotherly love, justice and clemency.' To regard *The Cenci* as a tragedy of incest is misplaced emphasis. Shelley himself regarded it as a tragedy of unnatural hatred, of parental hatred against children. The wrongs of Beatrice merely form a part of the general wrongs of all children. Her special wrong was due to the additional fact that she was a woman. That is why when Count Cenci is dead, though the wrong done to her and its consequences remain, she becomes calm.

"Mother, what is done wisely is done well.
 Be faithful to yourself
 And fear no other witness but thy fear."

And again,

"The deed is done,
 And what may follow now regards not me.
 I am as universal as the light:

Free as the earth surrounding air, as firm
 As the world's centre, consequence, to me,
 Is as the wind which strikes the solid rock
 And shakes it not."

(IV. i. 46-52).

The air of innocence that she assumes is not a pose. It is based on a conscious sense of rectitude and a complete disregard of death.

"I was just dreaming
 That we were all in paradise. Thou knowest
 This cell seems like a kind of Paradise
 After our father's presence."

Her last words are to her mother. 'It is very well.' We have here a drama of father hatred and of mother love and protection. It is not that the other kind of love is absent from the heart of Beatrice. It is seen in her words to Orsino.

"And thus I love you still, but holily,
 Even as a sister or a spirit might,
 And so I swear a cold fidelity."

(I. 24-26)

We know that Shelley was suffering from paranoia, persecution mania, and that he thought that his father wished his death. We know also that every case of paranoia has its counterpart in megalomania, that a man is destined for high deeds, and therefore the world is interested in persecuting him. What Shelley wants in life is protection, mother love, as seen in the love of Lucretia for Beatrice and of Beatrice for her little brother Bernardo of whom she demands that he shall think well of her when she is dead and gone. May it not be that Shelley thinks of himself as the injured Beatrice and subconsciously identifies with his father the old Count Cenci? The father that oppressed him in life is subconsciously strangled in a story, and the sense of peace is got by this release of the soul in artistic creation. Shelley was a child, incapable of feeling the consequences of his action. He was of a brooding and meditative temperament—an introvert. May we not say that we have in *The Cenci*, the subconscious working of the mind of a lyric poet who did not care for the delineation of passion in living characters, somehow giving vent to an incipient 'Oedipus-complex'?

Wittles says in his *Critique of Love* (P. 198) "Neither the heroes of the great love which devours life, nor the poets who are dear to us as singers of love, ever grew up in normal families." The libido, he says further, is a transferable energy. If it were so, would not the mother love that he missed, get transferred as sister love and other forms of incest bar? Talking of *The Cenci*, Shelley writes to Medwin, (May 1, 1820) "My chief endeavour was to produce a delineation of passions which I had never participated, in chaste language according to the rules of enlightened art."

A poet's mind is like a witch's cauldron. Angels and apes peep out of it at the same time. We may even go further and say that these angels and apes are our own baser and nobler aspects reflected at us through the medium of his poetry. We have such a hell's cauldron in *Epipsychidion*. This time Shelley is dealing with a live character. If we understand him aright here, we understand him aright over the rest of his poetry. *Epipsychidion* opens with the line, 'Sweet spirit! sister of that orphan one'. The sweet spirit is the person to whom the poem is addressed. It is Emily. But who is the orphan one? It is obviously Shelley himself. But why does he call himself orphaned? It has been suggested that it may be a feeble pun on his Christian name, Percy, which in Italian means 'lost', corresponding with the French word *Perdu*. But this is a feeble explanation. The orphaned one is he who has lost his mother, and what he laments is the loss of mother love. In this poem Shelley has substituted a sister for a mother. What he wants is the mother's protection. Why should he say to her whom he loves,

"Would we two had been twins of the same mother!
I am not thine. I am part of thee"

Why else should he find in her,

"A well of sealed and secret happiness
Vanquishing dissonance and gloom. A star
Which moves not in the moving heavens, alone
A smile amid dark frowns, a gentle tone
Amid rude voices. A beloved light.
A solitude, a refuge, a delight
to soothe the roughest day
And lull fond grief asleep,
A cradle of young thoughts of wingless pleasures."
"I measure

The world of fancies, seeking one like thee,
And find—alas! mine own infirmity.”

(58-71.)

That we have a substitution here is obvious. For he says later,

“In many mortal forms I rashly sought
The shadow of that idol of my thought.”

For the time being Emilia gets to be the embodiment of the love that he missed as a child and sought all through his life. He wants to have her all to himself, so that he may be reborn under the full warmth of her smile. What he wants to find in her is

“One hope within two wills, one will beneath
Two overshadowing minds, one life, one death,
One heaven, one hell, one immortality,
And one annihilation.”

(584-587)

He wants to be one with her in life and in death.

“If day should part us night will mend division
And if sleep part us—we will meet in vision
And if life part us—we will mix in death
Death cannot part us—we must meet again.”

What he seeks in her is the eternal feminine—‘the image of some bright eternity’ ‘the shadow of some golden dream,’ and to bask in her smile as if she were one of Leonardo’s women with that mysterious smile which means so much for the child. Love leads him to the winter of the tomb where he may lie waiting to be awakened to life even as Nature awakens in early spring to flowers and fruits. It is she that comes ‘like the incarnation of light’ and calls out the spirit ‘out of the dreaming clay.’ His attraction to Emilia is ‘like the vision of some antenatal dream.’ The poet has a vision even before he sees the living Emilia and this is how he describes the vision:—

“And there I lay, within a chaste cold bed :
Alas, I then was nor alive nor dead :
For at her silver voice came death and life,
Unmindful each of their accustomed strife,
Masked like twin babes, a sister and a brother,
The wandering hopes of one abandoned mother.”

(299-304.)

That is why Shelley calls her repeatedly,

“Spouse! Sister! Angel! Pilot of the fate
Whose course has been so startless!”

(130-131)

He wants her to be his bride, but she is also to be his ‘vestal sister.’ He wants to take her away to some lone island in the Aegean, to a pleasure house built by some ancient king ‘to his sister and his spouse,’ there to live with music and with books, a simple life, ‘beautiful as a wreck of paradise.’ *Epipsychidion* easily lends itself to misunderstanding. Shelley makes it worse by writing

“I never was attached to that great sect,
Whose doctrine is, that each one should select
Out of the crowd a mistress or a friend,
And all the rest, though fair and wise, commend
To cold oblivion, though it is in the code
Of modern morals, and the beaten road
Which those poor slaves with weary footsteps tread,
Who travel to their home among the dead
By the broad highway of the world, and so
With one chained friend, perhaps a jealous foe,
The dreariest and the longest journey go.”

(149-159)

It looks as though it is an invitation to licentiousness. But nothing can be farther from the mind of Shelley. He says in *The Defence of Poetry* that obscenity is the corrupting monster of society. There is no man whose poetry is purer. Let us read further.

“True Love in this differs from gold and clay,
That to divide is not to take away.
Love is like understanding, that grows bright,
Gazing on many truths; ’tis like thy light,
Imagination! which from earth and sky,
And from the depths of human fantasy,
As from a thousand prisms and mirrors, fills
The universe with glorious beams, and kills
Error the worm with many a sun-like arrow
Of its reverberated lightning.

(160-169)

He goes on to say that mind differs from its objects in this that to divide is not to take away. It is the eternal law of life, and on this

law sages hope and live. What Shelley wants is the creative mother love and this figures in many ways.

If added evidence were needed we will find it in the preface to *Epipsychidion*. Shelley writes,

“The present poem, like the *Vita Nuova* of Dante, is sufficiently intelligible to a certain class of readers without a matter of fact history of the circumstances to which it relates; and to a certain other class it must ever remain incomprehensible from a defect of a common organ of perception for the ideas of which it treats.”

In the *Vita Nuova* we have the key to the understanding of Shelley, and in Dr. Wittles' *Critique of Love* (P. 220) we have the key to the *Vita Nuova* itself. Says Dr. Wittles,

“Beginning with the first line, the *Vita Nuova* shows that Dante's enthusiasm and peculiar behaviour towards his idol arises from the incest barrier. Inhibiting the direct sex desire, the dammed up libido created in this great man the never ending longing which drove him in the three realms of the hereafter.”

And again, “The libido is a movable energy. In Dante's case it is transferred from his late mother to Beatrice, and from Beatrice back to his own brain. Dante's brain became sexualised, so to speak, and in this state of illumination was rendered creative for all time. Libido is the creative spirit of the world—whether as living offspring, or as offspring of the brain.” (P. 223).

In either case, we have a sublimation of the mysterious serpent power that gets locked up in sex. To him who sees love with the eye of a woman, and with the eye of a man, there opens out the third eye, the eye of wisdom, and when that eye of wisdom opens the lower aspect of love gets utterly burnt up. Cosmic consciousness opens out. The mystic realises that all are brothers and sisters, and Nature herself becomes one hymnal.

“The earth and ocean seem
To sleep in one another's arms, and dream
Of waves, flowers, clouds, woods, rocks, and all that we
Read in their smiles and call reality.”

(*Epipsychidion*. 509-512.)

And again,

“The pebble paven shore
Under the quick faint kisses of the sea

Trembles and sparkles as with ecstasy—
 Possessing and possessed by all that is
 Within that calm circumference of bliss,
 And by each other, till to love and live
 Be one."

(*Epipsychidion*, 546-552).

The search for the mother is at last found in Mother Nature, and in her love the soul finds rest. She is the Mighty Mother, the Uranian Aphrodite of the soul, and in her praise it was that he wrote his *Hymn to Intellectual Beauty*, and it will be in her love that the dead Adonais will be absorbed. He will be made one with Nature and with her voice will he speak. Shelley seems to have had a faint glimpse of this even in his Prince Athanase, where we have a fragmentary description of the spiritual counterpart that Shelley was seeking even in those young days.

"How many a one, though none be near to love,
 Loves then the shade of his own soul, half seen
 In any mirror
 How many a spirit then puts on the pinions
 Of fancy, and outstrips the lagging blast,
 And his own steps—and over wide dominions
 Sweeps in his dream-drawn chariot, far and fast,
 More fleet than storms."

It is only so long as a man does not know that he is himself part of Nature that he goes on chasing the object of his love. When the soul realises that it has in itself the object of its quest, it says with the mystic, "Myself and my beloved are one." *Stirb und werde*. We die to be. This is not death but self-realization or self-fulfilment. And though the poet uses words in the old language of love, the words have but a faint shadow of the meaning that he imparts to them. His mood is one that language faints beneath. Edward Carpenter truly says in *The Psychology of the poet Shelley*, (P. 51) "In his love nature, the very kernel of his life, he is pushing in a new way forward to a conception of the world far more intimate and important than any at present generally attained to." Carpenter goes on to say that in this respect Shelley's vision of life approximates to the vision of the founders of great religions—Buddah or Christ.

The reason that Carpenter gives for Shelley attaining this cosmic vision in life is that we have in him a being 'having

the feminine insight and imagination to perceive evil and the manly strength and courage to oppose, and finally annihilate it.' We find in him a blend of the masculine and the feminine, of action and meditation, of logic and intuition. In the characters that he has drawn he identifies himself not only with Alastor and Prince Athanase, but also with Ianthe, the pure soul that gets a cosmic vision, with Rosalind, and with Beatrice. May we not also add that it was because of this double nature of his, that he was able to get out of the psychological complex that tormented him through life, and be in the end the better for the struggle. "The best knower of the human soul is he who has lived through passions himself." (Adler, *Understanding Human Nature*, P. 13) Shelley is the better for his psychological complex. In fact the complex was essential to his liberation, for it was only in this way that he can understand love as a woman understands it.

"Woman as the bond slave dwells
Of man, a slave ; and life is poisoned in its wells".

(*Revolt of Islam*, 3314-15.)

He goes on to say that when woman lives as the child of scorn, falsehood, fear and toil wear out channels on her cheek, like waves on the sea, and then man himself is the worse for it.

"Well ye know
What woman is, for none of woman born
Can choose but drain the bitter dregs of woe
Which ever from the oppressed to the oppressor flow."

'Can man be free if woman be a slave?' No, says Shelley,

"Never will peace and human nature meet
Till free and equal man and woman greet
Domestic peace."

(*Revolt of Islam*, 994-996.)

Authority without love is the bane of life. What the soul demands is freedom to love, freedom to follow the line of growth by perceiving what is noble in life, and willingly take it as the law of life. Talking of his poetry, Shelley says,

"In recommending a great and important change in the spirit which animates the social institutions of mankind, I have avoided all flattery of those violent and malignant passions of our nature. There is no quarter given to revenge, or envy, or prejudice. Love

is celebrated everywhere as the sole law which should govern the moral world."

What Shelley wants is the freedom to love. It is 'the involuntary affection of our nature. Love withers under constraint. Its very essence is liberty. What Shelley wants to do away with is the stiff stays and artificial finery in which morality is dressed up, so that with greater freedom, family life as well as social life may become purer. It is unjust to Shelley to quote stray passages at him. The fact is that freedom will cure the evils that rise in the absence of it. Men cannot be false to one another if they are not false to their own higher selves. 'To the pure all things are pure.' Shelley is opposed not merely to licentiousness, but also to all kinds of repression, which he considers to be a greater foe of natural temperance than even unintellectual sensuality.

Thus in Shelley the quest for love, both as a man knows it and as a woman knows it, gets blended with the quest for freedom, once again from the man's point of view, as well as from the woman's point of view. He who has been a rebel all through his life and has dared all for freedom knows the value of it. But he who has missed love in life knows also the value of what he has lost. Shelley knows that love is the law of life, and he gets to know it by following the law of freedom which becomes an element in the ideal life, even at times a negative element, but somehow an integral nature of our life.

We now realise that the moods of solitude, of lower impulses, of fierce likes and dislikes, were like the casting off of so many veils, in a process of self-realization. It is obvious that the emotional life of a living being can not be such a smooth process as we have traced it to be. The poet's mind is rather like the cauldron of the earth, throwing ashes and sparks, and subject to violent upheavals in a process of settling down. In the letters of Shelley, we see the travail of the soul in his gush, in his strange detachment, and his violent dislikes. They represent the process of his love detaching itself from human objects and seeking the eternal. Thus he writes to Elizabeth Hitchner, "I love you more than my relation, I profess you are the sister of my soul, and I think the component parts of that soul must undergo complete dissolution before its sympathies can perish." But this Elizabeth Hitchner, becomes with equal vehemence, 'the Brown Demon' and Shelley writes of her to Hogg,

"She is an artful, superficial, ugly, hermaphroditical beast of a woman, and my astonishment at my fatuity, inconsistency and

bad taste were never so great as after living four months with her as an inmate."

In a letter to Fanny Imlay, Shelley describes himself as 'one of the most inoffensive of my species, I live on vegetable food, and never bit since I was born.' But there are times when he bites most viciously.

We know on what friendly terms Shelley was with the Gisbornes, and we remember with pleasure that fine poetical epistle of his, the *Letter to Maria Gisborne*. And yet, he writes to Jane Clairmont, (Oct. 29, 1820) "The Gisbornes are people totally without faith. I think they are altogether the most filthy and odious animals with which I ever came in contact. They do not visit Mary as they promised, and indeed if they did I should not stay in the house to receive them."

But he does not give them up. It is to them that he writes about Emilia—the Emily of his *Epipsychidion*. Shelley writes to John Gisborne, (18 June, 1822.)

"The *Epipsychidion* I cannot look at. The person whom it celebrates was a cloud instead of a Juno, and poor Ixion starts from the centaur that was the offspring of his own embrace. It is an idealised history of my life and feelings. I think one is always in love with something or other. The error, and I confess it is not easy for spirits cased in flesh and blood to avoid it, consists in seeking in a mortal image the likeness of what is perhaps eternal."

These letters contain some of the vagaries of 'Mad Shelley', but do they not show to us that he is getting, through all these vagaries, out of his madness? Is he not tilting right, and shaping his life by antithesis to the past?

"Reproach not thine own soul, but know thyself,
Nor hate another's crime, nor loathe thine own.
It is the dark idolatry of self,
Which, when our thoughts and actions once are gone,
Demands that man should weep, and bleed, and groan.
O vacant expiation! Be at rest—
The past is death's, the future is thine own,
And love and joy can make the foulest breast
A paradise of flowers where peace might build her nest."
(*Revolt of Islam*, 3388-3396.)

It is like the home-coming of the prodigal son, or like Christ harrying hell before his ascent to heaven. If it is true that the good shepherd rejoices over the recovery of his one lost sheep more than he does over the ninety nine that never strayed, may we not say that we too in turn should rejoice at the way Shelley was shaping his emotional life aright, and incidentally pointing out to us the eternal verity of life, instead of endlessly finding fault with him? We need not follow him through all his wanderings to arrive at the goal that he arrives at. The wisdom that he teaches is here, founded on the travail of a soul that any one may have it for himself.

“ O love! who to the hearts of wandering men
 Art as the calm to ocean's weary waves!
 Justice, or Truth or Joy! those only can
 From slavery and religion's labyrinth caves
 Guide us, as one clear star the seaman saves.
 To feel the peace of self-contentment's lot,
 To own all sympathies, and outrage none,
 And in the inmost bowers of sense and thought
 Until life's sunny day is quite gone down,
 To sit and smile with Joy, or, not alone,
 To kiss salt tears from the worn cheek of Woe
 To live, as if to love and live were one,—
 This is not faith or law, nor those who bow
 To thrones of Heaven or Earth, such destiny may know.”

(*Revolt of Islam*, 3289-3306.)

III

The personality of a great man, says Matthew Arnold, is like a mountain by the sea shore. Neither the base that lies below the waters, nor the cloud-capped heights abide our questioning. This remark, uttered long before Freud discovered the subconscious, that seven-eighths of personality, is even more significant to-day. Our discovery of the ‘Oedipus-complex’ in the subconscious of Shelley cannot, in the very nature of it be demonstratably proved. It is merely offered as a working hypothesis that explains some aspects of the poetry of Shelley, as also some aspects of the life of the man Shelley, such as his hasty marriage with Harriet, in order to protect her, and from her father (as if old Westerbrook were in any way a substitute for Timothy Shelley, his father, and his endlessly lending money to Godwin, his spiritual father, as if to make up for his father not giving him money. Our hypothesis will also explain some aspects of the melancholy of Shelley.

Mrs. Shelley says that with love as his key, Shelley could unlock the secret of all hearts. With the same key, we have tried to unlock the heart of Shelley himself, and it is hard to say whether we have succeeded or failed. But it does not matter. Our concern is neither with the complexes of abnormal personalities, nor to ascend 'the eagle baffling heights' of mystic consciousness, but be with average humanity which would fain walk along the high-road of human experience. If love is the irrefragable law of our lives, and if every violation of it injures ourselves and others, it ought to hold good for average humanity, which consists neither of saints nor of sinners. It is from the point of view of such average humanity that we shall discuss the validity of *Shelley's Law*, from the point of view of psychology, as well as of social ethics. Hadfield says in his *Psychology and Morals*, (p. 69) "The great endeavour of our lives is to build ourselves up into a higher unity and completeness and to maintain our integrity." This unity of personality, which is a functional rather than an organic unity, can, according to him, be maintained only when we have eliminated all psychological complexes, and given to the bundle of our accepted sentiments an impulse towards the good, by stimulating the will with an adequate stimulus, a stimulus which in the long run is capable of giving happiness to the soul. Complete fulfilment is possible only in a life of complete forgetfulness, when the soul gets lost in some great love, even if it be the desire of the moth for the star, for it finds in such love not merely a great stimulus to action, but also that element of voluntary self-limitation which alone gives us the true infinite. 'One moment has bound the free' and that is the moment of love. According to Shelley, love alone is the most adequate stimulus to action. We shall see to what extent it is so by comparing it with other motives for action as reason, or the pursuit of pleasure. We shall also see if love, as understood by Shelley, is capable of adjusting itself for a thousand to-morrows by that self-correcting element, which is essential if it should help us to make endless additions to ourselves in our pursuit of perfection. A moral ideal which is like a clock that is running a few minutes slow every day and requiring to be set right from time to time by some other standard is not a satisfactory ideal.

"The great secret of morals is love." That is because under the influence of love, as Gilbert Canan says, there is born a deeper consciousness, and we gain an insight into the process of life. It is 'the release of the soul.' Bergson truly says in his *Two Sources of Morals* (p. 196) "Shaken to its depths by the current which is about to sweep it forward, the soul ceases to revolve round itself

and escapes for a moment from the law which demands that the species and the individual should condition one another. It stops as though to listen to a voice calling. Then it lets itself go straight onward." The faculty of identification that great love introduces in an individual's life is something more than a social feeling. "This is as a matter of fact a cosmic feeling, and a reflection of the connectedness of the whole cosmos which lives in us ; it is an inescapable characteristic of being a human being" (Adler, *Understanding Human Nature* (P. 61). It is as if a current has flown from man to God and from God back to man again. Such love makes for the open society of humanity. "The great secret of morals is love, or a going out of our nature, and an identification of ourselves with the beautiful which exists in thought, action or person not our own. A man to be greatly good must imagine intensely and comprehensively. He must put himself in the place of many others. The pains and pleasures of his species must be his own." (*A Defence of Poetry*.) According to Shelley, the soul that loves is, as he says in the song of the spirits in *Prometheus Unbound*, in its own element, 'as the bird within the wind, as the fish within the wave', voyaging unpent through the boundless element bearing with it the prophecy which begins and ends in itself. It is like a rainbow arch triumphing over the dark clouds of life. When a man gives his plank to an enemy and plunges aside to die, when a sage is meditating over the common destiny of humanity, kindling it to noble thoughts with his pity, eloquence and woe, when a poet creates out of the shapes that haunt the wilderness of his thought his immortal words that move the dull and cold world into sympathy with feelings and aspirations it heeded not ; in all these cases we see the working of great love. The love that Shelley celebrates is like the Hermaphrodite which the Witch of Atlas creates, a sexless thing, or rather combining the beauty of both sexes. It is like the creative love of Asia as she catches glimpses of it from the sympathetic eye of Panthea as she narrates to her the dream of human liberation. "With respect to man, his public and private happiness consists in diminishing the circumference which includes those resembling himself, until they become one with him and he with them" (*The Colesium*). It is like God's love of humanity. In such love reason plays but a minor part.

"Reason cannot know

What sense can neither feel, nor thought conceive"

James Seth says, "If reason without feeling is empty, feeling without reason is blind". (*Ethics*, P. 122). But true love cannot be blind. Gilbert Canan says,

"That which is true and therefore beautiful cannot be defined, but can be known at the price of laying aside the intellect. It fulfils its purpose when it finds a path through the mind towards its desire. What is sufficiently accepted as life is a superficial thing, a by-product, an accumulation of the waste matter thrown up by the conflict and play of the huge forces that sustain the universe." (*The Release of the Soul*, P. 62).

He says elsewhere that in the choice between love and reason we have the choice between acting and play-acting. According to Bergson again, reason is the tool of the life force, whereas love is 'an aspect of the vital impetus itself'.

If 'love creates the harmony of truth', it is because it is grounded in our own deeper nature.

"Within my heart is the lamp of love
And that is day".

The 'lamp of life' is God. That is why love gives us a divine integration of life. It contains in itself that self-corrective element that makes for permanence. It is the instrument,

"With which high spirits call
The future from its cradle, and the past
Out of its grave, and make the present last
In thoughts and joys which sleep, but cannot die
Folded within their own eternity"

(*Epipsychidion*, 520-524.)

Love is compatible neither with the aggressive character traits like ambition and vanity, nor is it compatible with base servility. It establishes a proper balance of impulses, and makes the individual live in harmony with society. It is compatible only with the 'mood of giving, of serving, of helping, which brings with itself a certain compensation and psychic harmony, like the gift of the gods which takes root in him who gives it away' (Adler, P. 211) Love triumphs not merely over reason, but also over pleasure, hope, or fear, which are like the single rays of light, and not the harmony of white light. In a short poem entitled *Love, Hope, Desire and Pleasure*, Shelley compares these feelings to four ladies who wish to possess the empire of the heart. Desire first tempts the strong boy, Pleasure with her false glass.

"Pleasure lures the heart to follow—
O weak heart of little wit"

In the *Lines Written in the Bay of Lerici* the attraction of desire is compared to the illusory flame which attracts fish by night time, only to be speared to death. Pleasure leads neither to self realization nor to goodness, because it is based on the satisfaction of a single impulse.

“Between desire and fear thou wert
A wretched thing, poor heart,
Sad was his life who bore thee in his breast,
Wild bird for that weak nest.”

The heart that is torn between desire and fear goes on hoping against hope, always pushing the happy day of satisfaction into some remote future. That is the gift of the lady Hope,

“She who can borrow
For poor to-day, from rich to-morrow.”

None of these emotions taken singly is an adequate stimulus for that harmony of impulses which alone can give us the good life. The pleasure-pain motive is the least satisfactory. Life has to be drunk running. We cannot say to the passing moments, ‘Pray tarry, while I debate between pleasure and pain, between my rights and duties.’ Before we arrive at a proper adjustment of motive and results, the passing moment will be gone. And yet we are to act in the passing moments, and act in such a way that our deeds may hold good, *sub specie aeternitatis*. Moral insight alone can give us moral value, and such moral insight is provided in the love of the good which includes in it sympathy, a sense of duty, the gifts of arts and sciences. *Fais ce que dois, advienne que pourra*. Let us neither flee pain, nor pursue pleasure, but be true to our deeper nature, and make love the drawing force of life. We have in Shelley’s conception of love that Eudaemonism or ethics of personality, which integrates all our sentiments into one.

“How wonderful ; that even
The passions, prejudices, interests,
That sway the meanest being, the weak touch
That moves the finest nerve,
And in one human brain
Causes the faintest thought, becomes a link
In the great chain of Nature.”

(*Queen Mab*, II, 102-108).

Pringle-Pattison says, “Reality is one, and after all, the human mind is also one and not a bundle of unconnected and conflicting

impulses" (*Idea of God*. P. 57). In Shelley's great scheme of life whatever changes may take place in life, the one thing that will remain is love. It will come to us like calm to ocean's weary waves, and teach us to find our abiding rest in justice, truth and joy. It will release us from bondage to the false guides of life, and teach us to know ourselves by owning all sympathies and outraging none.

"Life is only travelling
Love is Journey's end"

(Quoted by Oliver Lodge, *Science and Human progress*, p. 177)

It is not a static end but a creative end. As Gilbert Canan says,

"If a man loves a woman he belongs to her to the degree of his love; so too with trees and the sky and if he learns at last through many loves great and small to love the soul, then he belongs to the soul, and by it is utterly possessed. The ineffable love of which the soul is the bearer is upon condition only that this universe which it has created shall be continuously recreated in its love." (P. 45).

Earlier in his book, *The Release of the Soul*, (P. 36) he observes,

"The simplest relationship of all those established by the imagination is that between a man and his work. He becomes aware of a living vibrant relationship between himself and it when he finds that he is fashioning something new. Something that never has been thought of before, something almost bewildering in its joy giving power calls upon his whole faculty of reverence. This is the process of art which is the process of work, that without this sublimation, it is not work but a degradation of the power of man. There is no task so humble that it cannot contain this sublimation, this sudden liberation of the joy that is in man, as in all things living, and this joy is forthcoming always in proportion to the capacity of the worker and the value of the work to humanity."

Here we have the poetry of life, 'when each moment flowers nobly into the next'. In the poet's love of life, the poet redeems from decay 'the visitations of the divinity in man.' Shelley says further, "A poet participates in the eternal, the infinite, and the one: as far as relates to his conceptions, time and place and number are not," for "he not only beholds the present as it is, but he beholds the future in the present".

When Shelley goes on to say further that poetry is the happiest moments of the best and happiest minds, he is using the word poet in a very wide sense, to include in it all those creative artists who are animated by the law of love and by those social sympathies that determine us to action, giving us as the result of their labours, "Virtue in sentiment, beauty in art and truth in reasoning." He says further in *The Defence of Poetry* that to be a poet is to apprehend the true and the beautiful, in a word, the good. He also says, 'Language, colour, form and religious and civil habits of action are all the instruments and materials of poetry'. According to him not merely are Dante and Milton great poets, but also Jesus Christ, Plato, and the law givers of Rome: in fact all those who create order and beauty in an evil time and make life approximate to the divine. The true poet is the heirophant of the world's glory, as the divine influence sweeps through him in its evanescent visitation, and makes him the lawgiver of the world, whether he is acknowledged as such, or left unheeded. He recreates the world out of his love of life, and in his works 'the world as from a resurrection balances itself on the golden wings of knowledge and of hope, and resumes its yet unwearied flight into the heaven of time.' The love that is born of the poet's soul, Intellectual Beauty, binds us to God, to our fellow men and to the earth in one grand harmony, and in that harmony each age will find new significance and a new source of joy. Life is the momentum of the human spirit, love, the momentum of God.

MAṆḌANA AND SUREŚVARA

By

S. S. SURYANARAYANA SASTRI

Though the name of Maṇḍanamiśra has long been familiar to students of Advaita, being referred to as it is by Advaitins generally with respect whether for agreement or disagreement, his definite Advaita work, the *Brahmasiddhi*, has only been recently made available through an edition brought out by the Government of Madras. Even the history of this edition reveals some fatality dogging Maṇḍana's reputation as an Advaitin. The manuscript was discovered in 1920 and the edition commenced in 1922 ; but it took sixteen long years for the book to reach the hands of scholars eagerly awaiting it, though the text is only 159 pages, and the Commentary about twice that size. The appearance of the book itself should serve to dispel many of the ancient superstitions about Maṇḍana and his identity with a Mīmāṃsaka who was vanquished by Śaṅkara and converted to Advaita under the name Sureśvara. The editor has contributed a learned and lengthy introduction which leaves no doubt on these points. But the malignant fate pursuing Maṇḍana's reputation delayed the publication of this Introduction till such time as the editor's successor-in-office could insert an ingenious Foreword, entering a defence of tradition and a *caveat* against research, generally confusing the issues and adroitly avoiding discussion of any of the weighty points raised in the Introduction. It is very doubtful if such an unlucky reputation can be or deserves to be saved. But in the interests of much-maligned research, an examination of the Foreword seems necessary.

That there was an Advaitin of repute named Sureśvarācārya is beyond dispute. Whether he really was so unfortunate that his own wife gave judgment against him we do not know, except from tradition, which we are not interested to dispute. What does interest us is the identity of this person with Maṇḍanamiśra, the author of the *Brahmasiddhi*. That Sureśvara, in his gr̥hastha āśrama, bore the name Maṇḍana is not wholly improbable, though the multiplicity of names¹ sought to be ascribed to him, while in that order of life, may make one hesitate before adding another

1. E.g. Viśvarūpa, Bhavabhūti, Umbeka.

to the list. Our contention is that between the Advaita of the *Brahmasiddhi* and that of the Advaita works ascribed to Sureśvara there are such significant differences as to bar the identification of the two authors.

The writer of the Foreword tells us²: "All are agreed that Maṇḍanamīśra is at the end of a long line of pre-Śaṅkara Advaita writers who represented the orthodox Advaita school of the day. Śaṅkara gave a new orientation to the same by freeing it from the shackles of its so-called friends the *Mīmāṃsakas* and developing its purer and nobler aspect to subserve the dictum 'bliss is obtainable through knowledge alone'. If it is conceded that the views of Maṇḍana, in the works in which the author is referred to as Maṇḍana, represent his views as an Advaitin of the *pre-Śaṅkara school, which is largely an Advaita-cum-Mīmāṃsā type*, the views of Maṇḍana in the works in which the author is referred to as Sureśvara should necessarily be *slightly different* as he has had the benefit of a *thorough conversion* at the hands of his guru Śaṅkarācārya". How "slight" difference is consistent with "thorough conversion" we do not know; we shall not press this. Nor shall we ask how or why after asking us only to "concede" (without sufficient grounds) the position that Maṇḍana was an Advaitin-cum-Mīmāṃsaka, the writer facilely asserts without any further discussion "we have shown how the doctrinal differences such as they are, between Maṇḍana and Sureśvara are neither unnatural in the circumstances of the case nor wholly and fundamentally opposed to each other"³. But we are bound to ask what support the "unanimous and consistent" body of tradition gives to the view that the unregenerate Maṇḍana was an Advaitin of any kind. We are told without a shadow of justification or evidence that the *Mīmāṃsakas* claimed to be friends of Advaita, that there was an Advaita-cum-Mīmāṃsa⁴ and so on. We shall let these pass; but, in what narrative, we ask, is Sureśvara-Maṇḍana described as an Advaitin? Is it not true, on the contrary, that he is described as exclusively a karmāṭha, a hard-boiled Mīmāṃsaka? Is there any indication of a position which even though not granting the exclusive efficacy of jñāna, grants its predominance and the subservience of all else to it? Neither from Vidyāraṇya nor from

2. p. vi; italics are ours.

3. p. vii; italics are ours.

4. This is hardly an adequate description of Maṇḍana's samuccaya-vāda, which is a synthesis of one-sided thesis and equally one-sided antithesis; on this point see the remarks towards the close of this paper.

the other mass of traditional material are we presented with any such assertion. Maṇḍana's own position⁵ is quite clear. He is not of those who consider ritual to be self-sufficing; he does treat ritual as preparing the self for self-realisation (ātma-jñāna); there is not the slightest hesitation in ascribing final efficacy to jñāna alone; for, this jñāna, which is identical with the dissolution of nescience, and is not other than Brahman, is itself release. But he does not go to the other extreme and maintain that karma and jñāna are diametrically opposed and that the one has nothing to do with the other. This is the position generally ascribed to Śaṅkara; and from the citations on p. 34, Maṇḍana seems clearly to have had Śaṅkara in mind in setting out and refuting this view. The portion dealing with jīvanmukti is a particularly striking reproduction of Śaṅkara's words.⁶ It would appear from this that the author of the *Brahmasiddhi* was aware of the view which is associated with Śaṅkara, and that he disagreed therefrom, while maintaining a position which upheld neither the sole efficacy of karma nor jñāna-karma-samuccaya, except in so far as karma not only prepares the individual for jñāna but also enables him to attain it quickly.⁷ This is not the position ascribed to the orthodox Mīmāṃsaka or to Sureśvara-Maṇḍana of tradition. As for the Mīmāṃsakas who claimed to be friends of Advaita, we have yet to have proof of their existence. Not every defence of karma in however remote a form (ārād-upakāra-katā) can convert one into a Mīmāṃsaka. In any case it is strange to claim that Maṇḍana became without sufficient reason a convert to the very view which he had controverted in his own (supposedly earlier) work.

Nor is it the case that there is an extensive or effective reply to Maṇḍana's position in Sureśvara's work. An important

5. *Brahmasiddhi*, pp. 26-36.

6. tasmān nā 'vagata-brahmātma-bhāvaḥ prāg iva sāṃsārikadharmabhāk; yas tu tathā, nā 'sāv avagata-brahmātma-bhāvaḥ. (Compare Bhāṣya on I, i, 4).

7. Śaṅkara and Sureśvara admit the utility of ritual in effecting the mental purification needed for jñāna; but Maṇḍana does not stop with this; as stated in the Introduction to *Brahmasiddhi* (p. xxxiv) he admits both a contemplative and a ritualistic discipline culminating in the final realisation. In a short paper contributed to the *Bhaktakusumanjali*, MM. Ganganath Jha protests against the samsārin's abandonment of ritual, in view of its need for mental purification; this is as it should be; but the editor's note "ayam eva siddhānto maṇḍanamiśraiḥ brahmasiddhāv avalambitaḥ" fails to note what we have just said is distinctive of Maṇḍana's teaching.

part of the reference to Maṇḍana's view is the criticism of pra-saṅkhyāna (profound meditation) as essential for Brahman-realisation. The essence of Sureśvara's criticism is that jñāna should come through a pramāṇa, while prasāṅkhyāna is not a pramāṇa, being but a continued repetition of what is established by another pramāṇa. Maṇḍana is aware of this line of criticism⁸ and meets it. It may be that Sureśvara, if his work is later, is repeating an earlier line of criticism; he and his master might have been satisfied with it, either as the best that could be done or as unanswerable in their view. If, however, the critic and the criticised were the same person, one would expect a fuller reply from the critic than the repetition of a position which the criticised was aware of and had met. We see more bitterness in Sureśvara; but not more logic. If this is a specimen of the "thorough conversion" effected, Śaṅkara would seem to have been rather easy to please.

The writer of the Foreword will have it that there are only slight differences between Maṇḍana's position and Sureśvara's; and because they are slight, he concludes to the identity of the two writers. Granted that both are Advaitins (as they undoubtedly are) their differences cannot be fundamental; differences among Advaitins are confined to the channels, the goal being the same, the realisation of the unity of the self (ātmaikyāsiddhi). If these differences had to be dismissed as slight, there would be no room at all to distinguish various schools of Advaita, as Appayya has done. While not looking for absolute divergence we can only see whether the margin of difference is sufficiently wide to admit of or demand a difference of persons.

Let us look at one of the many differences set out by the learned editor. Nescience, according to Maṇḍana, is located in the jīvas; Sureśvara locates it in Brahman. The latter is apparently more logical. If Brahman is the sole reality, everything must rest in that alone, through super-position. Nothing else can be the locus. Brahman itself is both the locus and the content of avidyā. Further, the jīva is in truth not other than Brahman; as jīva he is other, but his jīvatva is a product of nescience; how can nescience be located in its own product? So far, we have a case

8. p. 35:—

"syād etat—anuvartantām mithyāabhāsāḥ; pramāṇāt tu niścayaḥ; yathā-tattvam yathā niścayam tu vyavahāraḥ. tasmān nā 'vagatātmatattvasya kācana śubhā śubhā vā pravṛttir upapadyate."

quite consistent with the view of a single person who in his Maṇḍana-personality made a mistake and corrected it in the Sureśvara stage of his development. But we have to notice at least three factors making against this conclusion.

(1) Maṇḍana is not unaware of the illogical nature of his position. He knows that there is reciprocal dependence involved in locating nescience in the jīva, while jīvatva is the product of nescience. But, he asks, how can you expect avidyā to stand to reason? If it were not illogical, the phenomenal world which is its product would be through and through rational; and there would be no ground for treating this as non-real or looking for Brahman as its real substrate. It is the incomprehensibility of our world, its self-diremptive character, its resting on assumptions which will not bear examination, that forces us forward to transcend it in the supra-relational and the noumenal. To be inconsistent is of the very constitution of phenomenality; it is not a defect, but a merit. And the charge of illogicality, we shall see, is involved in every attempt to explain what is *ex hypothesi* inexplicable. All that the Advaitin can do is to take refuge in the beginninglessness (anāditva) of saṃsāra. There is no logical priority as between jīvatva and avidyā; as for chronological priority the question does not arise as neither has a beginning in time. It is inconceivable that a thinker with such a sustainable position abandoned it for one which in the last resort is no way better.

(2) Maṇḍana's position recommended itself at least to some Advaitins that came after Śaṅkara and Sureśvara, e.g., Vācaspati Miśra. Though Vācaspati has commented on both Maṇḍana and Śaṅkara, he does not always seek to synthesise the two or interpret the latter in the light of the former. Maṇḍana's sphoṭavāda, for instance, is criticised in the devatādhikaraṇa portion of the *Bhāmatī*, and the suggestion that the so-called jīvanmukta may be only a sādhaka, not a siddha, is uncompromisingly rejected by Vācaspati. If, while preserving such a critical attitude, Vācaspati nevertheless admits the view that avidyā is located in the jīvas, it must be because he considered it logically more tenable than the view which locates it in Brahman. This apart, it is not likely that such an eminent dialectician would have espoused a doctrine alleged to have been discarded by Maṇḍana, without a word of criticism or justification, especially when this "thorough conversion" is said to have taken place at a time so near Vācaspati's own.

(3) The justification for the position accepted by Maṇḍana and Vācaspati may be stated thus. Avidyā is destroyed by vidyā, not

in the sense of jñāna that is Brahman, but the jñāna that is in the form of a psychosis (vṛtti) in the individual. Obviously destroyer and destroyed must occupy the same locus. The antidote drunk by you will not expel the poison drunk by me. So if my jñāna is to be of service in dispelling ajñāna, the latter too should be located in me. In the face of this positive argument and the fact that illogicality is a bhūṣaṇa, not a dūṣaṇa, in the case of avidyā, there would seem to be neither excuse nor justification for abandoning it, except on one possibility. This consists in denying plurality of jīvas, and asserting that there is only one jīva, that this is identical with Brahman, that it is Brahman which deludes itself through its own avidyā, and that it is Brahman which is released through its own vidyā. Such a view has been maintained in the history of Advaita; for it naturally Brahman alone is both locus and content of avidyā; and it is a position which can be logically neither proved nor disproved, as every inconvenient fact is washed away in the torrent of the dream-analogy. There is reason to hold that Sureśvara favoured this eka-jīva-vāda. But it has no inherent superiority over the nānā-jīva-vāda, which agrees better with the phenomenal diversity of personalities. If Maṇḍana gave up his view of many jīvas, it could not have been because of the logical superiority of the other view; nor could it have been because that view was the one favoured by Śaṅkara, since there are no clear indications as to this. Indeed the opening sentences of the *Bhāṣya* may be held to point the other way; he who treated the denotations of "you" and "I" to be as radically different as darkness and light, could hardly have intended to deny the phenomenal plurality of jīvas.

And the diversity of jīvas is most consistent with a multiplicity of the diversifying avidyās. A single avidyā can be of no service, unless we can postulate a plurality of parts or śaktis for it. There would arise the question whether this plurality is natural to it or adventitious. If the former, it will always persist despite the release of some jīva or jīvas; when A attains release avidyā-śakti or part a_1 , should still persist as such, since the particularisation is *natural* to avidyā and can be resolved, if at all, only with the latter; the resolution of avidyā as a whole is impossible so long as there are other jīvas still in bondage; we are thus committed to one of two unacceptable conclusions—either that no jīva attains release before all others, a position opposed both to Scripture and reasoning, or that some jīvas attain release even without the destruction of that part or śakti of avidyā which bound them, a self-contradictory position, since release and the destruction of avidyā are coincident if not identical. To avoid this trouble we may treat the

diversification of avidyā into parts or śaktis as adventitious. What then is it due to? To the plurality of the jīvas. Thus we are in the old circle again, the diversification depending on the plurality of the jīvas and *vice versa*. Where then is the alleged logical excellence of the single avidyā view, if a plurality of jīvas be admitted? This, perhaps, may be said: granted the logical difficulty in both cases, the single avidyā view has this advantage, that it postulates a single entity with a plurality of potencies as attributes, while the other view postulates a plurality of entities (dharmins) and is so far less consonant with parsimony. There is, however, another way of looking at the question. We start with a phenomenal diversity; the plurality is given, not postulated like the unity; the unity of Brahman is a necessary postulate; short of that why should we assume another unity-in-multiplicity, in the face of logical difficulties? If we neglect for a moment the technical distinction of dharmi-kalpanā and dharma-kalpanā, do we not make a double assumption in the single avidyā theory—that avidyā is one and that somehow it accounts for the multiplicity of the jīvas? Do we not avoid one at least of these assumptions in basing ourselves on a plurality of avidyās? Who then can claim stricter observance of parsimony? The doctrine of plurality of jīvas seems to fit in best with the view of a plurality of avidyās. These avidyās (in the plural) are most naturally located in the jīvas, not in Brahman. This doctrine is not logically inferior to the other, while it seems to square better with experience and common sense. Nor is there any evidence that the eka-jīva-vāda was more acceptable to Śaṅkara. In the face of these, it is a wanton assumption to make that Maṇḍana gave up his own view on becoming Sureśvara. It is not a view either less in confirmity with Advaita or more in conformity with ritualistic hankerings; why then the alleged abandonment?

What we have discussed so far is one of the fundamental points of doctrinal difference between Maṇḍana and Sureśvara. It is a well-marked difference, one which lies at the base of the distinction between what are known as the Bhāmatī-prasthāna, and the Vivaraṇaprasthāna. Either position is an intelligible whole, while a change from one to the other is as unintelligible as it is uncalled for.

A host of minor points of divergence find mention in the learned editor's Introduction. Some of these afford a basis for controversy. Thus, Maṇḍana is a sphoṭa-vādin, while Śaṅkara and Sureśvara reject sphoṭa. But, it is argued (though with little justification), Śaṅkara himself would appear to admit sphoṭa in his

commentary on the *Māṇḍūkya*.⁹ Śaṅkara's authorship of this commentary has been questioned, though not finally disproved.¹⁰ Yet the acceptance or rejection of sphoṭa is, perhaps, hardly an adequate ground on which to distinguish between Maṇḍana and Sureśvara.

The same has to be said of the doctrine of bhāvādvaita; according to a number of Advaita writers, notably Madhusūdana and Brahmānanda, this is the view of Maṇḍana; it consists in asserting the reality of the destruction of nescience without militating against the non-duality of Brahman, since the admission of a negative reality like destruction does not conflict with the non-dualism of the positively real. Bhāvādvaita is condemned by Sureśvara and his followers; if Maṇḍana were a bhāvādvaitin, the identity of the two writers would be very difficult to sustain. But in spite of his valiant efforts to support tradition in this matter, the learned editor has not succeeded in basing bhāvādvaita on the *Brahmasiddhi*.¹¹ Indeed, what is known definitely of Maṇḍana's view, e.g., that knowledge or Brahman itself is the destruction of nescience, goes against the view which confers a negative reality on the destruction. Perhaps, the case for distinguishing Maṇḍana from Sureśvara would have gained strength if such minor points had been relegated to a subordinate position. However this may be, the major ground of distinction remains unaffected and can be answered only by an affectation to ignore it.

9. See *Brahmasiddhi*, p. vi, foot-note 2. This statement about Śaṅkara's acceptance of sphoṭa is highly questionable. In the passage cited (p. 91, Vol. V of the Memorial edition) Śaṅkara does mention the identity of the name and the nameable (abidhānā-bhidheyayor ekatva). This bears a superficial similarity to Maṇḍana's identification of the word (Akṣara) with Brahman, treating the world as a modification thereof (vāco vipariṇāmo vivarto vā). For Śaṅkara, however, the word is one not with Brahman, but with the nameable world; and the object of realising their identity is to get rid of both at one stroke and rise to Brahman; thus he says: ekatva-pratipatteś ca prayojanam abhidhānābhidheyayoḥ ekenai 'va prayatnena yugapat pravilāpayans tadvilakṣaṇam brahma pratipadyete 'ti. This is indeed a far cry from the identification of Akṣara with Brahman. It is a pity that this passage occurring on the same page as the previous citations from Śaṅkara did not get sufficient attention. It is also worth noting that in the multiplicity of Śruti passages cited by Maṇḍana in this connection, there is not a single quotation from the *Māṇḍūkya*; and in the whole of the book there is only one quotation from that upaniṣad and one from Gauḍapāda's *Kārikā*.

10. See Amarnath Ray, "The Bhāgavata Purāṇa and the Kārikās of Gauḍapāda," *Bulletin of the School of Oriental Studies, London*, VIII, i, 107-111.

11. See further an article by the present writer on "Maṇḍana and Bhāvādvaita" *Journal of Indian History*, December 1936.

At the close of the Foreword we are given a list of parallel passages from the *Brahmasiddhi* and Sureśvara's *Vārtika*. The identical list was furnished some years ago by a writer in the Journal of the Andhra Historical Research Society,¹² to establish the difference of the two authors. It is now argued that the close parallelism is consistent only with single authorship, that if there had been two authors neither would have tolerated the shameless plagiarism of the other, especially if they were contemporaries and adherents of rival schools. In the first place, we shall be making a great mistake in importing our horror of plagiarism into the literary conventions of those days. "What is good enough to be appreciated is also good enough to be appropriated" seems to have been the maxim of the time. There is no room for indignation, if we remember that few philosophical authors, if any, set store by personal reputations. It is the view that counts, not the authorship. Thus it is that we find a scholar of Appayya's eminence ascribing to the *Tattvasūddhi*, a view based on and taken from the *Brahmasiddhi*; and there are extensive passages common to Appayya's works and works like the *Paṇḍitarabhāṣya* and the *Brahmavidyābharaṇa*. Nor need the divergences between Maṇḍana and Sureśvara count for much, in this matter. Indeed, if there is any truth in the story of Sureśvara having been a hardened Mīmāṃsaka, his conversion would have been welcomed not only by Śaṅkara but by all Advaitins including Maṇḍana; and if Śaṅkara tolerated Sureśvara's jealousy for Padmapāda, Maṇḍana could easily have tolerated some pilfering from his own work, especially when by that pilfering his dialectic obtained vogue under the aegis of a publicist like Śaṅkara, an aegis which he himself never sought or obtained.

A detailed consideration of some of the passages, e.g., the first three, will also show that Maṇḍana's work provided the incomparably rich original of which we have comparatively weak echoes in Sureśvara. Thus Maṇḍana's Kārikā 5 reads "na bhedo vastuno rūpam tadabhāvaprasaṅgataḥ"; and he comments in three different ways on this line, according to different interpretations of the pronoun 'tat'. Sureśvara's *Vārtika* (v. 954) is a verse-paraphrase of the second and possibly the third of these interpretations. Similarly Maṇḍana's Kārikās 7 and 7½ are susceptible of a variety of interpretations, to meet different kinds of objections; Sureśvara's stanza 957 is based on one of these interpretations, that beginning on p. 53, with the words "yas tu manyate—arthakriyā-bhedo 'rthakriyā-vyavasthā; tato bhedādhigamaḥ" etc. It is not

12. M. Ramakrishna Kavi in Vol. V.

possible to appreciate this point as to which is the original and which the derivative except on a close study of both ; and for that there is neither opportunity here nor the need. The parallelism is admitted. But plagiarism was not to them the bugbear that it is to us ; and in the circumstances of the case, Maṇḍana might have welcomed the appreciation of his dialectic instead of resenting its appropriation.

Even the tales of Śaṅkara's triumphal progress make mention of a Maṇḍanamīśra "a life-long householder who was already a Vedāntin before he met Śrī Śaṅkarācārya".¹³ It is said of this Maṇḍana that he "does not lay any claim to literary fame". This seems an unduly cavalier way of disposing of the matter. Had Vyāsācala and the author of the *Guruvamśakāvya* no better conception of their work than chronicling every person of no importance, who met Śaṅkara ? Or are we to believe that Śaṅkara came across so few people that the mention of every one of them was thought necessary ? If this Maṇḍana was a non-entity, why mention him, especially when there was a likelihood of confusion with a more meteoric person of the same name ? The mention of the life-long householder can neither be suppressed nor explained away. The most plausible justification is that Maṇḍana was a scholar of some note and an adherent of Advaita (as otherwise there should have been a disputation). Possibly, Śaṅkara met a man of as good mettle as himself and passed by saying : "Brother, we agree as to the goal ; as for the paths we may differ but shall not quarrel ; we shall part in peace". And the characterisation of this Maṇḍana as a life-long householder is not without significance in this connection ; for the author of the *Brahmasiddhi* is a believer in āśramakarma, not as an end in itself but as a very serviceable means to the end ; it is of as much service as a horse to one who would otherwise have to trudge the whole distance on foot.¹⁴ Even the plodder who rejects the horse will get there in the end ; hence there is no condemnation of saṁnyāsa, such as we might expect from the mythical Maṇḍana who flew into a fury at the sight of Śaṅkara's shaven head. We have on the contrary, an attitude of synthesis exalting neither karma nor its renunciation, but seeking a *via media*.

The same synthetic attitude is seen in Maṇḍana's view of the relation of avidyā to vidyā. The latter is a fulfilment, not a nega-

13. *Bhaktakusumañjali*, p. 3; also Foreword, pp. viii-ix.

14. *Brahmasiddhi*, p. 37.

tion of the former: vidyā-'vidye dve apy upāyo-'peya-bhāvāt saḥite.¹⁵ We should not be lulled to sleep by the lure of avidyā; but the vidyā sought, we should not forget, is the sublimation of avidyā. The neglect of this attitude is largely responsible for the nugatory and sterile character of the history of Advaita. The Mīmāṃsaka presents the thesis—the absoluteness of duty; the Śaṅkara-Sureśvara Advaitin presents the antithesis—the absoluteness of renunciation; Maṇḍana presents the synthesis—the absoluteness of the absolute realised through renunciation in duty. The synthesis is both logically and chronologically posterior to the thesis and antithesis; but the advocates of the Maṇḍana-Sureśvara identity would have us believe that the synthesis preceded the antithesis. It is not the identity of these authors, but the evaluation of their positions that is of supreme importance. And no thinking student of philosophy to-day will fail to assign to Maṇḍana the place that rightfully belongs to him as one of our earliest "philosophers," men who achieved synthesis through a synoptic vision.

15. *Brahmasiddhi*, p. 13; see also Introduction, pp. xxxi-xxxiii.

MA'BAR FROM 1323 TO 1371 A.D.

BY

DR. N. VENKATARAMANAYYA

The History of Ma'bar during the half century that succeeded the Muslim conquest falls into three well-defined periods :—

- (1) The period of the Imperial Rule (1324-1334).
- (2) The period of the Sultanate (1334-1350).
- (3) The period of the Hindu Reconquest (1350-1371).

1. THE PERIOD OF IMPERIAL RULE

The Kingdom of Madura was conquered by the Mussalmans in 1323 A.D., during the reign of Sultān Ghaiyās-ud-Dīn Tughlaq, and was incorporated with the empire of Dehli. Parākramā Pāṇḍya who was then ruling at Madura is said to have been carried away to Dehli as a prisoner. Nothing is known about the history of the country during the next decade. The *Madurai-ttala-varalāru*, of course, gives the names of the Muslim governors who ruled at Madura, and the period during which each of them bore sway. According to this work, the first two years after the conquest appear to have been a period of anarchy,—a period when the country was in 'a state of hostility without any one's gaining a clear ascendancy'. Between 1326 and 1334 A.D. two officers both named Ulāpati KHān are said to have ruled the country for 6 and 3 years respectively.¹

Ulāpati KHān I—Akṣaya to Prajōtpatti.

Ulāpati KHān II—Āngirasa to Bhava.

It is not possible to accept these names and dates as genuine ; and the attempt to identify them with Sharīf Jalāl-ud-Dīn Aḥsan Shāh and 'Alā-ud-Dīn Udaijī respectively cannot be said to be quite happy.² It is generally asserted that Sharīf Jalāl-ud-Dīn was appointed by Sultān Muḥammad as the governor of Ma'bar ; but, it is doubtful whether he was ever appointed as the governor, though Ibn Baṭūṭa asserts in one place that Sultān Muḥammad appointed him as the Governor. Barni refers to him simply as Ḥasan, the

1. *The Nayaks of Madura*, App. E. p. 373.

2. *Ibid.*, n. 3.

father of Ibrāhīm, the purse bearer.³ 'Iṣāmy sets all doubt at rest by specifying the name of the office which he held in the province. He was, at the time of his rebellion, the Kotwāl, or the Police Commissioner of the City of Madura, an office which enabled him to exercise considerable influence over the provincial government.⁴ Though no information is available about the governors of Ma'bar, contemporary evidence, both historical and epigraphical, bears ample testimony to the continuance of Muḥammad Tughlaq's rule in Ma'bar up to 1334 A.D. Ma'bar, according to Barni, was one of the provinces of the empire of Dehli in 1327 A.D., when Sulṭān Muḥammad transferred his capital to Dēvagiri; and it continued to be so until Sayyid Jalāl's rebellion in 1334 A.D. This is corroborated by the testimony of the inscriptions. At Rāngiam in the Pudukottah State there is an inscription dated 732 A.H. which refers to a certain Ādi Surattān as the ruler of the country.⁵ It is interesting to note that the *Maduraittala-varalāru* mentions Ādi Surattān as one of the two Muslim generals who conquered Madura in 1323 A.D.⁶ An attempt has been made to identify him with Sulṭān Muḥammad or Sharīf Aḥsan Shāh; but the grounds on which the identification is based are too slender to deserve consideration.⁷ Another inscription at Pannaiyūr, Tirumayyam Taluka of the same State, is definitely dated in the 9th regnal year of Muhammadi Suratān, i.e., Sulṭān Muḥammad.⁸ It follows from this that his authority was recognised in the south of the Kāvērī until 1334 A.D. Allusions to the Muslim rule in the north of the Tamil country during this period are also met with in the contemporary lithic records. An inscription from Tiruvāmāttūr in the South Arcot District dated in the 14th year of Venṛumaṅkoṇḍa Śāmbuvarāya (1335-6 A.D.) refers to the ruin of the country caused by Muhammadan invasion before that date.⁹ Another record of the time of Rājanarāyaṇa Śāmbuvarāya (1345 A.D.) states that the country in the neighbourhood of Tiruvorriyūr in the Chingleput District prior to the date of the inscription was under Muhammadan occupa-

3. ED. iii, p. 243.

4. *The Futuḥ-us-Salāṭīn*, p. 449.

دران وقت بودست نامش جلال
بکشت از سران عوان هفت هشت

بمعیریکے سیدے کوتوال
ہزد کوس از شاه دہلی گذشت

5. *Inscriptions of the Pudukkottah State: The Chronological List*, No. 1.

6. *The Nayaks of Madura*, App. E. p. 373.

7. S. K. Iyengar: *South India and Her Muhammadan Invaders*, p. 165, n. 1.

8. *Inscriptions of the Pudukkottah State: Chronological List*, No. 670.

9. 434 of 1903.

pation, and that the Turukkar took possession of the local Śiva temple with most of its belongings.¹⁰ The extreme rarity if not the total absence of Hindu inscriptions in the Tamil country that are assignable to the interval between 1324 and 1335 A.D. seems to indicate that the Hindu political life was in a state of suspended animation and that the country was passing through a period of great distress.¹¹

2. THE PERIOD OF THE SULTANATE.

Sayyid Jalāl or Jalāl-ud-Dīn Aḥsan Shāh, as he is more commonly known to the modern historians, treacherously slew the officers in charge of the Ma'bar province and declared himself as its independent Sultān in 735 A.H. (1334-35).¹² 'Iṣāmy states that Jalāl's rebellion was caused by the oppression of Muḥammad bin Tughlaq, but does not mention any specific act of oppression in Ma'bar in support of his statement.¹³ It is suggested that Sayyid Jalāl was persuaded to rebel against Sultān Muḥammad

10. 203 of 1912; M.E.R. 1913, Part II, p. 127.

11. It is generally believed that notwithstanding the establishment of Muslim government in Madura, the Pāṇdyas continued to rule over parts of the Pāṇḍyan Kingdom (See *The Pāṇḍyan Kingdom*, p. 241). Sewell goes even so far as to suggest that in 1336 A.D. 'some of the Madura people at least clung to their old Pāṇḍya rulers, though they had been governed by a Muhammadan for ten years.' (*Historical Inscriptions*, p. 186). The available epigraphical material does not warrant such conclusions. No definite statement can be hazarded in the present uncertain state of the later Pāṇḍyan chronology, based on astronomical calculations which cannot be verified. A few instances may serve to illustrate the inconclusive character of these calculations. The inscription from which Sewell drew the inference mentioned above (741 of 1919) was originally assigned by the epigraphist to Māravarman Kulaśekhara II who ascended the throne in 1314-15 A.D.; but, on examination, it is found to be an inscription of Māravarman Kulaśekhara I, as shown especially by the title *Emmaṇḍalamum-konḍa*. (I am indebted to Mr. A. S. Ramanatha Iyer, Assistant Epigraphist for having re-examined the inscription at my request). A more glaring instance is furnished by another epigraph at Tirukkalakudi in the Ramnad district (64 of 1916) dated in the 31st regnal year of a Māravarman Vira Pāṇḍya dēva. Swamikannu Pillai who calculated the astronomical details given in the inscription suggested 25 Sept. 1310 A.D. as its date (M.E.R. 1916, p. 98). The Epigraphist who was justly dissatisfied with Swamikannu Pillai's calculations owing to the incompatibility of the subject matter adopted 7 September 1358 A.D. as the correct date (M.E.R., 1916, Part II, p. 126). Sewell, who believes that 1358 A.D. is not suitable, arrives at the conclusion that the date of the record was really August 30, A.D. 1364.' (*Historical Inscriptions*, p. 194).

12. Barni, E.D. iii, p. 243.

13. *The Futuḥ-us-Salātīn*, p. 570.

by the discontented officers of the army who desired to compel their master to return to Daulatābād so that they might join their families; and that some of the regiments of the disbanded KHurāsān army recruited from Kaithāl and its neighbourhood were sent as an additional force to Ma'bar'; the Sultān did not, however, make any provision for their maintenance; and Sayyid Jalāl who was not inclined to apply to the Central Government for 'extraordinary monetary allowance', 'took the law into his own hands and asserted his independence'.¹⁴ These statements, however, are not based on evidence, as no Muslim writer alludes even remotely to the supposed intrigues of the army officers with Sayyid Jalāl. Moreover, it must be pointed out that Sayyid Jalāl was only the Kotwāl of Madura at the time of his rebellion, and that making provision for the army was not a part of his official duty.

The real cause of Sayyid Jalāl's rebellion has to be sought for in the political condition of the Deccan. The country in the immediate neighbourhood of Ma'bar seethed with rebellions and the authority of the Sultān Muḥammad was completely overthrown; and Sayyid Jalāl who was ambitious and disloyal like several of his fellow nobles saw an opportunity of acquiring power and dominion and seized it.

Sultān Muḥammad Tughlaq who came to the Deccan in 727 A.H. to suppress Bahā-ud-Dīn Garshāsp's rebellion remained there for two years,¹⁵ and returned to Hindustan on hearing of the outbreak of Kishlu KHān's rebellion in 729 A.H.¹⁶ During these two years, he was engaged in a series of wars which ultimately resulted in the expansion of his empire: he conquered the kingdom of Kampili and incorporated it with his dominions, compelled Ballāḷa III to acknowledge his suzerainty and agree to pay an annual tribute, and overthrew the doughty Nāg Nāyak, the Kōḷi chief of Kandhāna. But the moment he turned his back on the south, the people rose up in rebellion and refused to obey the imperial officers. The movement for the liberation of the Hindus from the Muslim thralldom began on the east coast of Tīlang near Rajamundry on the banks of the Gōdāvarī. The events connected with this rebellion are described in an inscription dated 1423 A.D.¹⁷

14. Maḥdi Ḥuṣain: *The Rise and Fall of Muḥammad Bin Tughlaq*, pp. 159-60.

15. Nuniz, F.E. p. 296.

16. 'Iṣāmy, *Futuḥ-us-Salāṭīn*, p. 418.

17. J.T.A. II, pp. 106-7.

“After Pratāparudra had departed, at his own desire, to the world of the Gods, the Yavanas (i.e., the Muhammadans) filled this earth by the greatness of (Sultān) Muḥammad’s power. Then Prōlaya Nāyaka, brought it out from the bowels of the Yavanas like the Primeval Boar who raised the whole earth from the waters of the ocean, and restored it to its original condition. After the demise of Prōlaya Nāyaka, Kāpaya Nāyak of Sun-like glory who was served by seventy-five Nāyakas ruled his kingdom by the command of Viśvēśvara. King Kāpa, protected the earth by the grace of Śrī Viśvēśvara, and not only restored to the Brahmans the agrahāras wrested from them by the Mussalmans but granted them several afresh. Having served Viśvēśvara in several ways, he went (to Kailāsa) to serve His feet. Then the Nāyakas, having returned to their respective capitals, began to rule their estates giving up their mutual animosities. One of the Nāyakas who thus came back to rule his estates was King Vēma of the Panṭakula, a virtuous ruler, devoted to the worship of Śiva, whose mind was purified by the story of the Mahābhārata, and whose valour, increased by the blessings of the Brahmans, vanquished his enemies”.

The evidence of this record is borne out by the inscriptions of King Vēma himself. The earliest of Vēma’s inscriptions is a copper-plate charter dated 1330 A.D., noticed by the Mackenzie Surveyors.¹⁸ As this inscription has not been yet recovered, it must be left out of consideration. The next is an epigraph dated 1332 A.D., which alludes to a grant of land made by Vēma to the temple of Śānta Narasimhadēva at Nekarikallu in the Narasaraopet taluka of the Guntur district.¹⁹ The most interesting of all Vēma’s early inscriptions is a copper plate grant dated 1335 A.D.²⁰ We learn from this grant that Vēma had by this time conquered the whole of the east coast from the Guṇḍlakammā in the South to the frontiers of Kaṭṭiṅga which he constituted into a united monarchy. The question of relationship of Vēma to Prōlaya and Kāpaya need not detain us here. These inscriptions clearly show that the entire east coast of the Telugu country passed from the hands of the Mussalmans some time before 1335 A.D.; and to this extent, they confirm the account of the Hindu reconquest related in the charter dated 1423 A.D., cited above.

18. L.R. 57, p. 131 f.

19. 340 of 1915.

20. E.I. xxi. p. 267 f.

The Hindu rebellion was not confined to the east coast ; it spread westwards into the interior, and roused the people of the south-western Telugu country into active opposition to the Muslim government. Nuniz gives a graphic account of what happened in the province of Kampili which included a large part of the western Telugu country.

“When it was known throughout the country how he (the Sultān) was out of it, those who had escaped to the mountains, with others who, against their will and through fear, had taken oaths of fealty for their towns and villages, rose against Mileque Neby (the Governor), and came to besiege him in the fortress, allowing no provisions to go in to him, nor paying him the taxes that had been forced on them”.

The helpless Mileque Neby complained to his master that none obeyed him ; ‘the land was risen against him’; and ‘every one was lord of what he pleased, and no one was on his side.’²¹

Ballāla III who repudiated his allegiance to the Sultān encouraged the rebels, and lent them support. The lead was taken by the Āravīti chief Somadēvarājā who probably lived in the neighbourhood of Nalgonḍa in the Nizam’s Dominions. He defeated Malik Muhammad (Mileque Neby ?) in a series of battles fought at Nāgulapāḍu, Mudugal, Ānegondi, Kunti, and Sara ; and captured from him in the course of a single campaign the forts of Rāichūr, Yātagiri, Kaluvakollu, Musalimaḍugu, Ganginēnikoṇḍa, Kandana-vōlu and Sātānikōṭa.²² Though Sōmadēva did not completely succeed in expelling the Mussalmans, he managed to wrest most of the country from them. Ballāla III was busy about the same time farther south. He was encamped at Tiruvaṇṇāmalai in the South Arcot district for several months in 1328 A.D.,²³ and at Aruṇa-samudra, an unidentified place in the same locality, two years later in 1331 A.D.²⁴ The most interesting record is an epigraph at Conjeevaram which refers to Ballāla’s visit to the city in 1334-5 A.D. Another epigraph engraved on the north wall of the Gōvinda-rājaswāmi temple at Tirupati dated in the 12th regnal year of Tiruvēṅgaḷanātha Yādavarāya mentions ‘*Vallāladēvar-vari*’ a tax raised for paying tribute to Ballāla III.²⁵ The information furnished

21. F.E. p. 296-7.

22. *The Sources of Vijayanagara History*, p. 82.

23. E.C. ix. Db.14; Dv.60; v. Ak. 66.

24. E.C. ix (p. 71).

25. *Tirupati Devasthanam Inscriptions*, pp. 108, 110, 138.

by these inscriptions seems to indicate that Ballāḷa succeeded in imposing his authority over the northern districts of the Tamil country some time before 1334 A.D. It was probably during this time that Ēkāṃranātha Śāmbuvarāya expelled the Muhammadans from Tonḍaimaṇḍalam and assumed the title Venṛumaṇkoṇḍān or 'he who took the earth after a conquest'.

The rebellions in Tilang, Kampili, and the northern Tamil country which have been described above resulted in the formation of an extensive belt of territory hostile to the Sultān, and it separated Ma'bar from the other parts of the Empire. Moreover, the Sultān was not in a position to suppress the rebels and restore his authority; for, in the first place, his military strength was crippled by the complete destruction of his army by the Hindus of Qarāchal.²⁶ Secondly, the Hindu cultivators of the doab between the Ganges and the Jumnā, unable to bear the oppressive taxation, rose up in rebellion and Sultān Muḥammad was engaged in concerting measures to suppress them. Taking advantage of these circumstances, Sayyid Jalāl managed to murder the Governor and other officers in charge of the province, and declared himself sovereign, assuming the title of Sharīf Jalāl-ul-Dīn Aḥsan Shāh.

The history of the Sultanate of Madura which came into existence under the circumstances described above is far from clear. Ibn Baṭūṭa who visited Madura in 1342 A.D., gives a short resumé of the events that happened in Ma'bar during the first decade of the history of the Sultanate.²⁷ According to him, Sharīf Jalāl-ud-Dīn Aḥsan Shāh, who declared his independence in 1334-5 A.D., ruled for a period of five years and was killed in 1339-40 A.D. This is confirmed by numismatic evidence, the latest date furnished by the coins for his reign being 740 A.H. (1339-40 A.D.)²⁸ Ibn Baṭūṭa does not give any information about the circumstances in which Aḥsan Shāh was killed,—whether he lost his life in battle or fell a victim to the knife of an assassin. Probably his death has to be attributed to assassination. What steps Aḥsan Shāh had taken to enforce his authority, and how he governed his new kingdom are subjects on which no information is yet available. The only fact known about him during the period of his sovereignty is that he persuaded the army sent by Sultān Muḥammad to subdue him to join him.²⁹

26. For the date of this disastrous expedition see *The Indian Culture*, V, p. 140, n. 1.

27. K. A. N. Śāstri: *Foreign Notices of South India* (unpublished).

28. J.R.A.S. 1909, p. 673.

29. Barni, ED. iii, 243.

On the death of Aḥsan Shāh, one of his nobles called 'Alā-ud-Dīn Udaijī was elevated to the throne in 1339 A.D. He ruled for more than one year. During the first year of his rule, he led an expedition against the infidels and having plundered their country returned home laden with booty ; but in the next year when he repeated the exploit he was shot down by a stray arrow from an unknown hand.³⁰ The identity of the enemy on whom Sultān Udaijī waged war is not disclosed by Ibn Baṭūṭa, the sole chronicler of the deeds of the Sultāns of Ma'bar. It was probably Ballāla III or, what is more likely, one of the Pāṇḍyan princes, who still held sway over parts of their ancestral dominion.

Udaijī was succeeded by his son-in-law, Qutb-ud-Dīn, who was assassinated by his nobles after a brief rule of forty days ; and Ghaiyāṣ-ud-Dīn Dāmghani, a quondam trooper in the service of Malik Majīr Abu Rajā, the commander of the imperial army stationed at Dēvagiri, was next raised to the throne. Sultān Ghaiyāṣ-ud-Dīn who assumed the reins of government in 741 A.H., (1340-41 A.D.,) found his kingdom involved in grave peril. Ballāla III, according to Ibn Baṭūṭa, considered it expedient to invade the Coromandel coast, and effect its conquest, as it was defended only by a small force of six thousand Mussulman soldiers. He proceeded against the town Kobban (Kaṇṇanūr-Koppam) and having inflicted a defeat upon the Muhammadans in the neighbourhood, laid siege to the fort which was one of the strongest places in Ghaiyāṣ-ud-Dīn's kingdom. The garrison held out for ten months, at the end of which, owing to the shortage of food, they had either to surrender to the enemy or to perish with hunger. Ballāla, however, came to their help by granting them a truce of a fortnight within which they were expected to communicate to their master the conditions of surrender and obtain his sanction. The messengers who were despatched by the garrison to Madura returned with reinforcements under their Sultān ; and having surprised Ballāla's camp took him prisoner. Ghaiyāṣ-ud-Dīn at first treated the royal captive with apparent consideration, promising his release on the payment of an adequate ransom ; when, however, he had extorted from Ballāla all his wealth, elephants, horses, and property, he put him to death and caused his stuffed skin to be exposed on the walls of Madura.³¹

The account of the Moorish traveller is confirmed by the evidence of contemporary inscriptions. Ballāla III who was

30. Ibn Baṭūṭa, K. A. N. Śāstri: *Foreign Notices*.

31. K. A. N. Sastri: *Foreign Notices*.

desirous of recovering the lost possessions of his family in the South, managed, as shown by me elsewhere, to secure a footing in the north-west of the Tamil country, taking advantage of the civil strife in the Pāṇḍyan kingdom.³² Notwithstanding the defeat which he sustained at the hands of the Kākatiya general, Pedda Rudra in 1316 A.D.,³³ he still clung to Tiruvaṇṇāmalai in the South Arcot district,³⁴ and was contending against the Pāṇḍyas for the possession of Kaṇṇanūr, the capital of his grandfather and uncle in the Tamil country in 1332 A.D.^{34a}

His attempt was, however, frustrated by the Pāṇḍyas; and he was compelled to withdraw from the South, by the advance of the Muhammadans from Dehli under the Tughlaq Sultāns for the conquest of the southern Hindu kingdoms. Warangal and Madura both passed into the hands of the Mussalmans in 1324 A.D., and after a heroic resistance Kampili fell some two years later. So long as Muḥammad bin Tughlaq remained in the Deccan, Ballāḷa dared not prosecute his designs against Kaṇṇanūr, which now belonged to the former having been annexed to the Empire of Dehli together with the other Pāṇḍyan possessions on the conquest of Ma'bar. However, on the departure of the Sultān to Hindustan in 1328 A.D., to quell the disorders that broke out in the Punjab and Sind, Ballāḷa gained confidence and returned, as already pointed out, to Tiruvaṇṇāmalai, where he was engaged in concerting measures for consolidating his position in the country. Though the steps which he took to gain his object are not known, he appears to have acquired some sort of ascendancy over the affairs of the South by 1338 A.D.; for, the titles 'the Sun of the South', and 'the Emperor of the South', which occur in an epigraph of his reign dated in that year clearly indicate that his authority was acknowledged in a large part of the Tamil country.³⁵ The presence of Ballāḷa and his general Dāti Ballappa Daṇḍanāyaka at Tiruvaṇṇāmalai in 1340-41 A.D., suggests that their sojourn in the city was due to some military operations which they were directing in the neighbourhood; ³⁶ and the title 'Śētumūla-jayastambha' or 'the planter of the pillar of victory at the head of the Śētu, or Rāma's Bridge (Rāmēśvaram) which Ballāḷa assumed about March 1341

32. J.O.R. xii, p. 201.

33. *Ibid.*, pp. 203-4.

34. E.C. ix. Cp. 73; xii, Ck. 4 M.A.R. 1916, p. 55.

34a. M.A.R. 1913, Para 86.

35. E.C. xi.Cd. 6.

36. E.C. ix. Bn. 31, 499, 509 of 1902.

A.D., not only strengthens this view, but definitely recalls a military expedition to Rāmēśvaram which was included in the dominions of the Sultān of Madura. Ballāla's continued residence at Tiruvaṇṇāmalai from August 1341 to September 1342 A.D., and the allusion to his death in the Turuka war at Chirachirāpaḷli (Trichinopoly) at the end of this period show that Ibn Baṭūṭa's account of Ballāla's war with Ghaiyāṣ-ud-Dīn Dāmghānī is substantially accurate.³⁷

Ballāla, the most persistent and dangerous of his enemies, having been thus destroyed, Ghaiyāṣ-ud-Dīn was now free to devote his attention to the subjugation of the Hindus who still defied his authority. At the time of the landing of Ibn Baṭūṭa on the coast of Ma'bar, he was engaged in leading an expedition against certain infidels who occupied the forest region round about Arcot.³⁸ The expedition, however, seems to have ended abortively ; for, Ghaiyāṣ-ud-Dīn returned without accomplishing his object to Madura by way of Paṭṭan, where he died in an epidemic soon after his arrival.

On the death of Ghaiyāṣ-ud-Dīn, his nephew, Nāṣir-ud-Dīn who had formerly been a domestic servant in Dehli ascended the throne in 745 A.H. (1343-44 A.D.). Judging from the few facts mentioned by Ibn Baṭūṭa about his reign, he appears to have been a person of evil disposition and violent temper. How long he continued to disgrace the throne which he was called upon to occupy, cannot be ascertained at present. As Ibn Baṭūṭa left Ma'bar immediately after Nāṣir-ud-Dīn's accession, nothing is definitely known about the history of the Sultāns of Madura subsequent to his departure.

It has been, however, suggested that, soon after the death of Ballāla III in 1342 A.D., his son, Ballāla IV took up

37. See schedule on p. 51.

38. The place cannot be definitely identified, as the data given by Ibn Baṭūṭa are vague. Defremery and Sanguinetti, the French translators of Ibn Baṭūṭa's Travels, believe that it is identical with Arcot. S. K. Iyengar, however, thinks that it is Ariyakuḍi in the Ramnad district. (*South India and Her Muhammadan Invaders*, pp. 194-5). This identification is not free from difficulties. If the country in which Heracatou was situated was on the frontier of Ballāla's dominions, as believed by S. K. Iyengar, then Heracatou cannot be identified with any village in the Ramnad district; for notwithstanding the definite assertion, supposed to be based on the inscriptions, that 'the authority of Vira Ballāla had at the time extended to the southern frontier of Pudukottah' (*ibid.*, p. 195) there is no evidence available at present to show that Ballāla's authority ever extended on the south of the Kāvērī. Taking all the facts mentioned by Ibn Baṭūṭa into consideration, it may be tentatively suggested that Arcot was probably the place referred to by him.

EC xi Cd. 6	S. 1260 Bahudhānya Mārga su. 1 Wed.	*16 Nov. 1338 A.D.	Ballāla is called 'The Sun of the South,' 'The Emperor of the South.'
EC ix Bn. 31	S. 1263 Vikrama Kārttika ba. 5, Thurs.	*10 Nov. 1340 A.D.	Ballāla was at Unṇāmalapaṭṭaṇa.
499 of 1902	S. 1262 Makara su. 4, Sunday Uttirattādi.	4 Jan. 1341 A.D.	} Ballāppa Daṇṇāyaka at Tiruvaṇṇāmalai
509 of 1902	S. 1262 Makara ba. 1, Thurs. Puram.	21 Jan. 1341 A.D.	
EC x Mr. 82	S. 1263 Vishu Chittiri Mudal	End of March 1341.	Sētumūla-jayastambha
EC ix Dv. 54	S. 1262 Vikrama Śrāvaṇa su. 9.	2nd Aug. 1341	Ballāla in the nelēvīḍu of Unṇāmalapaṭ- ṭaṇa.
EC xii Si 10	S. 1263 Vishu Kārttika, su. 7, Wed.	17 Oct. 1341	Ballāla at Unṇāmalapaṭṭaṇa.
EC ix Bn 129	S. 1264 Vishu Phālguna, su. 1, Thurs.	7 Feb. 1342	Ballāla in the nelēvīḍu of Unṇāmalapaṭ- ṭaṇa.
EC ix Bn 24	S. 1264 Chitrabhānu Chaitra, su. 13 Wed.	20 March 1342	Ballāla at Unṇāmalapaṭṭaṇa.
EC ix Dv 46	S. 1264 Chitrabhānu Jyēshṭha, ba. 5, Fri.	*25 May 1342	Ballāla at Unṇāmalapaṭṭaṇa.
EC ix Dv 21	S. 1264 Chitrabhānu, Śrāvaṇa, su. 4, Thurs.	4 July 1342	Ballāla at Virūpakshapa..
EC ix Bn 21	S. 1265 Chitrabhānu, Āśvija, su. 5, Thurs.	5 Sept. 1342	Ballāla was ruling from Unṇāmalapaṭ- ṭaṇa.
EC vi Kd 75	Chitrabhānu Āśvija, su. 8.	8 Sept. 1342	Ballāla was killed in the Turuka war at Chirachirāpalī.

the quarrel and carried on the struggle with the Sultān of Madura 'for the next two or three years'. He having perished, like his father, in the war with the Sultān in 1345 A.D., Kumāra Kampana, one of the sons of king Bukka I of Vijayanagara, led an expedition against Madura 'either during the reign of Nāṣir-ud-Dīn himself or his successor in 1347 A.D.'; and 'the rule of the Muhammadans had been put an end to, at least temporarily;' for, about 1355-56 A.D. there was 'a faint effort' at revival which was ultimately stamped out in 1375-6 by Harihara II.³⁹

This account of the last days of the Madura Sultanate deserves careful examination, as it is based on a series of assumptions which are not based on facts. The first thing that demands scrutiny is the part which Ballāḷa IV is said to have played in the Hoysaḷa war with the Sultāns of Madura. It must be stated at the outset that there is absolutely no evidence, direct or indirect, in support of the contention that after the death of his father, Ballāḷa IV engaged himself in a war with the Sultān of Madura. Nothing is known of Ballāḷa IV except that he was crowned at Dvārasamudra on Friday, ba. 5, Śrāvaṇa Śaka 1265 (1343-44 A.D.),⁴⁰ and that he was ousted from his kingdom by Harihara I of Vijayanagara three months after his coronation in the month of Kārttika of the same year.⁴¹ The statement that Ballāḷa IV died in 1345 A.D. is contradicted by 'Iṣāmy who refers to his presence at Khārepaṭṭan on the west coast when Sultān 'Alā-ud-Dīn Ḥasan Gangu of Gulburga attacked it in 1347 A.D.⁴² Therefore, the available evidence about Ballāḷa IV does not even remotely allude to his participation in the war of the Hoysaḷas and the Sultāns of Madura.

39. S. K. Iyengar: *South India and Her Muhammadan Invaders*, pp. 179-85.

40. E.C. VI, Cm. 105.

41. E.C. V, Ak. 159. The assertion that Ballāḷa IV ruled until 1346 A.D. is based on a misconception. Ec. ix. Bn. 120 which is usually cited in support of this assertion does not refer itself to the reign of Ballāḷa, but alludes to a past event which had taken place in the time of Ballāḷa-rāya.

42. *The Futuḥ-us-Salātīn* (Lond. Ms. Folio 321).

خروشاں زکھتی پٹن گذشت بلال از سپاهش چو آگاه گشت
رها کرد پٹن بہ کوہی خزید دگر روز لشکر بہ پٹن رسید

Maḥdi Ḥusain altered the first two lines slightly and made them unintelligible. The couplet as found in his text runs thus:

خروشاں زکھتی پٹن درگذشت یلان از سپاهش چو آگاه گشت

See the Agra Edition, p. 562.

Another point that has to be examined is whether the Vijayanagara conquest of Madura took place as early as 1347 A.D. Two facts are mentioned in support of this proposition.—(1) The break in the coinage of the Sultāns of Madura. The coinage of the Sultāns of Madura is continuous during the first decade of the existence of the Sultanate; but 'there is a break in the coinage for a period of about 12 years' from 745 A.H. to 757 A.H. This could not have been due to a mere accident.⁴³ (2) In an inscription of the 31st regnal year of a certain Pāṇḍyan king called Māravarman Vira Pāṇḍya, bearing a date equated with Friday, 7th September 1358 A.D., Kumāra Kampaṇa, son of Bukka I of Vijayanagara, is said to have 'destroyed the Tulukkan,' 'established stable administration throughout the country and appointed many chiefs (Nāyakanmār) for inspection and supervision'.⁴⁴ From these premisses is drawn the inference, already mentioned, that the break in the coinage was due to the subversion of the Sultanate about 1347 A.D. as a consequence of the Vijayanagara invasion under Kumāra Kampaṇa.⁴⁵

It must be pointed out that the testimony of the coins attributed to the Sultāns of Madura by the numismatists is not trustworthy in the absence of confirmatory evidence from other sources. There is no reason for believing that the Sultāns who are said to have ruled in Ma'bar subsequent to the reign of Nāṣir-ud-Dīn Dāmghān Shāh did actually rule over that country. In the first place, apart from the suppositions of the numismatists, there is little evidence to show that the Sultāns mentioned in these coins ruled over Ma'bar rather than some other part of the world. Secondly, the choice of Ma'bar as the kingdom under the sway of these Sultāns is arbitrary. Excepting the fact that the coins were discovered in South India, there seems to be no valid ground to justify this choice. One characteristic of the Muslim coinage, that is, the mention of the place of mintage, which surely indicates the area where the coins were intended for circulation, is conspicuous by its absence in the so-called coins of the Sultāns of Ma'bar. Though one of the eminent numismatists of the last century who examined these coins discovered in them features of 'Ma'bar fabric', there is nothing to distinguish them from other coins, excepting the difference of their paleography which admits of several explanations.⁴⁶

43. S. K. Iyengar: *South India and Her Muhammadan Invaders*, p. 179.

44. *Ibid.*, p. 182.

45. *Ibid.*

46. J.A.S.B. 1895. Part 1, p. 51.

Therefore, it is not possible to assert definitely that the coins dated subsequent to 745 A.H. belonged to the Sultāns of Madura. Having due regard for the available numismatic evidence, all that can be reasonably said is that the coins bearing a date later than 745 A.H. were discovered in the country, which was once under the rule of the Sultāns of Ma'bar.

The evidence of the inscription alluding to Kampaṇa's conquest of Ma'bar is not more conclusive. Its date, on which the theory of conquest in 1347 A.D. depends, is variously calculated. Sewell, for instance, assigns it to 1364 A.D.

"On this foundation," says he, "the theory has been raised that Kampaṇa turned the Mussalman Sultān out of Madura before that date in 1358 A.D.; and this theory is said also to receive support from an entry in my '*Lists of Antiquities*' published forty years ago. I think that there is good reason to suppose that the date of the record was really August 30, A.D. 1364, and that the Pāṇḍya prince mentioned was that Māravarman Vīra Pāṇḍya alias Parākrama Pāṇḍya whose rule seems to have begun in A.D. 1335."⁴⁷

The inscription must be assigned to a still later date, as it clashes with contemporary epigraphic evidence.^{47a} Moreover, there are valid grounds for believing that the Mussalmans continued to rule at Madura without a break until 1371 A.D., when they were finally overthrown by Kumāra Kampaṇa.

3. THE PERIOD OF THE HINDU RECONQUEST.

A passage in the Telugu *Jaimini-bhāratam*, a work of the late 15th century A.D., while describing the heroic deeds of Sāluva Mangu, or Mangi, one of the generals who served under Kumāra Kampaṇa, indirectly indicates the gradual expansion of the Vijayanagara empire in the South. The passage when rendered into English reads thus :

'Sāluva Mangu excelled in brave deeds. He opposed the Sultān of the South in battle, and having taken him (prisoner) handed him over to Kamparāya; he established the Śāmbuvarāya in his kingdom, and was distinguished by the title *Sāmparāyasthāpanā-*

47. *The Historical Inscriptions*, p. 194.

47a. No Vijayanagara inscription bearing an earlier date than 1371 A.D. is found in the south of the Kāvērī; and the existence of a Muslim record dated 771 A.H. at Devakottah shows that the country was still under Muslim rule. (*Pudukottah Inscriptions*, Chron. List).

cārya or the establisher of Śāmpa (Śambu)rāya; he installed the image of Śrīranganātha (in his temple) and made a gift of 60,000 *māḍas* as an *ummaḍi* to that god; he justified his claim to bear his (ancestral) title *parapakṣi-sāluva*, i.e., hawk to the hostile birds viz., enemy kings by putting to death the Sultān of Madura; and he displayed his skill in horsemanship by riding his horse blindfolded, broke the gate of the city (Madura) and brought back quickly the big trumpet which he had thrown into the fort.'⁴⁸

The passage seems to outline the various stages by which the power of Vijayanagara extended over the South :—

(i) the war upon the Sultān of the South, his defeat in battle, and capture by Sāluva Mangu;

(ii) the restoration of the Śāmbuvarāya to his throne (which presupposes his subjugation);

(iii) the installation of the image of Śrīranganātha at Śrīrangam (which implies the establishment of the Vijayanagara authority on the banks of the Kāvērī); and

(iv) the invasion of the Kingdom of Madura, the defeat and the death of the Sultān in battle, and the capture of the city.

It must be ascertained whether the facts enumerated by the author of the *Jaimini-bhāratam* are genuine and whether they occurred in the order in which he has described them. The *Madhurāvijayam*, a contemporary poem in which Gangādēvī, the Queen of Kumāra Kampaṇa describes her husband's expedition against the Sultān of Madura, states that Kumāra Kampaṇa first overthrew the authority of the Śāmbuvarāya and occupied his territory before he proceeded against the Sultān of Madura. As Gangādēvī does not allude to the restoration of the Śāmbuvarāya, and as no trace of the Śāmbuvarāya rule is disclosed by the inscriptions subsequent 1361-2 A.D., when his authority was overthrown by Kumāra Kampaṇa, the restoration of the Śāmbuvarāya alluded to in the *Jaimini-bhāratam*, if it really took place, must be assigned to an earlier period. The *Madhurāvijayam* alludes to the ruined condition of the temple of Śrīranganātha. Whether Kumāra Kampaṇa took any measures to renovate the temple and restore worship in it is not known from Gangādēvī's poem, owing to the fragmentary condition in which this work has come down to posterity. However, it is unlikely that a Hindu prince like

48. The *Jaimini-bhāratam*, I. 32. The reading కొనిపచ్చి సంపరాయనికినిచ్చె in the first line of the stanza in the printed text (see Sources, p. 29) is not supported by the Mss.

Kampana would have marched on quietly to Madura, leaving the temples of his gods in ruins on the way. Sāḷuva Mangu, according to the *Jaimini-bhāratam*, restored the worship in the temple, though the contemporary epigraphic evidence and the later Vaishṇava tradition attribute the pious deed to Gōpaṇa, another of Kumāra Kampana's lieutenants, and assert that the restoration was accomplished by him in 1371 A.D.⁴⁹ Whoever the agent that was instrumental in effecting the restoration, it is certain that it took place in the interval between the subjugation of the Śāmbuvarāya country and the fall of Madura.

Therefore, the genuineness of the last two events mentioned in the *Jaimini-bhāratam* is confirmed by the contemporary evidence; and it is not unlikely that the remaining two, viz., the defeat and the capture of the Sultān of the South and the restoration of the Śāmbuvarāya to his kingdom, should also have been based on authentic information which was within the reach of its author.

'The Sultān of the South,' whom Sāḷuva Mangu captured must have been the Sultān of Madura, as there was no other Muslim ruler, excepting him, who bore sway on any part of the peninsula to the south of Vijayanagara.⁵⁰ A close examination of the Vijayanagara inscriptions in the Tamil country belonging to a period earlier than the subjugation of the Śāmbuvarāya dominions, if available, may perhaps throw some light on the problem. A search reveals, as a matter of fact, the existence of a few records of this early period, and they seem to point to the possibility of a contact, if not actually a conflict, between Vijayanagara and Madura about 1352 A.D. For the convenience of reference these early inscriptions are brought together in the following schedule :—

Reference.	Place.	Taluk.	District.	Name of donor.	English date.
357 of 1928-29.	Tiruppālai-vanam.	Ponneri.	Chingleput.	Vīra Sāvaṇṇa Uḍaiyār.	1350 A.D.
8 of 1899.	Śendalai	Tanjore.	Tanjore.	do.	1352-3 A.D.
350 of 1927-28.	Punjai-pugaḷur	Karūr.	Trichinopoly.	do.	1352-3 A.D.
297 of 1919.	Āvūr.	Tiruvaṇṇāmalai.	North Arcot.	Kumāra Kampana Uḍaiyār.	1352-3 A.D.

49. E.I. VI, pp. 322-30.

50. The *Rāmābhyudayam* (*Sources*, p. 33) refers, as a matter of fact to the Sultān of Madura, as 'Dakṣiṇa Suratrāṇa.'

It is obvious that for some unknown reason the Vijayanagara princes, Vīra Sāvaṇṇa Uḍaiyār and his cousin Kumāra Kampaṇa, came to the southern country, far away from the seat of their respective governments, in 1352-53 A.D. More significant than this is the area, which they, especially the former, traversed in their peregrinations. Sāvaṇṇa was the Governor of Udayagiri in the northwest of the present Nellore district. He was in the neighbourhood of Ponneri in 1350 A.D. An inscription in the same locality of his uncle Bukka I dated in the same year shows that the northern fringe of the Tamil country was already incorporated with the Vijayanagara empire.⁵¹ Two years later, Sāvaṇṇa was at Śendalai in the vicinity of Tanjore. He appears to have sojourned here for a while ; for, one of his officers, Annama Nāyaka who accompanied him built a shrine for the god Vighnēśvara in the compound of the local Śiva temple.⁵² From Śendalai he moved westward along the southern bank of the Kāvērī and reached the neighbourhood of Karūr about the middle of 1352 A.D. About the same time Kumāra Kampaṇa left Mulbāgal, the seat of his government in the Kōlār district, and proceeded to Tiruvaṇṇāmalai which had previously served Ballāla III as a convenient basis of operations against the Muhammadans at Kaṇṇanūr. It is not likely that these movements were accidental. One possible explanation that can be suggested is that both the princes were simultaneously inspired with a desire to go on a pilgrimage to the southern shrines. But, with the exception perhaps of Tiruvaṇṇāmalai, the temples in all the other places of pilgrimage were in ruins. In the language of Gangādēvī, "Vyāghrapuri (Chidambaram) has become in fact the abode of the *vyāghras* or tigers. The *Vimāna* (the dome of the central shrine) of Śrīrangam is so dilapidated that now it is the hood of Ādisēsha alone that is protecting the image of Ranganātha from the falling debris. The lord of Gajāraṇya (Jambukēśvaram), who once killed an elephant to obtain its skin for his garment, has now again been reduced to the same condition, because he has been stripped of all clothing ; while the *garbha griha* (central shrine) of many another temple is crumbling."⁵³ Pilgrimage to the southern shrines, under these circumstances, was out of the question. The only proper explanation of the simultaneous movement of the two Vijayanagara princes into the interior of the Tamil country

51. 378 of 1928-29.

52. S.I.I. VI. No. 444.

53. *Madhura-vijayam*, Introduction, pp. 5-6.

appears to be that they came there to attack some enemy who was ruling in the Kāvērī delta from the northwest and the northeast. It is known from the *Madhurāvijayam* that the country extending from Chidambaram southwards was included in the kingdom of the Sultān of Madura. Sāvaṇṇa's movements in the Tanjore and Trichinopoly districts, and the construction of a temple by his officer at Śendalai would not have passed unchallenged. Moreover, his journey from Śendalai in the Tanjore district to Karūr in the Trichinopoly district along the bank of the Kāvērī must have involved him in a conflict with the Muhammadan garrison at Kaṇṇanūr which he had to pass on his way. If there had been a conflict between Sāvaṇṇa and the Muhammaḍans, Kumāra Kampaṇa who was at Tiruvaṇṇāmalai, would not have remained there idle without hastening to the assistance of his cousin.

There are, therefore, good grounds for believing that the king of Vijayanagara came into conflict with the Sultān of Madura in 1352-3 A.D., though it cannot be asserted definitely, on the basis of epigraphic evidence, that the Sultān suffered a defeat and fell into the hands of his enemies as stated in the *Jaimini-bhāratam*. Confirmatory evidence of an indirect character supporting the statement of the *Jaimini-bhāratam* comes, however, from a contemporary Muslim historian, whose account is generally ignored as it is wrongly believed to be inaccurate. Shams-i-Sirāj 'Afif, who briefly narrates the history of Ma'bar during the reign of Fīrūz Shāh Tughlaq, describes what had taken place in Ma'bar at the time of Fīrūz Shāh's accession to the imperial throne of Dehli.

"When Sultān Muḥammad bin Tughlaq Shāh," says he, 'went from this world to that world (i.e. died), and Sultān Fīrūz Shāh ascended the throne of the Empire, the farman of the Emperor was despatched to Ma'bar. The people of Ma'bar, having come to an agreement, proceeded to Daulatābād, made Qurbat Hasan Kāngu their leader, brought him to Ma'bar, and chose him (as king) to rule over them. They withdrew their heads from obedience to Sultān Fīrūz Shāh. And Qurbat Hasan Kāngu (who had settled down in Ma'bar to rule) fell into evil ways."

This is corroborated by a speech which 'Afif places in the mouth of Fīrūz Shāh himself :—

'When the Great King, the late Sultān Muḥammad Shāh bin Tughlaq Shāh * * * departed from this temporary abode to the permanent abode (i.e., died), farmans bearing our signature were despatched to you. You had shown no obedience to our orders,

went to Daulatābād, brought Qurbat Ḥasan Kāngu, and set him up in Ma'bar'.⁵⁴

It is evident that at the time of the arrival of Fīrūz Shāh's farmans in Ma'bar, that country was without a king; what is more, when the people wanted to choose a king, they had to get one from Daulatābād in the Deccan, as they could not find a proper candidate among themselves.⁵⁵ Sultān Fīrūz Shāh's coronation was celebrated in Dehli on 14th September 1351 A.D., and the farman which was probably despatched at the end of that year, if not later, must have reached Ma'bar in 1352 A.D., that is, about the time of Vīra Sāvaṇṇa Uḍaiyār's sojourn on the banks of the Kāvērī.

54. *Tārīkh-i-Fīrūz Shāhī* (Bib. Ind.), p. 261.

چون سلطان محمد شاه بن سلطان تغلق شاه * * * ازین جهان
بدان جهان پیوست و سلطان فیروز شاه در پادشاهی نشست فرمانهای
همیشه در معبر رفت - خلق معبر متفق گشت - جمیع خلایق در دولت
آباد رفت - قربت حسن کانکو را پیش کردند - و در معبر آوردند - و بر
سر خویش بیادشاهی اختیار کردند - سر از اطاعت سلطان فیروز
کشدند - و قربت کانکو (که در معبر بیادشاهی نشسته بود) جمله افعال
قبیح بصریح پیش گرفته -

چون خدا یگان مغفور مرحوم سلطان محمد شاه بن سلطان تغلق
شاه * * * از دار فدا بدار بقا رحلت فرموده فرمان طغرای ما بجانب
هما صادر شده - شما اطاعت فرمان ما ننکرده در دولت آباد رفته قربت
حسن کا نورا آورده در معبر نشانده -

S. K. Iyengar who had access only to the imperfect summary of this passage by Dowson (ED. iii, p. 339) considers that 'Afif's mention of Qurbat Ḥasan Kāngu and Daulatābād was due to his confused notion that Ma'bar and the Deccan were identical. (See *South India and Her Muhammadan Invaders*, p. 187). The passage of 'Afif given above does not warrant this belief, as he clearly states that people went from Ma'bar to Daulatābād, and brought back with them from that place Qurbat Ḥasan Kāngu. The name Kāngu need not necessarily refer to the founder of the Bahmany Dynasty, as there could have been other persons, besides Ḥasan Gangu Bahmany, who bore that name.

55. The selection of a king from among the Mussalmans of Daulatābād was probably actuated by motives of policy. The Mussalmans of Ma'bar were assailed by the King of Vijayanagara. At the same time the Sultān of Dehli attempted to revive his claims of supremacy over them. As the Bahmany Sultān was the enemy of both their enemies, they must have desired to establish some sort of connection with him.

Now, there was, as stated above, a conflict between Vijayanagara and Madura in 1352-3 A.D., and the messengers who brought the imperial farman from Dehli in 1352 A.D., found Ma'bar without a sovereign or even a proper leader to take his place. These facts seem to point to some calamity, the nature of which is not disclosed by contemporary sources. The author of the *Jaimini-bhāratam* declares that the Sultān suffered a defeat on the battlefield and was taken prisoner by Sāḷuva Mangu, one of Kumāra Kampana's lieutenants; and his statement may be taken as true, as it gives the most satisfactory explanation of all the facts that have a bearing on the problem.

The trustworthy character of the information supplied by the author of the *Jaimini-bhāratam* being thus established, the events connected with the expansion of Vijayanagara outlined by him, may now be briefly described.

Two expeditions, one from the south-east under Vīra Sāvaṇṇa Uḍaiyār and the other under Kumāra Kampana from Mulbāgal in the south-west of the Vijayanagara kingdom, proceeded into the interior of the Tamil country, passed through the Śāmbuvārāya dominions and reached the banks of the Kāvērī in 1352-3 A.D.

The attitude of the Śāmbuvarāya towards the invaders is not known. Probably he was hostile. A few stanzas from Bhōga-nātha's *Udāharaṇamāla* cited in Sāyaṇa's *Aḷankāra-sudhānidhi* describe the latter's martial activities, and his victory over Champa-Narēndra, i.e., the Śāmbuvarāya.⁵⁶ Neither Sāyaṇa nor his master Sangama II is known to have joined Kumāra Kampana in his campaign against the Śāmbuvarāya in 1360-61 A.D. Epigraphical evidence, on the other hand, distinctly points to an early conquest, partially at least, of the Śāmbuvarāya territory by Vīra Sāvaṇṇa Uḍaiyar, a brother of Sangama II.⁵⁷ Sāyaṇa appears to have taken an active part in Vīra Sāvaṇṇa's southern expedition and won military glory to crown his scholarly achievements, which his brother celebrated in fluent Sanskrit verse. The Śāmbuvarāya

56. *The Sources*, pp. 48-50. Garuḍanagara mentioned in the mutilated verse where Sāyaṇa won a victory must be Garuḍagiri (i.e. Tiruvahīndrapuram) on the Ghadilam in the South Arcot district.

57. 378 of 1928-9	Suruttapalli,	Ponneri,	Chingleput.	1350-51.
357 of 1928-9	Tiruppālaivanam,	do.	do.	1350-51.
213 of 1912-	Tiruvorriyūr,	Saidapet,	do.	1354-55.
240 of 1912-	do.	do.	do.	1356-57.
369 of 1928-9	Tiruppālaivanam,	Ponneri,	do.	1359.

appears to have sustained a crushing defeat and lost his power completely.⁵⁸

It must have been after the conquest of the Śāmbuvarāya territory that Vira Sāvaṇṇa came into conflict with the Muhammadans of Madura; Kumāra Kampana, who descended on the Śāmbuvarāya territory from Mulbāgal, joined him, and the combined forces of both the princes appear to have encountered the Muhammadans under their Sultān, who came to defend his dominions, somewhere probably in the neighbourhood of Kaṇṇanūr. In the engagement that took place, the Sultān, as stated already, was defeated and was taken prisoner.

The Vijayanagara princes did not, however, establish themselves in the interior of the Tamil country after their victories over the Śāmbuvarāya and the Sultān of Madura. The inscriptions of Rājanārāyaṇa Śāmbuvarāya dated from his 14th to 23rd regnal years (1351 A.D. to 1360 A.D.) which are found all over the Chingleput, the North Arcot and the South Arcot districts clearly show that the Śāmbuvarāya continued, notwithstanding Vijayanagara victories, to rule over his old dominions, as if nothing had happened to disturb him.⁵⁹

This must have been the result of a peace as a consequence of which Rājanārāyaṇa Śāmbuvarāya was restored to his dominions; and the peace was perhaps concluded mainly through the instrumentality of Sāluva Mangu. That appears to have been the foundation of his claim that he restored the Śāmbuvarāya to his kingdom, an achievement, in virtue of which he assumed the title of *Śāmbuvarāyasthāpanācārya*.

The Śāmbuvarāya appears to have remained in undisturbed possession of his kingdom until 1360-61 A.D., when he had to face another invasion from Vijayanagara. The causes of this invasion are nowhere explained. Rājanārāyaṇa or probably his successor became restive and attempted to free himself from the yoke of Vijayanagara. Whatever might have been the causes of invasion, Bukka I commissioned his son Kumāra Kampana to overthrow the Śāmbuvarāya and rule his kingdom, making the city of

58. The *Sāluvābhyudaya* (Sources, p. 31) explicitly states that Sāluva Mangi first subjugated the Śāmbuvarāya, and then restored him to his kingdom.

59. 410 of 1912, 140 of 1923, 103 of 1932-33, 436 of 1925, 218 of 1934-35, 287 of 1910, 494 of 1926, 131 of 1934-5, 61 of 1933-4, 53 of 1933-4, 396 of 1909, 36 of 1933-34, 16 of 1932-33, 306 of 1919, 564 of 1919; Also 344 of 1909, 434 of 1925.

Kāñcī his headquarters.⁶⁰ Kampaṇa set out from Vijayanagara, with an army, passed through Mulbāgal and reached Viriñcipuram on the Pālār, which he made the basis of his operations. He entered the Śāmbuvarāya country, defeated its king in a battle, and having proceeded to his capital (Conjeevaram?), captured it. He then pursued the Śāmbuvarāya to the fort of Rājagambhīra (Paḍai-viḍu) where he had taken refuge. He invested the fort, put the Śāmbuvarāya to death, in a duel and captured it. On the death of their king, the subjects of the Śāmbuvarāya submitted to Kampaṇa, who, having made Kāñcī, according to the behests of his father, his capital, began to rule the erstwhile Śāmbuvarāya country.⁶¹

The territory of the Śāmbuvarāya which embraced the northern districts of Ma'bar thus passed into the hands of the Rāya of Vijayanagara in 1362 A.D. He became the immediate neighbour of the Sultān of Ma'bar, and it was inevitable that a conflict should arise between them sooner or later, owing to the natural opposition of the creeds which they professed. The Sultān of Madura was the follower of 'the true faith' founded by the Prophet Muḥammad; and as a true believer he was obliged to eradicate false gods, and spread the gospel of Islam. The Rāya was the protector and the maintainer of the eternal Hindu Dharma; and as a scion of the Kshatriya race, it was his duty to keep on the sacrificial fires burning and provide for the worship of the gods in their numerous temples without hindrance. Nevertheless, no untoward event seems to have happened during the years that immediately followed the conquest of the Śāmbuvarāya kingdom. However, after the lapse of eight years, Kumāra Kampaṇa became once again active, and led his troops victoriously into the kingdom of the Sultān.

The affairs of Madura appear to have been in a state of confusion owing to the disagreement between the Sultān and his nobles. Qurbat Ḥasan Kāngu or Kānu, whom the Mussalmans of Ma'bar brought down from Daulatābād to rule over them, proved unworthy of the high office which he was called upon to assume. Shams-i-Sirāj 'Afīf, who seems to have made careful enquiries about the conduct of this monarch,⁶² gives a brief account of the manner in which he was accustomed to transact business:—

60. *The Madhurā-vijayam*, p. 15.

61. *The Madhurā-vijayam*, pp. 21-25.

62. *The Tārīkh-i-Firūz Shāhi*, p. 261.

راویان محقق برین مورخ ضعیف شمس سراج عفیف گفته و گوهر اخبار
بدین آثار سفته -

“ When that Qurbat Ḥasan Kāngu held court in the hall of audience, he would put on on his hands and feet and neck all the ornaments of women ; he would engage himself with beardless youths in base actions.....In short, when Qurbat Ḥasan Kāngu commenced to do such things in the city (capital) of Ma'bar, the people of Ma'bar were infinitely distressed on account of him, and were disgusted with him and his actions ”.⁶³

The discontent of the nobles with the Sultān paved the way for the Vijayanagara conquest. It gave an opportunity to Bukka I to launch an attack on the Muslim kingdom, and put an end to outlandish tyranny which was harassing the people like a nightmare. Bukka commanded Kumāra Kampaṇa to march with his army against Madura and expel the Mussalmans from the land. The latter proceeded with all his forces, defeated the Mussalmans who opposed his advance near Kaṇṇanūr, and entered the island of Śrīrangam. It was on this occasion that Gōpaṇa installed the images of Śrīrangānātha and his consorts which he brought with him from Gingee, in their renovated temple on 17th Vaigāsi of Parīdhāvi Śaka 1293. Having celebrated his victory over the Muḥammadans by the restoration of the temples, Kampaṇa advanced upon Madura. What happened during the course of this march is unfortunately not known, as all our authorities, the Hindu as well as the Muslim, lay exclusive stress on the final encounter between the Mussalmans and the Hindus outside the fort of Madura. When the Hindu army approached his capital, Quarbat Ḥasan Kāngu who did not lack in courage, unworthy of royalty as he was, placed himself at the head of his forces, came out bravely to oppose them. Then followed a fiercely contested battle, in which the Muḥammadans were defeated and put to flight. Qurbat Ḥasan did not yet abandon hopes of victory. He resolved to try final conclusions with his Hindu adversary by a personal combat, and challenged him for a duel. Kampaṇa accepted the challenge. At first they fought with bows and arrows for a long time ; but when Kampaṇa cut down the heron (Huma ?) ensign of the Sultān, they exchanged the bows for the swords ; but after a few passes, the Sultān lost ground, and Kampaṇa beheaded him with a swift stroke of his scimitar.⁶⁴

63. *Ibid* (Bib. Ind.), p. 261.

64. The *Madhurā-vijayam*, pp. 46-7. The *Rāmābhyudayam* (*The Sources*, p. 33) which agrees with the *Madhurā-vijayam* about the death of the Sultān in a personal combat, however, states that his adversary was Sāḷuva Mangu and not Kampaṇa.

The Muhammadan historian does not, however, refer to this duel. According to him, the Sultān was taken prisoner and put to death. His account is brief but clear.⁶⁵

“Bukkan, an enemy, who was on the frontiers of Ma’bar with a large army and powerful elephants, invaded Ma’bar and captured Qurbat Ḥasan Kāngu alive, and after capturing him killed him”.

Though it is not possible to decide how exactly the Sultān met with his death, it may be stated that the duel appears to have been the favourite mode adopted by Gangādēvī to dispose of her husband’s enemies. The Śāmbuvarāya is said to have also died in a duel with Kampaṇa.⁶⁶ There is probably more truth in the account of the historian than in that of the poetess.

The death of the Sultān was not, however, the final episode of the war. The Muhammadans shut themselves within the fort, and refused to surrender. How long Kampaṇa had to invest the fort before he captured it is not known. The demolition of the gate by Sālūva Mangu, alluded to in the *Jaimini-bhāratam*, is perhaps the last incident which brought the siege to a close. The fort at last fell; the Muhammadans were finally dislodged from their last stronghold, and the Hindu rule was once again established. The victory of the Vijayanagara army was celebrated as usual with the re-opening of the temples for worship.⁶⁷ The capture of Madura and the establishment of the Vijayanagara rule in Ma’bar are also mentioned by Shams-i-Sirāj ‘Afif.

“After capturing (the Sultān), he (Bukkan) killed him, and took possession of the city of Ma’bar (Madura); he destroyed throughout Ma’bar the cities in which the Mussalmans lived. Moreover, the Muslim women became captive in the hands of the Hindus; and Bukkan made the city of Ma’bar his residence.”⁶⁸

The vanquished Mussalmans of Ma’bar made a forlorn attempt to regain their lost power by appealing to Dehli for help. Sultān Firūz Shāh who was no lover of war was not inclined to consider their request favourably, and sent them back with vague promises of future help.⁶⁹

65. ‘Afif. *The Tārīkh-i-Firūz Shāhi* (Bib. Ind.), p. 262.

66. *The Madhurā-vijayam*, p. 24.

67. *The Maduraittala-varalāru* (See *The Nayaks of Madura*, App. E. p. 274).

68. *The Tārīkh-i-Firūz Shāhi* (Bib. Ind.), p. 262.

69. *Ibid.*

The Mussalmans ruled over Ma'bar for nearly half a century ; but the duration of their rule was not uniformly the same throughout that country. In the *Toṇḍaimaṇḍalam* which embraced the northern districts of Ma'bar, it appears to have lasted for about a decade. The country was conquered by the Muhammadans in 1323 A.D. The inscriptions of Ballāḷa III and Venṛumaṇkoṇḍa Śāmbuvarāya clearly show that the Hindu supremacy was re-established by 1334 A.D. Farther south, in the region around Kumbakonam 'the anarchy caused by the Muslim occupation' is said to have lasted for a period of 40 years,⁷⁰ i.e. up to 1363 A.D. ; and the country to the south of the Kāvērī remained under the Muhammadans eight years longer.⁷¹ During these 48 years, two Sultāns of Dehli, Ghaiyāṣ-ud-Dīn Tughlaq, and his son, Muḥammad bin Tughlaq ruled for 10 years until 1334 A.D. and they were followed by six independent Sultāns, who ruled the country during the remaining 38 years.

Jalāl-ud-Dīn Aḥsan Shāh	1334—1339
'Alā-ud-Dīn Udaijī	1339—1340
Qutb-ud-Dīn	1340
Ghaiyāṣ-ud-Dīn Dāmghanī	1341—1343
Nāṣir-ud-Dīn	1343—1352 ?
Qurbat Ḥasan Kāngu	1353—1371

70. 322 of 1927.

71. *The Nayaks of Madura*, App. E., p. 374.

SOME THOUGHTS ON BRITISH FOREIGN POLICY

By

E. J. BINGLE

One of the easiest ways of raising a laugh is to talk of British hypocrisy. The delight in such a description is by no means confined to this country; "perfidious Albion" is a not uncommon description of the British national character in Europe, especially in matters of foreign policy. To put in a defence is to admit the charge; *qui s'excuse, s'accuse*. What I propose to do is to seek to outline what appear to be the main historical lines of British foreign policy, in their development in the last century and a half and in their application in the present.

British foreign policy since the French Revolution may be summed up, I think, under five heads.

First, to use some phrases of Prof. Seton-Watson, the British Government and people have manifested an 'instinctive opposition to any bid for world power'. As a corollary of this, our governments have always shown a 'preference for a certain equilibrium of forces on the European continent'—the idea of a balance of power, if you will, which is said to date from the time of Wolsey. Such a preference has meant that after periods of victory, British Governments have tended to turn away from their allies, either to isolation or to friendship with their former enemies; this has happened in 1600, 1713, 1763, 1815 and 1919. Such a reversal of policy has often proved very puzzling to former allies. It has also meant that Britain has tended to intervene on the side of the weaker party or group in Europe.

Secondly, Britain has intervened in Europe not in the hope of acquiring European territory but with the aim of safeguarding the British Isles and in the interests of the security and expansion of her overseas possessions. Such a principle is amply illustrated in the Seven Years' War, the Napoleonic Wars, and the Great War. It means that historically the doctrine of isolation which is sometimes powerfully advocated today cannot be held to have been found a possible British policy.

Thirdly, as a consequence of our island position and our overseas possessions, the main line of British defence has always been

sea-power. This has meant that the control of certain sea-routes has been of overwhelming importance to Britain—the English Channel and the narrow seas, the Portuguese coast, the Mediterranean. The eastern end of the Mediterranean was the scene of eleven first-class crises during a hundred years in all of which Britain played a leading and often decisive part.

Fourthly, there has always existed in Britain the confused feeling that “Britain is of Europe, and yet not of it”, a feeling which has constantly given rise to periods of hesitation and withdrawal, followed by periods of vigorous intervention. Many Englishmen have desired to cut entirely adrift from European affairs, but when the mood has passed, they know that it is impossible.

Fifthly, British foreign policy and the British constitution have at times been closely linked together. Our critics from Napoleon to the dictators of the present have asserted that Parliamentary institutions make continuity and reliability in foreign affairs impossible. On the other hand some British statesmen have advertised Parliamentary institutions as one of our greatest exports. It has been found easier to conclude alliances with countries which possess similar representative institutions and correspondingly harder with despotically governed states. But it would be untrue to fact to say that British foreign policy has ever been determined by purely ideological or constitutional considerations.

Having put the cart before the horse, and stated conclusions before offering evidence, we may now consider British foreign policy since the French Revolution in its historical development.

The French Revolution placed the younger Pitt in a difficult position. He might have been described as a very moderate Liberal, following at a very safe distance the principles of the master, Adam Smith,—peace and free trade. He was confronted by an ideological revolution, an armed doctrine, which was speedily to develop into an aggressive nationalism under a military despotism. But he refused to be drawn into a war on doctrinal issues; it was the threat to British interests, the control of the narrow seas and the government of the Netherlands, which made Pitt intervene in 1793. Once in, he defined British aims in the same terms—peace, security, patriotism; the importance of the Mediterranean and of Sea Power were cardinal to his policy. The form which the Revolution had taken made him adopt the attitude that the Revolution must be accepted or crushed—an intelligible position in face of a Napoleon.

Pitt did not live to see victory, but his principles were carried to victory by his successors. But the greatest victory of British policy was not Waterloo but the peace. For Castlereagh achieved in 1814-15, what the peace-makers of 1919 failed to do, an unvindictive peace. The restoration of France to the frontiers of 1792 was a triumph, not merely of skilful diplomacy, but of common sense and of uncommon foresight.

The principal British agent in this achievement, Castlereagh, continued to conduct British foreign policy along the same lines for seven years. A conservative with a feeling for legitimacy (in moderation), indifferent to nationality and hostile to democracy, he was possessed by a real feeling for and knowledge of Europe as a whole. This did not however contradict his defence of essential British interests—sea-power, maritime rights and the retention of the strategic outposts of Empire. His attempt to work out the new method of diplomacy by conference—a forerunner of the League of Nations idea—was finally frustrated by Canning and the distrust of British public opinion of continental commitments in advance. Before the end of his life he was moving into a new world where a Tory British minister, recalling 1688 and the British constitution, could not deny to other states the right to similar institutions achieved if necessary by revolutionary methods; such was the outcome of his policy in regard to Spain and Greece.

The policy of Canning was a contradiction and a continuation of that of his predecessor. He deliberately set out to break up the concert of Europe on the ground that it was "a combination of governments against liberty". His hostility to Metternich and all that he stood for meant a policy of isolation tempered by spasmodic intervention. His interventions revealed a sensitiveness to British public opinion and sentiment and a strong sense of British commercial interests. The recognition of the revolted Spanish colonies in South America was due to a mixture of motives—as a counterblast to the French intervention in Spain, as a concession to British trading interests, and as a means of restoring the balance of power in Europe. Sentiment, strategy and commerce again played their part in Canning's interventions in Portugal and Greece.

The great age of British foreign policy was undoubtedly that of Palmerston; it followed a period of weakness in foreign affairs under Wellington and Aberdeen when initiative and decision passed from Britain to France and Russia. Palmerston, an odd combination of the 18th and 19th centuries, advocated liberalism and the protection of British interests with a tongue which was the

abomination of European statesmen, and his undiplomatic words were matched by actions which were as sensational as they were decisive. In a Europe which was dividing into two ideological camps, the liberals of the West and the autocracies of the East, he was the typical Victorian Englishman. Liberalism had its limits; it might be good for Spain or Portugal and Belgium (where English interests were deeply committed) but it did not reach to a suppressed Poland. His support of Turkey raises perhaps the most significant issue of 19th century British foreign policy, on which Lord Salisbury confessed at the end of the century that Britain had put its money on the wrong horse. His support for Turkey in Syria against France endangered the keystone of English policy and interest, the understanding with the liberal government of France. It was only made secure again by the tact and personal influence of his successor.

Palmerston was at his best in the handling of events of the revolutionary period of 1848, at his worst in the Crimean war. His advocacy of constitutional concession was as sound as it was unpalatable; his actions in Switzerland, Italy, Portugal, Hungary and Greece were as liberal as they were decisive. In Italy his action was confused because he realised that the real champion of Italian nationality against Austria was Louis Napoleon. He was powerful enough to make and break cabinets and defy the Queen. Yet Britain was allowed to drift into the Crimean war, and being in it, to commit crimes and follies incredible. It was one of the few wars for which one man was primarily responsible—Lord Stratford de Redcliffe. It was a war forced by British public opinion on a reluctant cabinet and an unwilling queen; the press was coming into its own with disastrous results. In the upshot Palmerston (and many with him) were to demonstrate their pathetic belief in the reformability of Turkey which the years were to prove a complete illusion. The respite which was thus afforded to Turkey made possible the rise of Christian nationalities in the Balkans under the aegis of Russia—an unpremeditated and undesired state of affairs.

The tragic failure of a debased Palmerstonian policy was to be seen under Russell, who was a genuine believer in democracy at home and nationality abroad. But his brave words (or doctrinaire lectures, as Queen Victoria thought them) were marred by inaction and misunderstanding at a time which was pregnant with far-reaching decisions. In Italy, despite Russell's enthusiasm, the cause of nationality was led by Napoleon III, and was later skilfully diverted by Bismarck in the interests of his penetrating schemes. Nationality had no attraction for Russell in Poland or east of the

Adriatic. In Denmark he failed to realise the danger of small nations gone chauvinistic; the issues were confused and misunderstood, and the only gainer was Bismarck. France was alienated, and English neutrality was the only policy while Prussia conquered Austria, then France, and united Germany on an anti-liberal national basis. Nor was the attempt of Disraeli to develop a forward foreign policy more successful; he aimed at breaking the League of the Three Emperors and thought he had succeeded, but he was grievously mistaken. Britain once again backed Turkey to Russia's advantage; the new state of Bulgaria was set up under Russian auspices, and the partition of the Balkans was a standing invitation to a general European war which came at last in 1914. The collapse of the Western liberal bloc had resulted from the Franco-Prussian war; Disraeli who was supposed to have a special insight into the Oriental mind was (apart from the Suez Canal shares deal) most successful in re-establishing an understanding with France.

The last twenty years of the 19th century were a period of isolation in British foreign policy, and as usually happens in such a situation, initiative and decision passed to other states. As a consequence, by 1900 the disastrous situation of 1914 was almost prepared. Isolation was not the policy of a man or a party; Salisbury and Gladstone, Conservatives and Liberals, were at one in this. It arose rather out of a general confusion. Domestic reforms and Ireland occupied British ministers; the understanding with France was imperilled by French imperialism; Bismarck by his skilful policy of alliances was seeking to draw Britain away from France into the orbit of Prussian policy; the fear of a Franco-Prussian war of *revanche* haunted the diplomats of Europe; and Russia (the ally of Germany) was the bogey of the British Empire in Asia. In such circumstances British policy was almost inevitably hesitant and fluctuating; Salisbury was evasive in reply to Bismarck's proposal for an alliance and was more concerned with Britain in Africa—the cession of Heligoland in exchange for Zanzibar can only possibly be understood in that light.

That the situation became clearer by the close of the century was due to factors outside British control, in particular to the personality and the policies of the new German Emperor, William II, who set himself to reverse the policy of Bismarck in several notable respects. The reinsurance treaty with Russia was not renewed, Russia turned to look for new allies and the Entente with France was slowly, if somewhat hesitatingly, developed.

German ambitions for colonial expansion received a new impetus, but the critical issue for Britain was the development of the German fleet in the Navy Bills of 1898 and 1900. How far naval development was a consequence of colonial expansion, how far it was due to the personal idiosyncracies of William II and Tirpitz is a moot point, but for Britain, whether under a liberal or a conservative ministry, it was finally divisive. Germany had the most powerful conscript army in Europe, Britain the most powerful fleet. Britain had no intention of developing any army of the type or magnitude of the German one, and for Germany to build a navy equal to the British could mean only one thing—that Germany aimed at both the hegemony of Europe and the domination of the world. The varied alarms and controversies of the early years of the 20th century may not unfairly be reduced to this simple issue.

If Europe was already divided into two armed camps by 1900, the prospects of war were not necessarily immediate. A good deal of genuine co-operation between rival powers still remained possible and culminated in the Ambassadors' Conference at the close of the first Balkan War. Each incident (and it was a great time for incidents) only made war at some future date a little more certain. The incidents however revealed how much the peace of Europe was at the mercy of extra-European colonial considerations and of the Balkan tangle. There was also a certain superficial fluidity about the official groupings; strenuous efforts were made to detach Britain from France, and Italy to the end was fluctuating in its loyalties. Nevertheless to us a generation after the event the line of march is clear enough. The Franco-British Entente was worked out by Lansdowne during 1902 to 1904; it seemed to British contemporary opinion a colonial matter, a tit for tat over Egypt and Morocco; that it ignored other international rights and relations, especially those of Germany, did not appear to worry the authors. Its European implications were clearly revealed in the Tangier incident of 1905, which served however only to strengthen the Entente; the Algeiras conference of 1906 also served the same purpose. The Anglo-Russian Convention of 1907, which seemed to its authors to be purely concerned with Asiatic questions, had similar repercussions and 'altered the focus of Europe'. Meanwhile the consultations of the British and French general staffs which Grey countenanced in 1906 and revealed to the Cabinet as a whole only in 1912 gave the Entente a more definite content. War came very near in 1908 on the Balkan issue; Grey was able to prevent this by announcing the British position of neutrality in advance. It has been argued that if a similar line had been taken

in 1914, the catastrophe might have been averted. The objection to this is that Grey's action in 1908-9 was definitely disadvantageous in its results; it caused the collapse of an ally, Russia, and the consequent triumph of Austria over the Southern Slavs was to cause fearful recriminations later. War came very near again in 1911, but on Mr. Lloyd George's Mansion House speech, Germany drew back, since (as we know now) Tirpitz' naval preparations were not ready.

During those last few years before the flood Grey sought "to bring the two groups nearer together", to use Lichnowsky's description. The Haldane mission of 1911 failed, because the price of a German alliance was recession from the Entente and complete neutrality. The naval issue towered above every other consideration, and Britain began to expand its naval construction at a furious rate, and drew nearer to France and Russia in consultations which, though not binding in form, almost inevitably compromised the issue in 1914. The Balkan War offered a common ground, since both Germany and Britain desired to restrain their allies. But the failure of the Conference of Ambassadors in London consequent on the outbreak of the second Balkan War left the initiative with Germany; Grey with his eye on India turned to Turkey but in vain. The Balkans now became the scene of that fierce competition between Austria and Russia out of which the Great War was to begin, which was to end in the collapse of both those autocracies. Co-operation was resumed by Germany and Britain in such matters as the Baghdad Railway and African colonies but the end was near—the date being partly determined by the completion of the widening of the Kiel Canal. Germany was now ready with its military and naval preparations; but it was left to Austria to determine the *casus belli* and the immediate outbreak of war. The entry of Britain into the war was determined by that interest for which Englishmen have fought in every century since the 16th—the control of the Netherlands and the narrow seas.

II

From history we turn to comment, though it is well to remember that any history of British foreign policy is by its nature an interpretation. How far do the historical lines of British foreign policy throw light on British policy since the War, and what bearing have they on the more immediate situation?

Certain new factors have entered the situation and may in the course of time alter it profoundly; their effects are still being

worked out before our eyes. One is air-power, the results of which we may well regard with the gloomiest forebodings. Another is the new version of nationality. Up to about 1870, the principle of nationality tended to the enlargement of existing states, notably in Italy and Germany. After that date the principle in its application to S.E. Europe has meant an increasing fragmentation of states on a racial basis, a tendency which culminated in the peace treaties of 1919. The development of collectivist doctrine, preached in the later 19th century, has now come home to roost in our present world. Whether it be true or not that socialism is by its nature a war economy, the most highly collectivised states are in fact the most warlike, and their collectivism is not merely the organisation of industry but the regimentation of knowledge and propaganda to a degree unknown and also technically impossible hitherto. Such a development has taken place in a world which is so unified economically and so economically sensitive, that for some countries it has seemed the only possible course to contract out of the world economy—an impossible ideal, it may well be, but one which is being pursued today both for economic and military reasons.

The basis of post-war policy for Britain as for all European states has been the peace treaties of 1919. Were they just or sound? It is perhaps not possible to answer that question directly but it is at least true to say that they were idealistic; the principle of nationality and racial self-determination was carried further than it has ever been carried before, and Europe received into its comity a large group of new national states—Poland, Finland, Esthonia, Latvia, Lithuania, Czecho-Slovakia, and the newly arranged Balkan states which included the new state of Jugoslavia. The most serious defects of the treaties were their economic clauses which can only be understood by those who remember (to their shame) the madness of 1918-19, the transfer of German colonies on the ground of German unworthiness, and the refusal of all negotiations with the German delegates. But apart from the economic question the treaties were a not impossible basis for the reconstruction of Europe on national lines.

How have the years dealt with the traditional principles of British policy? The answer may be developed in relation to the principles outlined above.

1. Since the War there have been various candidates for world hegemony, but one by one they have dropped out of the running. In Europe France at times aspired to this, or appeared to do so; the high point was probably reached in the occupation of

the Ruhr in 1923, an action from which British opinion violently dissented. Since then French ambition has been more restricted to the ideal of security; internal troubles have greatly modified French ambitions and policies. To the more imaginative minds, Russia was a possible claimant in 1920 or thereabouts, but her western ambitions were checked at Warsaw; since then famine, the five-year plans, external dangers in the Far East and in the West, and internal divisions have served to make Russia a pacific power in Europe willing in its own interests to adopt the ideal of collective security. If the United States ever aspired to dominate Europe, then the defeat of Wilson and the treaties in the Senate in 1919 and the economic collapse of 1929 were salutary checks; in any case the bulk of American opinion was and remains isolationist, which does not however mean unsympathetic. Once again the most determined aspirant to European hegemony is Germany, which now extends from the Baltic to the Brenner, a state whose political, military and economic organisation points in one direction only—war. If you ask for what end, the programme has been set forth in Hitler's *Mein Kampf*: the unification of all Germans in one Fatherland (there were 13 million of them outside Germany), expansion towards the south-east in search of land in the fertile Ukraine, and the final settlement with France. Such are the aims of a policy which has been assiduously pursued for five years as yet without war, but a policy whose every stage of progress brings war nearer. For Britain the problem is the old one: how far should any British government commit itself in advance? In some respects, by membership of the League and by the Locarno treaties, Britain is already committed, as she was committed by the 1839 Belgian treaty in 1914. Geography, institutions, history tie Britain to France more closely than any treaty; the tragedy of post-war diplomacy has been the friction of London and Paris at the most critical moments, e.g., in 1935. The new situation of Russia, its interests and pacific policies, its alliances with France and Czechoslovakia all tend to bring Russia into alignment with Britain, but the relation is as precarious and unliked as that before 1914: it might well prove as disastrous in its results. Italy still fluctuates, with a general inclination to Berlin. The two camps are formed again, on lines suspiciously like those of old; if we remember that German sea-power is no longer as dangerous as it was in 1914, German air-power is perhaps an even greater threat.

2. It remains true that Britain has no territorial ambitions in Europe; that at least distinguishes its policy from that of other powers. But does it remain true that the fate of British overseas

possessions may yet be decided in Europe? Some in Britain have answered, No, and that opinion has been echoed in some of the Dominions. But I think it is fair to say that recent events have tended to alter Dominion opinion in the direction of realising that the issues in Europe are still of world-wide reference, and the fate of Czecho-Slovakia may have decisive (and disastrous) significance for Australia, Canada and South Africa. If, as Chatham claimed, America was won in Germany, it may well be lost there also. In any case the security of the British Isles is more than ever at the mercy of events in Europe; the presence of Lord Runciman in Prague was no adventitious circumstance.

3. The importance of sea-power is still fundamental to British policy but the post-war years have set new limiting factors and conditions. Air-power and submarine warfare have already modified our conceptions of sea-power and may change its meaning altogether. The narrow seas and the Netherlands are as important as ever they were, but air-power means that the control of the English Channel is no defence of Britain against bombing squadrons with bases well outside Belgian territory. Britain has become far more vulnerable than it ever was before.

The other great interest of the strategy of sea-power has been the Mediterranean and here a new situation has arisen. Britain has taken on increased responsibilities in the Eastern Mediterranean, more especially in Palestine, which are proving an increasing source of danger.

Egypt has achieved that measure of independence, envisaged so long ago by Gladstone and so frequently postponed, but under conditions which today threaten to rob it of its content. Long range guns may deprive Gibraltar of its former strategic value, and air-power has weakened the value of Malta as a naval base. But the dominating and novel fact of Mediterranean politics is the post-war development of Italy under Mussolini, who has openly proclaimed his aim of making the Mediterranean a Roman lake. Mussolini's activities in Spain, in Libya and in Palestine have brought this aim within a measurable degree of realization. He knows well that in this policy his most dangerous opponent must inevitably be Britain; events in Abyssinia, Spain and Palestine have encouraged him to believe that he can risk offending Britain to a degree which Palmerston at any rate would have thought incredible. Compromise in this matter is not in the nature of things impossible; it is a way which Mr. Chamberlain continues to tread, but Mussolini's doctrine and practice, Machiavellian in form as in

fact, seem to set limits to the present policy of the government. The alternative policy appears to be a Peace Front among those other Mediterranean states, including France and the Balkan powers, which may set limits to Mussolini's soaring ambitions.

4. Is Britain part of Europe? Many thousands of British people must have wished devoutly that their island home was cut off from Europe during the last twenty-five years, but the conclusion is being driven home that Britain can never escape European commitments and responsibilities. Britain's insular position, 'set in the silver sea', has now been profoundly changed by the menace of air-power. The minds of British statesmen and the British public tend to move in the old grooves and British post-war policy has been a medley of the old fluctuations, hesitations and interventions. The withdrawal from the Triple Guarantee of 1919, which was to have been the basis of French security, the attitude towards the Geneva Protocol and to disarmament, and the policy towards German aggression all reveal the same hesitation; Locarno, the Saar, Abyssinia recall British intervention, which reached its latest expression in the anomalous position of Lord Runciman. When Britain has withdrawn from Europe, events have often moved decisively against British interests. Britain has been engaged in all the great wars of Europe since the 16th century, and it seems impossible now for Britain to contract out of her European responsibilities.

5. The relation of foreign policy to constitutional and ideological questions has never been more important or difficult than during the last twenty years. First Russia, then Italy, then Germany have been turned into ideological states. An ideological war is said to be raging in Spain, though the precise ideology of either side is difficult to discover. The tradition of Pitt, Castlereagh and Canning has been revived in the present and was voiced most effectively by Mr. Eden; Britain stands between the ideologies and will deal with neither side on ideological grounds. This is neither understood nor desired by some in Britain or in Europe. It is true that France is Britain's natural ally, on constitutional as well as on many other grounds. It is true that Russian interests (not ideology) thrust Russia to the side of Britain. It is also true that the foreign policy of despotic governments works in a very different way from that of more democratic states; secrecy, dissimulation, the idiosyncrasy of the dictator, the need for constant stimulation and coups and success, the hysterical denunciation of enemies, all these things make the foreign policy of the dictator-

ships repulsive and difficult to handle. Against this Britain has common interests with each of the dictators; in peace with Russia, in trade with Germany, in the Mediterranean with Italy. A foreign policy which relates itself to interests rather than ideas or constitutions has been the British tradition; this is not to deny the great tradition of British liberalism in the 19th century nor the great issues at stake in the survival of democratic institutions in the world. Yet to fight for democracy as an idea or system is probably to make sure of the end of democracy, especially if that war be world-wide.

One development in the British constitution during the last twenty years ought to be noted, namely, the changes in the relations of the Dominions to the mother country symbolised by the Statute of Westminster. These changes are not understood in Britain and are almost completely misunderstood in Europe; their effect was apparent and caused much puzzlement at the time of King Edward VIII's abdication. That event passed off with unanimity between the Dominion governments and the British government, but it revealed the fact that the foreign policy of the British Empire has no automatic unity; the great Dominions may easily adopt very divergent attitudes on great questions of policy and there have been some signs of this danger in the last few years. The foreign policy of the British Empire as a whole now depends to an extent not known before on prior consultation, discussion and unanimity of opinion rather than on dictation from Whitehall. A unanimous policy will undoubtedly be a much more difficult result to achieve, especially in sudden emergencies, but such a state of affairs is so characteristic of British tradition and the constitution as a whole that the dictators cannot understand how the thing works at all.

In conclusion, we have tried to show that there is such a thing as an historical British foreign policy and that this policy is a combination of British ideals and interests. That policy has still important applications in the strange times in which we live today. Is it fair to sum that policy up in the word Peace? Does Lord Halifax like Grey seek to bring the two groups nearer together? The cynic may say that peace is the interest of the satiated powers. That may be true; British policy and diplomacy have never been a pure idealism, and British interests and British economic organisation demand peace as the condition of their survival. It may also pertinently be asked whether the war of the unsatiated is likely to achieve results any more satisfactory in the long run; Europe today is at the mercy of gamblers. In that Europe Britain

still has such commitments which make it improbable that isolation can be an honourable or successful policy in a continental conflagration.

POSTSCRIPT—OCTOBER 1938

That September was a time of great historical crisis, no one will take leave to doubt ; but to determine the precise significance of the crisis is beyond the ability of most, including the writer. It has been a crisis in the literal sense of that over-used word—a turning-point in the disease of Europe. The direction of the turn only the months and years will reveal. It may not be altogether inappropriate to attempt to review the events of September in the light of the preceding discussion of British foreign policy, and to attempt, however roughly, a trial balance-sheet.

One thing stands clear, that as in 1914 the issues of European peace lay with Great Britain. That is not the common view which holds that the final word was with Hitler ; this is, I think, mistaken. The policy of Hitler in the past five years has always been carefully related to the probable reactions of the other states of Europe, and his success has been due to the most brilliant *timing* of his coups by which he has secured the most resounding successes at minimum cost. In the recent situation the decisive factor was Mr. Chamberlain's will-to-peace, a policy of peace at any price. It was this policy which determined the policies of France and Russia; a slight movement in the opposite direction would have brought them into war. Czechoslovakia was thus placed not at the mercy of Germany but of her allies, behind whom stood Britain. For the results in Central Europe and elsewhere, Britain must in consequence take a heavy share of the responsibility.

Behind Mr. Chamberlain stood the British Foreign Office and I think we can trace in the actions of the British Government many of the traditional principles of British foreign policy which have been outlined. There was re-echoed the longstanding opposition to any attempt at European or world hegemony ; that is probably the chief of those 'larger issues' on account of which Mr. Chamberlain declared Britain would be prepared to go to war. There was the ever-recurrent hesitation as to whether Britain was committed to anything at all in Europe ; the careful insistence that Britain was bound by no treaty or legal obligations to Czechoslovakia was counterbalanced by Lord Runciman's mission to Prague and the action taken by Mr. Chamberlain which decided the fate of Czechoslovakia. There is much point in the story of the woman in London who was overheard to say after the crisis was over—'Does

Czechoslovakia still belong to England?' Sea-power played its part in this airminded age; the mobilization of the British fleet was taken by the continent to mean that Britain was really serious. The Dominions and Parliament had their say in the matter; one wonders what would have been the fate of Lord Lloyd in Germany. As far as one can judge, there was surprising unanimity in Imperial foreign policy in the moment of crisis. If Britain had declared war it would have been on the side of the weaker country. To complete the parallel with 1914, there was a measure of disagreement in the cabinet up to the last, which entailed one resignation. How far can we discern the balance of advantage and disadvantage?

On the credit side, the obvious gain is peace. To read the letters which come from England is to begin to perceive what was the extent of the anxiety of the last few weeks, what the shadow of imminent war came to mean. That is the measure of the vast relief which came over the European peoples when the danger of war receded; this situation has not, I think, been properly appreciated in India. But the relief may on reflection change to apprehension. Peace such as it is means absence of war. That is clear gain in the sense that civilization has gained a breathing space; the pause for reflection may induce more sober and saner counsels—there was no pause in August 1914. But the apprehensions continue to crowd upon us; the armament race is to be continued with increasing vigour by all concerned. Against whom are the armaments directed? The armaments situation reflects a curious light on the so-called pact which Mr. Chamberlain induced Hitler to sign. That Europe is not now engaged in the most destructive war of history is nevertheless something to be profoundly thankful for.

The last few weeks have seen one more large step in the direction of German appeasement. The precise meaning of Hitler's statement that Germany has no more claims to make in Europe is not easy to determine. There are plenty more Germans outside the existing frontiers of Germany who make up the full measure of "Greater Germany". It is clear however that any further German advance in Europe will raise issues of the utmost gravity; the German-speaking people of Alsace, the Tyrolese Germans in Italy provide even more thorny questions than Sudetenland. Whether the next move will be the claim for colonies remains to be seen, but many think it was broadly hinted.

The process of revision of the treaties of 1919 continues. It does not continue in a very orderly fashion, it is true, but then it is difficult to imagine that to be possible. The cherished rights and wrongs of nations have not yet proved, apart from some ex-

ceptional cases, amenable to juridical treatment. Think of what has been abandoned—reparations, war debts, the demilitarized Rhineland area, the forbidden Anschluss, the territorial lines of Central Europe. It has proved possible to revise the treaties without resort to war ; it has not proved possible to revise them in a reasonable way by conference. The responsibility for that must rest with more than one party.

One further gain is that the map of Europe has been redrawn to coincide more closely with the lines of race and language. The German-speaking peoples are slowly being formed into a homogeneous state. In justification of his action Hitler appealed to the principles of President Wilson ; whether the prophet of self-determination and democratic self-government would have approved of his latest exponent may well be doubted. The difficulties of the principle have been amply illustrated ; the new frontiers of Czechoslovakia have left the state almost defenceless against further aggression. The remaining minorities within the state have immediately moved to aggressive action and the stability of the new state is seriously in danger. There is no clear rational principle by which the frontiers in central and south-eastern Europe may be determined. The neutralization of Czechoslovakia along the lines of Switzerland may solve the problem but the bona fides of the guarantors are seriously open to question.

The debit side of the account is a heavy one. Its chief item is that the whole business has been carried through without any thought of or reference to the League which was actually in session at Geneva. That is political realism with a vengeance ; the conception and machinery of European comity and collective security have broken down, or rather, have been deliberately destroyed. The exclusion of Russia from any share in the negotiations may prove to be disastrous for European unity. Post-war idealism has received its greatest defeat ; we may differ in the apportionment of blame, we must join in lament over the fact. For what will take its place ? In relation to long-term policy the League stood for a genuine idea which was grounded in European fact ; the rebuilding of a European union must come at some date in the future if Europe is to survive, but it will be a harder task than ever before.

The present alternative to the League in Europe as elsewhere is the arbitrament of armed force. To pretend that the settlement recently negotiated was anything more than this seems to me to be a misuse of language. The description by Mr. Chamberlain of his talks with Hitler bears this out to the full. The negotiations con-

sisted in a series of ultimatums from the Fuhrer ; when the first was (to his great surprise) accepted, a further ultimatum in more stringent terms was presented. Europe is still at the mercy of gamblers ; those who are prepared to risk war carry the day, those (like the Governments of Great Britain and France) who are not prepared to put all to the hazard must perforce agree to the dictators' terms. That cannot be considered a condition of stable peace. At what point any question becomes one of those "larger issues", whose character Mr. Chamberlain did not define, remains to be seen. The reluctance of the British Government to move to war is natural enough, but to judge from the reports it is to be understood in relation to British lack of military and other preparations. But those who claim that the decisions of the 1919 treaties were forced on the vanquished nations can hardly claim that the present settlement is the product of reasonable negotiation and has any greater claim to stability.

All of which seems to point to the fact that Germany has greatly strengthened its hold on central Europe and has achieved a resounding triumph at no military cost. The end of Nazi ambition is not yet, either in Europe or outside. We may well expect further pressure on Czechoslovakia, and further German expansion through S. E. Europe as far as and including Turkey. The Spanish question appears to be moving towards a settlement in a Fascist sense ; but the history of the past century may warn us against the idea of a permanent settlement in Spain. The problem of Palestine remains as a convenient lever for any anti-British power. Russia may in view of recent experiences move into a new diplomatic orbit. Peace remains not an achievement but a problem. On August 3rd 1914 Sir Edward Grey said to a friend : "the lamps of Europe are going out ; they will not be relit in our generation". A quarter of a century has passed and that melancholy prophecy continues to prove its truth.

REFERENCES :

- R. W. Seton-Watson : Britain in Europe, 1789-1914 : 1936.
- R. W. Seton-Watson : Britain and the Dictators, 1938.
- G. M. Trevelyan : Grey of Falloden, 1936.
- F. J. C. Hearnshaw (ed.) : Edwardian England, 1933.
- J. A. Spender : Men and Things, 1937.
- R. C. K. Ensor : England, 1870-1914.

THE TOTALITARIAN STATE

BY

DR. E. ASIRVATHAM

In current political literature the term "totalitarian State" is used in contrast with the term the 'liberal democratic State.' Since the close of the Great War, totalitarianism has been on the increase everywhere, and parliamentary democracy has declined. The totalitarian State claims jurisdiction over the whole of man's life. No part of the individual's life is outside its detailed supervision and control. If the Bible teaches that "we live, move, and have our being in God," totalitarianism teaches that "we live, move, and have our being in the State." According to totalitarianism, the individual's life is not his own. It is a trust given to him by the State to be used in the service of the State. In the words of Mussolini, if the nineteenth century was an age of socialism, liberalism, and democracy, the twentieth century is to be a century of authority, collectivism, fascism, and the totalitarian State.

In ancient times, the Greek City-State was totalitarian in the good sense of the term. Conditions having been totally different from what they are to-day, the State performed multifarious functions. It was the Church, the School, and the State—all combined. The State and society were practically synonymous terms. Civic life was the breath of the nostrils of the Greek. As MacIver puts it, citizenship was almost a profession. The attachment of the Greek to his city was so deep as to justify the motto "She (the city State) is ours and we are hers".

The totalitarian State of to-day is entirely different from the Greek city State. It is a modern version of Louis XIV's famous dictum: "I am the State." Its philosophical originator was Hegel who elevated the State to a mystical height. To him "the State is God on earth." It is "the march of God in history"; "the objectification of reason"; "the actualisation of concrete freedom."

According to totalitarianism, the State is all in all. In the words of Mussolini: "Beyond the State nothing". The State is an absolute in comparison with which all individuals and groups are relative. It is an absolute, permanent, and supernaturally sanctioned institution. Mussolini's motto to the Italian people is "All within the State; none outside the State; none against the State".

The Foreign Policy Association of America defines the totalitarian State as follows: "For the pluralism of the modern democratic State, where the Government is only one of several groups which have the individual's allegiance, fascism has substituted the totalitarian State which embraces all the activities of individuals and subordinates them to national ends." A high Italian official defines the totalitarian State as "a State of truly sovereign authority which dominates all the forces of the country."

Totalitarianism assiduously cultivates State worship. According to it, the individual is to attain significance only by his service to the State and is to find complete self-fulfilment in this service. Sieburg says that with the coming of Nazism "there are to be no more human beings in Germany, but only Germans!" Anyone who wants to live "in Germany, with Germany and through Germany is obliged to submit to the nation and to adapt himself to the totalitarian States". "Every individual's life belongs not to him but to the State and to the State alone."

The Totalitarian State is thus an unlimited State. It does violence to the richness and variety of voluntary group life. Religion, morals, and education are subordinate to the State. In Italy even sporting, educational, and recreational associations are centralised in Fascist hands. Franz Schanwecher, a Nazi theorist, writes: "The Nation enjoys a direct and a very deep unity with God. . . . Germany is the Kingdom of God". The aim of totalitarianism is to obliterate the fundamental distinction between the State and Society and make the State omni-competent.

Totalitarianism assumes different forms in different countries. It has assumed the form of Communism in Russia, Fascism in Italy, and Nazism in Germany. Even in the Anglo-Saxon countries where love of individual liberty has been strongly rooted, State activity is on the increase; and this may lead to a new type of totalitarianism which may be called democratic totalitarianism.

I. FEATURES OF THE TOTALITARIAN STATE

(1) The totalitarian State is dictatorial in character. It is opposed to Liberalism and to Parliamentary Government. It vests supreme power in the hands of one individual or in one Party. Russian dictatorship is a dictatorship of the Left, while Italian and German dictatorships are dictatorships of the Right. The former is on the whole the dictatorship of a party, while the latter is the dictatorship of an individual. Stalin, for instance, is not treated like a

demi-God by newspapers and propagandists, as is the case with Mussolini and Hitler. In both Fascist Italy and Nazi Germany there is unquestioned obedience to the leadership of one man.

Parliamentary democracy is anathema to the totalitarian state. It is criticised as being stupid, corrupt, and slow-moving. Parliaments are looked down upon as mere talking shops, incapable of accomplishing results; at times of emergency they are absolutely helpless. According to a Fascist apologist, democracy is a decaying corpse. Totalitarianism believes in the gospel of direct action. Its motto is, to use the words of Oliver Cromwell: "What's for their good, not what pleases them—that's the question." Yet totalitarianism is not autocracy pure and simple. It combines the aristocratic principle of government by a privileged *elite* with a democratic width in the basis of selection.

(2) The Totalitarian State crushes individual liberty. Communism regards individual liberty as a *bourgeois* conception. The periodical purges of its political opponents are illustrative of this fact. Fascism and Nazism do not believe in the common man at all. They regard the conception of individual liberty as a fetish of the past.

Totalitarianism tolerates no political opposition. It is government by one party. Whatever criticism is allowed is within the party. In criticising, the aim should be to make the existing machine work better, but not to overthrow it under any circumstance. The totalitarian State allows no liberty of thought, speech, and writing. Severe censorship is exercised over the Press, publication of books, Radio, Moving picture industry, Theatre, Music and Art. There is no liberty of meeting or liberty of association. Strikes are forbidden in Fascist Italy.

In Italy and Germany professors and schoolmasters are sifted and resifted. The school is used for political propaganda purposes. State centralization has taken the place of local life. The Civil Service, Judiciary, Army and University are purged of "anti-national elements." University Presidents in Germany are appointed by the Kultur Minister. No criticism of the regime is permitted in the Press. Leading Italian intellectuals have been killed, imprisoned or exiled. The mysterious disappearance of Matteotti in Italy in 1924 and the execution of Roehm and his group in Germany in 1934 are too well known to require comment.

Both Fascism and Nazism carry on intense propaganda and use all possible psychological methods to appeal to the mob. They

make use of marches, military uniforms, and rhetoric to rouse the people. Germany has prisons and concentration camps for her political opponents. Within the first few months of their coming into power, the Nazis put fifty to eighty thousand political prisoners in concentration camps. Hitler's teaching is that in propaganda the end justifies the means.

The Press in the Totalitarian States is required to support the Government solidly. According to Dr. Goebbels, the press is to be developed into a piano upon which the Propaganda Ministry can play any tune it likes. There is to be only one public opinion and the nation is to think unitedly. German wireless talks are one series of military and warlike harangues. Preparation for war is the one constant theme. In Fascist Italy, likewise, the government head of the press decides what news are to be published and what suppressed. In these circumstances it is no wonder that people even give up the habit of reading newspapers.

The individual in the totalitarian state is completely subordinated to the authority of the leader and the hierarchy. The Fascist oath reads "In the name of God and Italy I swear to execute without discussion the orders of the Duce and to serve with all my strength and if necessary with my blood the cause of the Fascist revolution." Authority, discipline, and subordination are the watchwords of the Fascist Party. The motto given by Mussolini to the youth organisation of his country is "To believe, to obey, to fight."

(3) Totalitarianism glorifies the nation and emphasises the idea of the State as a power system. Narrow nationalism, chauvinism, aggressive warfare, and imperialistic expansion are some of the essential features of Fascism and Nazism. Russian communism is fast becoming nationalistic and militaristic, although it is not yet aggressively imperialistic.

According to Fascism, international peace is a coward's dream; pacifism is "an act of cowardice in the face of sacrifice." The Fascists exploit the nationalistic sentiment. They exaggerate and distort the internationalism of the socialists and communists. The jibe thrown at socialists is that they are the friends of every country but their own.

Italian education is chauvinistic to the highest degree. The schools are conducted under a system of drill and discipline almost military in its character. Force and violence are extolled. The

man of action is praised rather than the thinker. Thought is fatal to Fascism.

Both Italy and Germany want colonies for expansion, for raw materials, and for the sale of their manufactured goods as well as for the satisfaction of their "will to power." Mussolini says "Imperialism is the eternal and immutable law of life." "We are forty millions squeezed into our narrow but adorable peninsula." Italian expansion, says Mussolini, is a matter of life and death. Italy "must expand or perish."

Mussolini and Hitler openly preach the necessity of War. It is necessary for the development of manly qualities. Fascism has chosen an internal policy which involves war as an external consequence. Hitler believes in the power of the victorious sword. He has demonstrated the truth of the remark of the late Lord Birkenhead that the world continues to give its glittering prizes to those who have sharp swords and stout hearts. Roehm says "Pacifism is, according to the view of the soldier, cowardice on principle. Cowardice is no philosophy, but a defect in character."

Hitler's ambition is not only to re-conquer the territories lost under the Treaty of Versailles but annex all lands where there are substantial German minorities. The events since the Munich Agreement make it clear that Hitler will not be satisfied till he establishes something like a Monroe doctrine over Central and Eastern Europe. His aim is to neutralize France and realise his expansionist ambitions with the active help of Italy and Japan and the connivance of Great Britain.

(4) The Totalitarian State is exclusive. It does not believe in Liberalism and humanitarianism. Its prayer is "God bless me and my wife, my son John and his wife, us four and no more." Germany is building up strong race prejudices and hatreds. It believes that the Nordic race is the best of all, although science gives us no conclusive evidence of racial superiority as between the major races. While probably only less than half of the German population is Nordic, the evolution of a pure Aryan race is the aim of Nazism. The Nazis want to safeguard the purity of their language, literature, and race.

The Totalitarian State is exclusive, further, in the sense of trying to make itself economically self-sufficient. The economic policy of both Italy and Germany is to make themselves as little dependent as possible upon foreign countries for the supply of

materials required for the prosecution of war. In pursuit of this policy Germany to-day is producing considerable quantities of synthetic wool and rubber. As a State she has entered the field of foreign trade and commerce with a view to pushing forward the sale of her finished goods. Where this policy will end and whether it will really lead to the economic betterment of the country, it is difficult to forecast.

(5) The Totalitarian State is fast becoming a rival to religion. While Communism on the whole has banned religion, Fascism and Nazism are making religion a tool of the totalitarian State. Nazism particularly bids men give unto Caesar that which belongs to God. It is out to establish a narrow, exclusive, and un-christian Christianity known as Nordic Christianity. Whatever in the Bible, in the teachings of Jesus, and in Christian traditions does not fit into the Nordic ideology, is thrown overboard. Hitler is the New Saviour. The totalitarian State is an enemy of the totalitarian religion. J. A. Spender writes: "Russia has tried to extirpate religion, Mussolini to sterilise it, Hitler to annex it". It may be added that Franco is endeavouring to exploit it.

II. WHAT TOTALITARIANISM HAS DONE

However much we may disagree with the aims and policies of totalitarianism, we cannot gainsay the fact that communism, fascism and nazism have given to the people of the respective countries "a faith to live by and a cause to die for". The people are filled with a new confidence and a new sense of self-respect. We are reliably informed that the number of suicides has gone down in the totalitarian countries except, of course, among the Jews in Germany. Totalitarianism has banished pessimism and defeatism and has inculcated a strong sense of manliness. It has unified the people and promoted national unity and solidarity. It is true that in the absence of any criticism it is difficult to say whether the present regime has popular support behind it or not. But the fact that no open revolt has broken out leads one to believe that, in the opinion of the people at large, there is no suitable alternative to the present regime at least for some time to come.

Totalitarianism has made selfless service possible. The dictators are not despots interested in improving their own material position. They are not like the Oriental despots of old. By mass suggestion and hypnotism they take good care to see that vocal popular support is behind them. The totalitarian State has brought into clear relief a new line of distinction between popular and un-

popular governments as against parliamentary and non-parliamentary governments.

Poverty and unemployment have been brought under control in the Totalitarian States. People are so well disciplined that they are prepared to go through thick and thin together. Totalitarianism further satisfies the craving that there is in man to follow leadership and authority as well as for action.

III. WHAT OF THE FUTURE?

The good which the totalitarian states have accomplished is nothing when compared with the price that people have had to pay for it. Totalitarianism has meant the crushing of individual liberty and the suppression of human personality, violence at home and unashamed aggression abroad, the brutalising of human nature and the militarisation of a whole people. When the free spirit of the people begins to assert itself once again totalitarianism is bound to die a natural death. The injustices of the Versailles Treaty which have been a blessing in disguise to the dictators in their militaristic and aggressive policies, cannot last for all time. When these injustices have undone themselves, as they are bound to do soon, the main prop of totalitarianism is bound to disappear.

Totalitarianism has shown clearly that eternal vigilance is the price we have to pay for liberty. Mere lip service to individual liberty, equality, fraternity and humanitarianism is not enough. It should be buttressed by positive action. What the rise and spread of modern dictatorships show us is that dictatorship is the outcome of fear and insecurity. Fascism arises when the middle classes become panicky.

Totalitarianism has succeeded to a remarkable extent because it has realised the fact that men are fundamentally irrational. By a careful study and skilful use of men's instincts, feelings, and prejudices, it has risen to power. It has shown clearly the urgent need there is for every statesman and administrator to possess a sound knowledge of group psychology and mastery of the technique of propaganda. At a time when society and culture are becoming politicised, totalitarianism calls our attention to the urgency of an intelligent and realistic study of political forces. It further directs attention to the fact that any philosophy is better than no philosophy so long as there are people earnest about it and willing to work it.

One of the fundamental weaknesses of totalitarianism is that while it has a full grasp of the gregarious nature of man, it has

overlooked the craving there is in every man for solitude. One wonders how long Fascism and Nazism can last once the mood for solitude, reflection, and self-examination gains control of the people of Italy and Germany.

If democracy is to succeed there is no use of its simply fighting dictatorship. It should adapt itself to dictatorship and rise superior to it. Instead of being a mere formal concept, democracy should become a living reality.

URBAN CENTRES IN KERALA¹

By

GEORGE KURIYAN.

When an attempt is made to classify rural and urban populations, many difficulties due to lack of agreement on any precise definition of the terms rural and urban are met with. "All quantitative statements must be based on the Census Reports of those countries which distinguish between rural and urban populations."² The definition of urban populations varies from one country to another and even in some cases in different parts of the same country.³ According to the definition laid down in the Imperial Census Code, a town includes (1) every municipality, (2) all civil lines not included within municipal limits, (3) every cantonment, (4) every other collection of houses inhabited by not less than 5,000 persons which the Provincial Superintendant may decide to treat as a town for Census purposes. In dealing with questions arising under the last clause, the Provincial Superintendant is required to have regard to the character of the population, the relative density of the dwellings, the importance of the place as a centre of trade and its historic associations.⁴ Clearly no absolute criterion was in question and much depended on the application of these general considerations. The 5,000 minimum for a town has been much more strictly followed in Madras than in other areas and as comparisons of urban elements depend upon a uniform

1. For the purposes of this paper Kerala denotes the southern portions of the West Coast of India, comprising the District of Malabar and the Indian States of Cochin and Travancore.

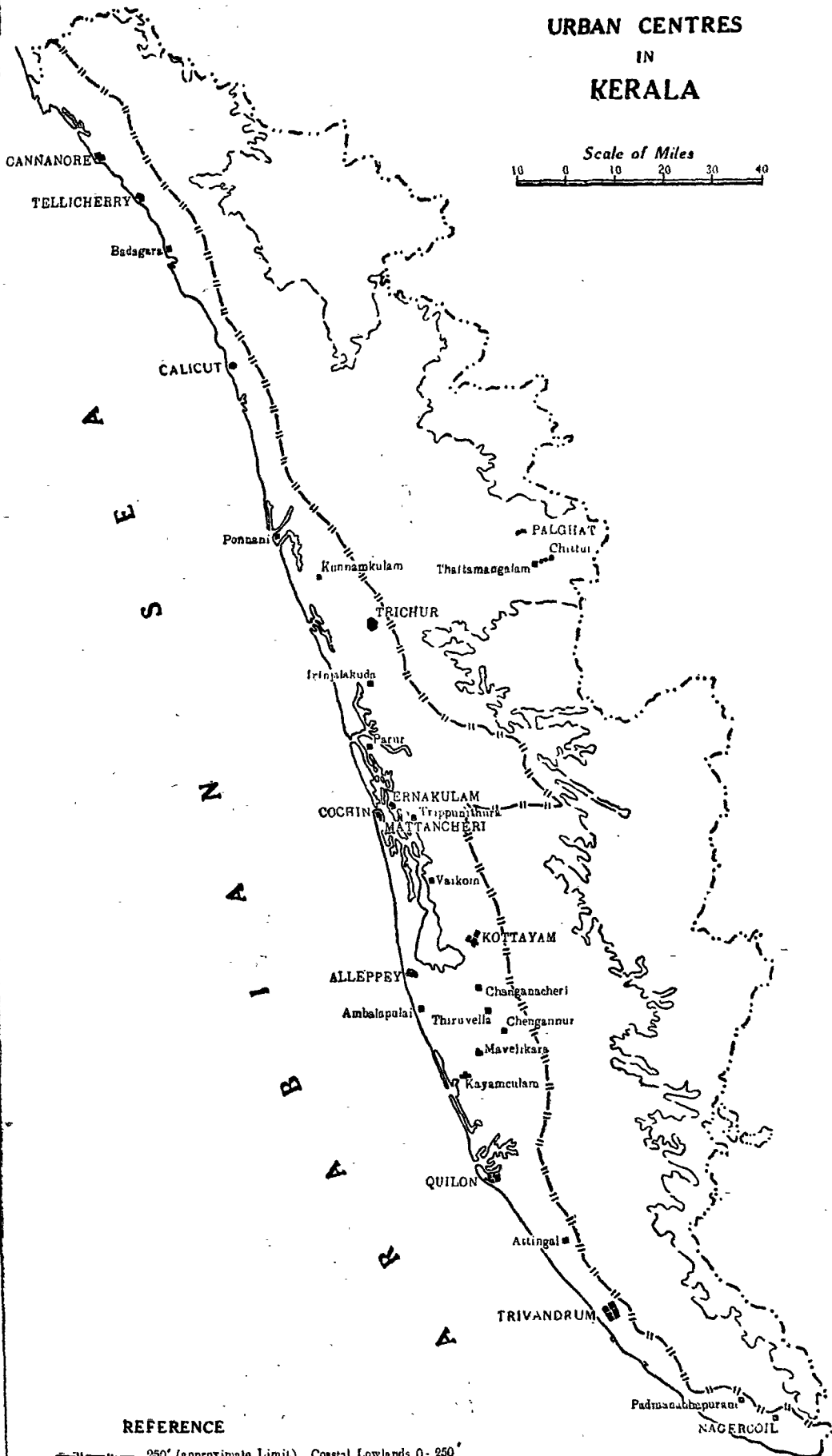
2. Vide Geography 1929 Page 100, C. B. Fawcett on "The balance of rural and urban populations".

3. In England and Wales the urban population means the population of all urban districts irrespective of their magnitude. In Canada it denotes the population of all incorporated towns and cities. The urban population of New England is the population of all those local government areas which have more than 2,500 inhabitants, whether they are, or are not incorporated. In several parts, the population is classed as urban when it exceeds a certain arbitrary standard. In Scotland, this standard is 1,000; in France 2,000 (for the agglomerated population only); in the U.S.A. and New Zealand 2,500; in parts of India 5,000; while the U.S.A. has also a separate grouping for those over 8,000.

4. Census of India, 1931. Vol. 28. Travancore. Part 1. Report Page 58.

URBAN CENTRES IN KERALA

Scale of Miles
10 0 10 20 30 40



REFERENCE

- 250' (approximate Limit) Coastal Lowlands 0 - 250'
- - - 1000' Foot Hills 250 - 1000'
- TOWN

system of classification, this difference in procedure might produce considerable effect on urban proportions.⁵ In spite of every care taken to secure consistent application, it is improbable that local vagaries have been avoided.⁶

In any country it would be difficult to condense into a formula the attributes of a town and in Kerala "where the village represents in essence an extent of country throughout which isolated houses are dotted",⁷ certainly no hard and fast line exists. The presence of the usual amenities associated with town life such as markets, shops, better classes of schools and other public institutions may be used as guiding factors for distinguishing an area as an urban unit.⁸ But nevertheless, the most important aspects should be the character of the population and the relative density of the dwellings.⁹

A preliminary classification of the chief occupations of mankind leads to the view that agriculture, pastoral work and forestry are essentially and necessarily rural occupations, while the other avocations like industry, commerce, professional and governmental work are urban. On the occupational basis in any urban area, the majority of the population should be non-agricultural.¹⁰ It is unfortunate that occupational statistics are not available for every village in Kerala. One has therefore got to supplement the statistics wherever available, with a detailed study of the large scale topographic maps. According to the Census of 1931, the towns of Kerala are distributed as follows :—

Region.	Total number.	Municipal towns.	Non-Municipal towns.	Less than 5000.	Population.			
					5,000 to 10,000.	10,000 to 20,000.	20,000 to 50,000.	50,000 to 100,000.
Malabar	.. 8	5	3	Nil	1	2	4	1
Cochin	.. 12	4	8	Nil	5	4	3	Nil
Travancore	.. 46	19	27	14	15	11	5	1
Total	.. 66	28	38	14	21	17	12	2

5. Census of India, 1931. Vol. 14. Madras, Part 1. Report Page 55.

6. Census of India, 1931. Vol. 14. Madras, Part 1. Report Page 54. It is stated that a suggestion was made to the Census Superintendent that the presence of a coffee club should be taken as a reliable indication of urbanity!

7. Vide Census of India, 1931. Vol. 14. Madras. Part 1. Report Page 53.

8. Census of India, 1931. Vol. 28. Travancore. Part 1. Report Page 58.

9. Vide Census of India, Vol. 14. Madras, Part I, Report. Page 59 'the more or less uniform aggregation which one would expect in a city . . .'

10. Agriculture in what follows, includes pastoral work and forestry. It could be defined as the exploitation of animals and vegetation.

The Travancore Census Superintendent does not seem to have followed the lower limit of 5,000 very strictly. It is not clear why the 14 areas where the total population is less than 5,000 have been classified as towns.¹¹ Every one of them is only an over-grown village and it would be very much better to consider them as purely rural areas. From the above tables it is seen that there are 21 towns in Kerala where the population is between 5,000 and 10,000, 15 of which are in Travancore (occupational statistics are available only for 3 of these). Without accurate statistics of occupation, it becomes difficult to determine whether they are urban or not. It looks as though most of these should be considered as large villages where the occupations of the people are mainly rural.

I am therefore limiting the scope of this paper to those Census towns where the population is in excess of 10,000. 31 such areas are found in Kerala and the following tabular statement gives all the available data regarding the occupations of the dwellers of these towns.¹²

11. Vide Census of India, 1931. Vol. 28. Travancore. Part 1. Report Page 59. Surely a declaration under the Police regulations or the provision of a conservancy staff could not make an otherwise rural area, urban.

12. Accurate statistical information is available for only 16 out of the 31 towns.

Name of place.	Exploitation of animals and vegetation.	Total number of people engaged in				Remarks. The major occupations with their numbers.
		Industry.	Transport ¹³	Trade.	Public Admini- stration and liberal arts.	
Calicut.	9728	7865	2938 1325 R 1052 W	6065	3273	Textiles, 2523. Wood, 2056.
Trivandrum.	4138	4714	2018 1018 R	4222	7911	Trade in foodstuffs, 2680.
Alleppey.	1172	3076	1214 743 W	3629	1217	Trade in foodstuffs, 2035. Textiles, 1251.
Nagercoil.	2479	3888	533 506 R	1778	1965	Textiles, 1200. Trade in foodstuffs, 965.
Quilon.	2239	4235	1028	2199	1549	Food industries, 1036. Ceramic industries, 742. Trade in foodstuffs, 1413.
Kottayam.	1322	1394	617 426 R 147 W	1553	1512	
Changanacherry.	3284	1336	401 252 W 137 R	1874	758	
Parur.	1052	1092	309 140 W	781	647	Trade in foodstuffs, 424.
Thiruvella.	1074	621	147 116 R	605	848	do. 303.
Mavelikara.	2291	610	263 151 R	690	698	do. 480.
Vaikom.	2138	1107	173 150 W	684	872	Textile industry, 400.
Shencottah.	2017	820	252 225 R	790	518	Trade in foodstuffs, 507.
Kayamculam.	1114	862	281 224 W	962	289	do. 677. Textile industry, 350.
Attingal.	1467	580	177 113 R	549	657	Trade in foodstuffs, 320.
Haripad.	2077	397	244 216 R	306	451	Essentially agricultural.
Padmanabhapuram.	1284	622	181 170 R	677	613	Trade in foodstuffs, 460.

13. Under transport, W denotes the number of persons who are engaged in transport by water and R the number of persons who are engaged in transport by road.

Haripad has a municipality, it had a total population of 10,387 in 1931. On a glance at the occupational statistics, one finds 2,077 people returned as employed in the exploitation of animals and vegetation, while the other occupations altogether employ only as much as 1398 people. Haripad therefore ceases to be an urban centre and there thus remains only 30 urban centres in Kerala.

In any urban area it is normal to expect the dwellings to be closely packed together¹⁴ and the density of population to be much greater than in the rural areas. The tabular statement that follows gives the area of the towns, the number of dwellings, the density of dwellings per square mile and the density of population. The variation in the density of population among the several towns is remarkable, Attingal registers the very lowest (816 per square mile) and Shencottah the very highest (17,464 per square mile).¹⁵ Cochin, Mattancheri and Ernakulam have very high densities of population well over 10,000 per square miles.

14. Census of India, 1931. Vol. 14. Madras. Part 1. Report Page 59. 'The more or less uniform aggregation which one expects in a city . . .'

15. Vide author's article on the 'Distribution of population in Kerala', in the Journal of the Madras Geographical Association, Vol. 13. Pages 140 to 145.

Name of town.		Area in sq. miles.	No. of dwellings.	Density of dwellings per sq. mile.	Density of population per sq. mile.
Calicut	..	10.77	14,795	1,374	9,218
Trivandrum	..	11.29	14,272	1,264	8,505
Palghat	..	9.0 *	8,402	934*	5,560*
Trichur	..	4.87	6,823	1,400	9,375
Alleppey	..	4.54	7,426	1,635	9,656
Nagercoil	..	4.48	8,433	1,882	9,586
Mattancheri	..	2.69	6,269	2,335	14,738
Ernakulam	..	3.12	5,244	1,681	11,743
Cannanore	..	4.0 *	4,875	1,219*	8,559*
Quilon	..	4.53	5,234	1,155	7,448
Tellicherry	..	4.0 *	3,828	957*	7,587*
Kottayam	..	4.42	3,902	883	5,710
Changanacherry	..	5.23	3,867	739	4,627
Cochin	..	1.5 *	3,518	2,345*	15,212*
Chittur—					
Thattamangalam	..	2.14	3,361	1,571	8,839
Ponnani	..	3.0 *	2,256	752	5,403*
Parur	..	3.57	2,564	718	4,251
Thiruvella	..	3.63	2,209	609	3,991
Mavelikara	..	4.00	2,325	581	3,549
Kunnamkulam	..	1.89	2,524	1,335	7,313
Vaikom	..	3.70	2,519	681	3,732
Shencottah	..	0.70	2,788	3,983	17,464
Badagara	..	3.0 *	1,639	546*	3,753*
Irinjalakuda	..	2.02	1,700	842	5,442
Kayamkulam	..	3.00	1,743	581	3,614
Chengannur	..	8.75	1,660	189	1,227
Trippunithurai	..	1.27	1,694	1,334	8,373
Padmanabhapuram	..	2.50	2,075	830	4,125
Attingal	..	13.00	1,781	137	816
Ambalapulai	..	4.75	1,855	391	2,157

* Denotes approximate figures.

The density of occupied dwellings per square mile within the town is perhaps a better index of urban features. Attingal again registers the very lowest (137 per square mile) while Shencottah has the very highest (3,983 per square mile). Cochin and Mattancheri have also very high densities, nearly 2,500 per square mile. It has been suggested that an urban area on an average has about 4 houses per acre with approximately 5 persons per house.¹⁶ Accepting this suggestion, the density of dwellings must be about 2,560 per square mile and the density of population about 12,800

per square mile. In the map of the Population of Great Britain¹⁷ a density of 6,400 persons per square mile is suggested as the lowest limit of urbanity. The number of towns which satisfy these criteria are extremely few and hence they could not be made applicable to Kerala. Shencottah though an agricultural centre has a density much greater than the industrial and commercial centres of Cochin, Mattancheri and Alleppey. Shencottah resembles the Tinnevely District and the Tamilian preference for town dwelling is well evidenced in this case.¹⁸ It is likewise interesting to note that Nagercoil with its Tamilian population shows an overcrowding of houses (c.f. conditions with Alleppey where the density of population is greater, but the houses are less over-crowded).¹⁹ These facts bring out clearly the peculiar preference of the Malayalees to live in dispersed settlements. Kerala is noted for its isolated houses. The density of dwellings even in the urban parts is low, and except in portions of few large towns, there is no over-crowding of houses. In rural areas and in many parts of most towns, the houses are scattered.²⁰

On the functional basis it is possible to classify the towns into several groups :—

- (1) *Capitals. Present Political.* Calicut, Trivandrum and Ernakulam.
Seats of Royalty Trippunithurai and Attingal.
Past Political Padmanabhapuram.
- (2) *Industrial towns.* Nagercoil, Quilon and Trichur.
- (3) *Commercial towns.* Alleppey, Mattancheri, Cochin, Badagara, Ponnani, Palghat, Tellicherry, Cannanore and Kayamculam.
- (4) *Market towns.* Changanacherry and Irinjalakuda.
- (5) *Religious towns.* Vaikom and Kunnankulam.

17. Map of the Population of Great Britain, 1931. Ordnance Survey of Great Britain.

18. Census of India, 1931. Vol. 14. Madras Report. Part 1. Page 57.

19. Census of India, 1931, Travancore. Vol. 28, Part I, Report. Pages 66 and 67.

20. Census of India. Vol. 14. Madras Report. Part 1. Page 71. "The density of dwellings in Calicut varies remarkably but as compared with the other cities of Madras, it is much less congested. In the case of Calicut, the characteristic weakening of population density towards the city margins is clearly seen. The extremes of Calicut differ little from the Malabar country side."

- (6) *Agricultural and Distributive towns.* Shencottah, Mavelikara, Thiruvella, Chengannur, Parur, Ambalapulai and Chittur-Thattamangalam.

Present Capitals. Calicut is the head-quarters of the district of Malabar, Trivandrum and Ernakulam are the capitals of the Indian States of Travancore and Cochin respectively.

Calicut. The situation of Calicut is low, flat and unhealthy and its position on the little Kallayi river is a standing puzzle. The mouth of the Beypore river six miles further south would have been a much better locality. There is no harbour and steamers have to lie in the open roadstead two miles off the land. Nevertheless it is a port of importance in Kerala exporting coffee, ginger and nuxvomica seeds and importing cotton yarn, piece goods and salt. In recent years Calicut has developed as an industrial centre and large quantities of soaps are manufactured. The crude cold process is widely spread in the district, but the more important modern factory method is found in Calicut at the Kerala Soap Factory which manufactures on a large scale, good and cheap soaps of a pure quality. Next to Madras City, Calicut has the largest business in furniture making in the Presidency. In addition, Calicut has weaving mills and three umbrella factories, where the iron ribs of the umbrellas and the cloth are imported from Germany and the factories only make sticks and handles from thin bamboos obtained from the local forests. Calicut is also an important tile manufacturer. It is thus becoming an important industrial centre. During the last Census decade, it has grown up by about 20% and its growth can be attributed largely to the genuine development of an important commercial centre. This town which possesses many of the attributes of a real city, is likely to continue to grow.²¹ The density of dwellings in Calicut varies remarkably, but as compared with the other cities of the Presidency, it is much less congested. "Two thirds the wards of Madura have over 100 persons per acre, only two fifths of Madras wards and one twenty-fourth of Calicut's reach this standard".²²

Trivandrum situated at the southern extremity of the back-water communication system of Kerala, is the capital of the Indian State of Travancore. It is essentially a capital town where the

21. Census of India, 1931. Vol. 14. Madras. Part 1. Report. Page 63.

22. *Ibid.*, Pages 70 and 71.

most important occupation of the people is public administration together with the professions of the liberal arts. It is noted for its ivory works. Apparently it looks as though the last Census decade has seen a phenomenal growth in the town (33%), but when adjustments are made for the increased area treated as urban in the 1931 census, the growth is only 29%. (The area added during the census was 1.23 square miles, the growth of the taluk is 29.5%).

Ernakulam the capital of the Indian State of Cochin is situated on the back-waters two miles east of, and opposite to the port of Cochin. It has an apparent growth of 70% during the last census decade, but if the boundaries are confined to those of 1921, (extent of area added is 549 acres and the population of this new area is 5,669) the increase is only 33.5%. The rural parts of the taluk show an increase of 25.4%. This additional growth of Ernakulam is in every probability due to the development of the Cochin harbour.

Among these three centres, it is only Ernakulam which has shown during the last census decade a much greater rate of growth than the surrounding rural parts and this is clearly due to the rapid strides that have been made in the improvement of the Cochin harbour.

Past Capitals. Padmanabhapuram was the head-quarters of the Royal house and the capital of the Travancore State till 2 centuries ago. (The town is surrounded by a square fortification of stone about $2\frac{1}{2}$ miles in perimeter). Its area has been increased during the last census by 0.5 square miles, and its adjusted increase of population is 10.4%, while the rural parts of the taluk have shown a growth of 20%. Even its actual increase is less than the rural growth, showing thereby, that it is only its geographic momentum which keeps it still going.

Seats of Royalty. In the Indian State of Cochin, Ernakulam is the political capital while Trippunithurai is the seat of the Sovereign. Looking at the growth of the town, one would be surprised at this phenomenal increase of more than 200% during the last Census decade. In the Census of 1931 the limits of Trippunithurai have been extended by the absorption of the outlying suburbs and if the area newly treated as urban is deducted from the total urban area and the calculation confined to the urban area of 1921, it is found that the average increase of population is only about 25%—slightly greater than the average for the State (23.1%), but identical with the increase in the taluk. Much of the

growth of this town should be credited to the rural areas and not to the town itself.

Attingal situated on the Vamanapuram river is the headquarters of the Ranis of Attingal who formerly possessed the sovereignty of the country and with whom the English first entered into negotiations. The sons of the Ranis of Attingal have been the reigning sovereigns of Travancore since the time of Marthanda Varma in the first half of the 18th century. Attingal has the very lowest density of population among all the towns of Kerala (816 per square mile); and nearly 5 acres of land is on an average available for each dwelling. It ceases to have any urban appearance and looks an extremely rural area. A majority of its population however, follow non-agricultural pursuits and hence this area is treated as a town. Its suburbs had such a rural appearance that the Census Superintendant of 1931 decreased its total area by 3 square miles. Even making adjustments for this, its population has increased by 18.1% only, while the rural parts of the taluk have shown an increase of 23%.

The past capitals and the seats of Royalty have both shown a growth less than the rural parts of the taluks in which they are situated.

Industrial towns. In Kerala there are only 3 important industrial towns, Nagercoil, Quilon and Trichur.

Nagercoil is situated very near the southern extremity of Kerala, but its position is similar to that of Palghat, in that it commands the Aramboly gap. Textile industry is the most important single industry. The town has an established reputation for fine lace works. It is a very old centre for education, has the oldest English School which has now become a college. During the last Census operations, its area was increased by 1.43 square miles. It has shown an average increase of 23% in its population while the corresponding figure for the taluk is only 15%. The town has an average density of 15 persons per acre as against 2 in the rural parts of the taluk, (see foot notes 18 and 19) which indicates the Tamilian preference for town dwelling. Its growth is more comparable to the adjoining Tamil districts than to the true regions of Kerala.

Quilon is one of the oldest towns of Kerala; it is the Coilum of Marco Polo. Its natural position practically commanding the back-water communication both to the north and the south, made it one of the greatest ports of trade even as early as the beginnings

of the Christian Era. It is an important centre for the Ceramics industry and it also manufactures tiles. In recent years it has become an important centre for the cashew-nut industry. It practically has a monopoly in the trade of nuts and this new industry now engages as much as 1,000 labourers per day. Its area was also increased during the last census by 0.29 square miles. Its population has a recorded increase of 34.2%, but when adjustments are made for the area newly treated as urban, it has shown a growth of 27.5% while the rural parts of the taluk have shown a growth of 26%.

Trichur. Probably Trichur originated as a temple town, but now it is an important industrial centre. It is unfortunate that occupational statistics of Trichur are not available. The town has one of the largest steam saw mills in South India, a steam weaving mill, a small check weaving factory, many printing presses and about half a dozen brick and tile factories. The chief articles of trade are paddy, timber, prepared areca, and cotton fabrics. Trichur is considered the oldest town in the West Coast and its foundation is attributed by local tradition to Parasu Raman. During the last census, its extent was added by 1,025 acres (the population of this newly treated urban area was 13,752) and it shows an actual increase of 64% since 1921. If the newly treated urban area is deducted, it is found that the rate of growth of the population is less than 15% while the taluk has shown a growth of 25%. Much of this is real urban growth and should be credited to the town.

*Commercial Towns :—*Alleppey lies between the sea and an extensive tract of paddy fields bordering the Vembanad lake, with which the port is connected by a canal. It is the chief sea port of Travancore with the best harbour. Besides being commercial, it is also industrial, manufacturing coconut oil, coir matting and tiles. During the decade 1921-31, these industries have together employed 50% more labourers; nevertheless its commercial activities are more important. At Alleppey the Head offices of many of the indigenous banks are found and it is practically the metropolis of Travancore. In 1920-21 the total tonnage of vessels including catamarans which visited the port was 179,345 while in 1930-31 it was 1,035,059. The average density of population in the town is 15 per acre as against 2 per acre in the taluk. During the last decade it has shown a phenomenal growth (36.7% as against a taluk growth of 26.8%) due to the rapid strides in the development of trade and industries.

Mattancheri is to the state of Cochin what Alleppey is to Travancore. Geographically there is nothing to separate Mattancheri from the town of Cochin. It is the most crowded centre in Kerala (except Shencottah) and has the most urban appearance. Its situation on the back-water makes it one of the most important centres of trade and with the development of the Cochin harbour, its trade has increased enormously. Its area has been increased by 648 acres during the last census (the population of this area is 8,113) and it has shown an actual increase of 60 % during the last decade. All this has to be credited to the town. Linked to Mattancheri is *Cochin*, the most important port of Kerala. It has an excellent harbour with magnificent back water facilities, more than 120 square miles in extent. Deep water jetties have been constructed with broad gauge railway connections to Shoranur and Madras. The town is built on a narrow strip of land lying between the back water and the sea at the mouth of the Cochin river. The history of Cochin as a sea port commenced about the 14th century, since when, it began to gradually supersede Cranganur as an emporium of trade. The port of Cochin has recently been greatly improved, it has a deep water harbour, dredging of the channel is necessary, but is done without hindrance to traffic. When the reclamation work is completed, twenty to thirty vessels can be housed simultaneously. Its importance as a passenger and as a cargo port has been increasing steadily and it is bound to be on the ascent. However during the last census decade it has shown only a growth of 10%; this is because it is overcrowded and unhealthy and people prefer to live either in Mattancheri or in Ernakulam.

Badagara so called from its situation just north of the Kotta river is located on the coast at the northern extremity of the Ellattur Badagara backwater. Nearly 58% of the population is Mahomedan—the Moplahs. Coconuts and copra are the chief items of export and salt and grain are the only items of import. It has a ruined fort which by tradition was acquired by the Kadattanad Rajas in A.D. 1564 from the Kolattiris. It was one of the strongholds of Tippu. Recently the industry of pressing fish oil has been started and is now thriving.

Ponnani situated at the mouth of the Bharathapuzha is a small port. About 90% of its inhabitants are Moplahs. There are nearly 40 mosques in the town. One of the earliest English factories was started here some time in the middle of the 17th century. As a port, Ponnani is handicapped by its dangerous harbour; the bar shifts yearly and is impeded by shoals and sand banks. The chief item of import is salt.

Palghat. The legendary history of the Palghat Gap ascribes its origin to the inevitable Parasu Raman, who, after reclaiming Kerala from the sea, found it impossible to procure inhabitants to the lands as the mountains to the east were impassable. Accordingly with his own hands, he cut the chasm in the Ghats which is now known as the Palghat Gap. Palghat forms a sort of transition region between Kerala and the Tamil Nad; thus the Nambutiri Brahmin and the Moplah almost disappear and their place is taken by the Pattar Brahmin and the Ravuttars respectively. Its commercial importance is due to its position commanding the gap, on an arm of the Bharathapuzha. Palghat is a manufacturing centre of some importance, manufacturing knives, locks, tiles and matches. The apparently slow increase of Palghat is due to the fact that its limits were made smaller in the constitution of its municipality. When this is allowed for, its increase is 12%; this is below that for Malabar District (14%), but above that for Palghat taluk (8% increase). This taluk is a transition region between Coimbatore in the East and the true West Coast regions and the approximation of both taluk and town increase to the Eastern rates is noteworthy.²³

Tellicherry situated on a group of low wooded hills running down to the sea, is protected by a natural water of basalt rocks. Its importance is largely fortuitous. The small river (only 14 miles long) in the north originally was a useful line of defence, but is navigable only for 3 or 4 miles and is of little value for trade. Dharmapattanam island at the mouth of the Anjarakkandi river 3 miles north would have been a more eligible site, but at the end of the 17th century, it was a bone of contention among the Malayalee chieftains, and the East India Company preferred to shun complications and settled down in Tellicherry. The first English settlement in Malabar was founded here in 1683 to secure the pepper trade. During the wars with Hyder and Tippu, it became a base of operations. Even today it is the principal exporting centre for Malabar pepper and Coorg coffee. Fish oil industry has also been started with success and in recent years, it has become an important centre for the furniture industry.

Cannanore consists of two detached portions locally known as the old town or Cannanore proper and the cantonement. Between the two and commanding the old town lies Fort St. Angelo. Its importance is also fortuitous. Besides being commercial, it has 4 weaving mills and several tile factories (statistics not available).

Kottayam lies on the Meenachil river and was formerly the capital of the Kottayam Rajas. Lying as it does on the main road to Peermade, it attracts considerable trade. Kottayam has developed as a commercial centre since the opening up of the High Ranges of Travancore for the plantation industries. It has been the head-quarters of the Church Missionary Society and is also an important centre for the other sections of the Syrian Church. The learned professions become particularly important indicating the high educational standards of the place. Without any increase in its total area, it has shown a remarkable growth during the last Census decade, nearly 34%. (Even the taluk increase is as high as 33%). This is mainly a result of the development of the rubber plantations in the foot-hills of the High Ranges (Mundakayam and the surrounding regions).

Kayamculam formerly the capital of the Kayamculam Rajas whose kingdom was surrendered to Travancore in 1745, has been important from ancient days. Small coasters could arrive through the Kayamculam bar and it therefore became important as a port. All the industries associated with the coconut palm are found here and it has facilities for back-water and canal communication. Its growth is almost the same as that of the taluk in which it is situated (18%).

Market towns Changancherry and Irinjalakuda are the only 2 towns which I have classified in this group.

Changancherry lies on a rising ground on the eastern border of the Kuttanad delta of the River Pamba. Several canals lead to it and there is free water communication with Quilon and Alleppey. It was formerly the capital of the Thekkumkur Rajas after the annexation of whose territory its importance has declined. The place is noted for a bi-weekly fair which is the biggest in the whole of Kerala. The town during the decade 1921-31 has grown up by 27%, but the rural parts have shown an increase of 41%. This large rural growth is due to the development of rubber plantations.

Irinjalakuda the head-quarters of the Mukundapuram taluk of Cochin State is a large centre for distributing the agricultural products of the whole taluk. Its bi-weekly fair is the largest in the Cochin State.

Religious Centres. Vaikom and Kunnamkulam are the only two important religious centres in Kerala, the former for Hindus and the latter for Christians,

Vaikom stands on the eastern bank of the Vembanad lake. It has a famous Siva temple to which thousands of pilgrims resort for the Ashtami festival in the months of Masi (February-March) and Kartigai (November-December). The predominance of the Hindu element in the town is noteworthy. (Vide table).

Kunnamkulam is the chief centre of the Jacobite Syrian Church in the Cochin State. It has not merely some of the oldest and wealthiest Syrian Christian families, but also some of the oldest churches in Kerala. Recently it is becoming important as a trading centre, mainly of arecanut.

AGRICULTURAL AND DISTRIBUTIVE TOWNS.

Shencottah lies at the foot of the Western Ghats on the main road from Tinnevely and Madura to Quilon. Its importance is essentially due to its position which is very similar to that of Palghat. In the neighbourhood are found large coffee estates (Ambasamudram taluk) and it has become an important distributing centre. It also distributes the products of the High Ranges of Travancore to a small degree. Its rate of growth during the decade has been low and corresponds to that of the Tamil Nad.

Mavelikara was formerly the capital of the Mavelikara Principality which is testified by the presence of the large fort built of red stone and mud still existing in a ruined state. Today it is purely a distributing town of agricultural products. Its non-agricultural population seems to be almost equally divided among industries, trade and the learned professions. The more important industries are rice milling, and coir manufacture and most of the traders are engaged in the trade of food stuffs. Its growth of 16% during the last census decade is less than that of the taluk (20%).

Chengannur (No occupational statistics are available). Its importance is due to its position on the Pamba river from where it could distribute the products of the hills, mainly timber brought down by the river. It has also a large bi-weekly fair.

Thiruvella on the Manimala river was formerly much more important than now and its importance has diminished since the time of Marthanda Varma. It is today however an important Christian centre with many educational institutions. Its growth during the decade is similar to that of the taluk.

Parur at the mouth of the Periyar, was formerly the capital of the Parur Rajas and a military station. Tippu destroyed it when

he conquered Cochin. Originally it belonged to Cochin, but was made over to Travancore in 1762 and is almost completely surrounded by Cochin territory. The growth of Cochin and Ernakulam have tended to diminish the trade of Parur. During the decade it has grown up by 25·6%—exactly identical with the growth of the surrounding Cochin territory.

Ambalapulai is noted for its local trade of articles associated with the coconut palm, practically collecting the produce of the neighbourhood and sending it to Alleppey.

Chittur-Thattamangalam. Chittur and Thattamangalam are about 3 miles apart, Chittur is an industrial centre on the Anamalai river where cotton weaving is the most important industry and it is the chief centre of the Tamil Brahmins (similar to Palghat) while Thattamangalam is a commercial centre, the trade being essentially in the hands of the Ravuttans. These two towns are connected together by a string of houses and it becomes difficult to say where one ends and the other begins !

In Kerala therefore are found 30 urban centres and the following table indicates their growth during the period 1901 to 1931. There were only 18 such centres in 1901, 19 in 1911 and 21 in 1921. During the last census decade it would therefore appear that there has been a phenomenal increase in the numbers of these urban centres. 6 of these new ones are found in Travancore (excluding Haripad only 5), 3 in Cochin, and only 1 in Malabar. Badagara in Malabar had a population of more than 10,000 in 1901 and 1911 while it recorded in 1921 a population just under 10,000. It may probably be due to the errors in enumeration, but more probably it was due to the terrible after effects of the Moplah rebellion. It is therefore clear that the district of Malabar shows little or no growth of such urban centres during the last 30 years. Excepting Calicut, all the other 5 towns of Malabar have shown a rate of growth less than that of the rural parts surrounding them.²⁴ Kunnankulam in the Cochin State had a fairly constant population during the period 1901 to 1921, but in 1931 it has suddenly leaped up. More or less similar to it is the case of Irinjalakuda. It is only Trippunithura in Cochin state which has grown up tremendously during the last census decade. "If the area newly treated as urban is deducted from the total urban area and the calculation

24. This also reflects the market preference of the Malayalees to live in dispersed settlements.

confined to the urban area of 1921, it is found that the average increase of population in both these towns (Kunnamkulam and Trippunithura) is only about 25%—slightly greater than the average increase for the state, 23·1%. The 5 new urban centres of Travan-

Name of town.	Population in 1901.	Population in 1911.	Population in 1921.	Population in 1931.	Distribution according to religions in 1931.		
					Hindus.	Christians.	Muslims.
Calicut.	76,982	78,417	82,334	99,273	57,965	6,325	34,843
Trivandrum.	57,882	63,561	72,784	96,016	75,354	13,746	6,910
Palghat.	44,177	44,319	45,487	49,044	39,521	1,309	8,223
Trichur.	15,585	23,574	27,897	45,658	22,352	21,509	1,783
Alleppey.	24,918	25,665	32,074	43,838	18,986	11,574	13,224
Nagercoil.	25,782	29,883	34,406	42,945	32,211	6,879	3,855
Mattancheri.	20,061	23,508	24,664	39,645	16,110	13,856	9,054
Ernakulam.	21,195	21,901	23,192	39,638	18,170	15,391	2,406
Cannanore.	27,811	28,957	27,705	34,236	16,597	3,568	14,049
Quilon.	15,691	18,839	25,135	33,739	18,017	9,422	6,299
Tellicherry.	27,883	29,258	27,576	30,349	16,743	1,769	11,836
Kottayam.	17,552	15,141	18,833	25,236	11,626	12,388	1,222
Changanacherry.	14,264	17,242	18,955	24,201	11,582	10,234	2,385
Cochin.	19,274	20,023	20,637	22,818	5,147	12,062	5,558
Chittur—Thatta- mangalam.	14,317	14,706	18,150	18,915	16,656	341	1,918
Ponnani.	10,562	13,984	13,345	16,210	2,555	68	13,584
Parur.	12,962	13,782	11,949	15,176	11,096	3,060	738
Thiruvella.	?	7,969	12,020	14,489	8,582	5,706	201
Mavelikara.	?	?	12,209	14,194	9,266	4,910	18
Kunnamkulam.	7,194	8,336	8,517	13,822	5,820	7,779	223
Vaikom.	?	?	11,259	13,808	11,669	1,857	282
Shencottah.	9,039	10,309	11,241	12,225	10,893	66	1,266
Badagara.	11,319	11,149	9,804	11,259	5,623	128	5,491
Irinjalakuda.	8,420	8,699	9,457	11,047	5,880	4,594	573
Kayamculam.	5,745	5,830	9,172	10,841	6,311	2,177	2,353
Chengannur.	?	?	?	10,738	6,557	4,173	8
Trippunithura.	?	4,976	4,761	10,717	8,614	1,948	155
Attingal.	?	?	8,699	10,612	9,387	211	1,014
Haripad.	?	?	?	10,387	7,676	1,970	741
Padmanabha- puram.	?	?	9,156	10,313	7,719	1,258	1,336
Ambalapulai.	?	?	9,055	10,248	8,677	640	931
Total urban population.	488,584	530,028	640,463	841,637	503,342	180,918	152,479
Total population of Kerala.	6,559,920	7,362,184	8,084,013	9,834,933	6,219,126	2,005,239	1,604,629
Percentage of urban to total population.	7·4	7·2	7·9	8·5	8·09	9·02	9·50

core in 1931 do not show any phenomenal growth. The only conclusion that one can draw is that it is only the larger industrial and commercial towns of Kerala which have in general shown

a rate of growth, greater than that of the rural parts, while the smaller towns have shown a rate less than that of the rural parts.

The distribution of the urban population itself is interesting. More than 75% of the total urban population live in the larger urban centres with a population more than 20,000. This is true not only of 1931, but also of 1921, 1911 and 1901. "The West Coast or Malabar village may be far from the general idea conveyed by the term, but the West Coast town is a genuine urban agglomeration." ²⁵

Towns take their rise in many ways. The earliest form is the strategic point around which grow non-rural aggregations in the days of uncertain rule. Trade routes and markets would inevitably seek their protection and consequently communications grow towards such points. Urban aggregations have an abundance of labour. For the development of industries, good communications and a large supply of labour are in great demand. Hence, when industrial development came along, it also tended to seek these places. Marked local conveniences for a particular industry or occupation produce townships and under more settled government, communications no longer necessarily or always seek a strategic point. Nevertheless, bridge-heads or crossing points on great rivers, important gaps or passes must always hold a primary position in the system of communication of a country and one therefore expects to find such places appearing among its more important urban collections. In Kerala, "the towns might be said to have arisen at the more important crossings of the lagoons and back-waters."²⁶ Palghat owes its importance to its position on the gap through which communications are bound to seek a way and any point commanding them has a perennial importance. Urban growth depends much upon industrial development, but in an agricultural region like Kerala, more upon easier and swifter communications. In a land of few or difficult communications, people move less and hence their meeting points are smaller and fewer. Improve the communications, and urban development is a certain consequence. During the last census decade, there has been a phenomenal growth in bus transport and it has contributed in no small measure to the comparatively greater growth of all the natural centres of communication. The Census Superintendent of Madras states that in almost every case where

25. Census of India, 1931. Vol. 14. Madras. Part 1. Report. Page 59.

26. *Ibid.*, Page 65.

the increase in population of a town has been greatly in excess of that of the district, it will be found that the town possesses certain natural advantages as regards approach by rail or road and the largest increase are in those towns which during the decade have seen some marked development in their communications. In Kerala communications are a matter of the coast and the towns in general do not outstrip the district growth so much as in other cases. This reflects again the greater degree of dispersion preferred by the Malayalees!

Some towns therefore might originate due to their very situation. There are gap towns like Palghat, Shencottah, and ports like Alleppey, foot-hill towns like Chittur-Thattamangalam, road or railway junctions, bridge-head towns, etc. In an attempt at a classification of the towns, the situation might be chosen as the prime criterion and a division suggested. The growth of a town may however be associated with certain other facts like the development of either railway transport or road systems or sea-borne trade. Towns might grow up due to the development of industries like the plantation industry, or, they might grow up because they are chosen as the seats of Royalty. Religious centres due to the influx of a large number of pilgrims from far and wide, might develop urban characteristics; thus a town might grow around a temple, a church or a mosque. New areas might be chosen as capitals and the shift of capital might account for the growth of some urban centres. Manifold are the ways in which towns originate. It may therefore appear to be very rational to attempt a classification of towns on the basis of the factors concerned in their growth. But however, it should be remembered that a town could originate due to one particular cause while its subsequent development might only be attributed to an entirely different one. Many examples could be cited to confirm the above statement. The town of Trichur is built on a rising ground on the apex of which is the Vadakunnathan temple which is considered the oldest in Kerala. It is highly probable that Trichur originated as a temple town, but to-day its importance is as a commercial and industrial centre. I have therefore preferred to classify these towns on their functional basis.

The total urban population of Kerala in 1931 was 831,250 forming only 8.5% of the total population (say $\frac{1}{12}$ th). The proportions of urban to the total population in 1901, 1911, 1921 were 7.4%, 7.2% and 7.9% respectively. Since 1911 the growth has been more rapid and this is certainly due to the improvement of

communications and the large increase in bus transport. But nevertheless, even in 1931, the urban population forms only $\frac{1}{12}$ the total population and this indicates conclusively that Kerala is far from being urban. In England and Wales, nearly 80% of the total population is urban. Scotland has 77%, Australia 62%, U.S.A. 51% (Towns over 8,000—44%), New Zealand 58%, Canada 49%, and South Africa 20% of their respective populations living in urban areas. Comparisons of urban proportions with any of these industrialised regions of the world would therefore be meaningless. India is essentially rural and the urban proportions of Kerala are the very lowest as seen from the following tables :—

Region.	Percentage of urban to total population.	Region.	Percentage of urban to total population.
Madras ..	13·6	United Provinces ..	11·2
Bombay ..	21·2	Baroda ..	21·4
Mysore ..	15·9	(20% if towns less than 5,000 are omitted)	
(13·5% if towns less than 4,000 are omitted)		Tinnevelly ..	26·1
Cochin ..	14·9	Tanjore ..	16·6
Madura ..	20·2	Trichinopoly ..	14·1
Malabar ..	7·4	Coimbatore ..	11·3
Travancore ..	7·6	Kerala ..	8·5

If comparisons are made with the adjoining provinces of British India one notices the remarkably low urban proportion in Kerala 'which again reflects the greater degree of dispersion preferred by the Malayalees.'

In Kerala, Hindus, Christians and Mohemadans together account for 99·5% of the total population. The distribution of these communities in the urban centres is however not in the same proportion as their total numbers. The Hindus constitute 63·3% of the total population, but only 60·15% of the total urban population is Hindu ; the Christians constitute 24·4% of the total population and 21·62% of the total urban population while the Mahomedans who constitute only 16·3% of the total population form 18·23% of the total urban population. The Mahomedan element in the towns is slightly greater than in the rural parts while the Hindu element in the rural parts is greater than in the towns. This is a clear reflection of the occupation of the muslims who unlike the Hindus and Christians are traders more than agriculturists and therefore live in towns in proportionately larger numbers.

In the commercial towns one finds the much greater preponderance of the muslims.

Distribution.—24 out of the 30 towns (80%) lie in the coastal lowlands (See Map) while the remaining 6 lie in the foothill zone. 5 of these are agricultural and distributive towns. Among these it is only Palghat which is a commercial town and even here a large portion of the commercial activity is confined to the distribution of the agricultural products. In Kerala therefore, the towns are essentially a matter of the coastal lowlands—the area of easier communications—they have invariably arisen at the crossings of the lagoons and the back-waters.

A NATIONAL HEALTH POLICY

BY

V. KRISHNA ROW

(Continued from Vol. X No. 2. Page 259).

PHYSICAL EDUCATION POLICY—PART II.

In Paras 28, 39 and 40 of Part I of the scheme of medical examination as part of National Health Policy, I have tried to explain the role of the teacher and the medical officer of the school pupils, with reference to physical education, assignment to physical activities and adjustment of school program in accordance with physical capacity; certificates of physical fitness for games; and the medical examiners' "right" to modify the games, as circumstances warrant.

2. In my special article on the "Trends in Physical Education and School-hygiene in South India," in the Educational supplement of the "South Indian Teacher"—October, 1937, I have drawn the attention of the Public and the Government to the salient defects in the present scheme of physical education.

3. "Physical education" is defined by the Chief Medical Officer of the Board of Education, England, as the "building up of the bodies and personalities of the children by means of regulated physical exercises," and with this definition, I hope, there would not be any disagreement; and this could be made the starting point for a further exposition of the subject. Apart from the definition, the *aim* of physical education, as expressed by Lord Dawson of England, is "not to produce a nation of trained athletes, but rather to ensure that by the proper training and development of body, men and women may be enabled to carry out their daily work to the utmost of their ability, and enjoy their leisure with that sense of well-being, which comes from the possession of a sound mind in a sound body".

4. The main urge for improving the physical activities of the various Nations and their introduction into the politics of their countries, has been the keen and intense desire to keep every child and every citizen *physically fit* for military purposes. The British Physical Training and Recreation Act of 1937,

is designed to give effect to the Government's scheme "for improving the health and physique of the Nation." In the words of the London "Spectator," the essential aim of this new Act is "to preserve and develop the physique, which has been built up by the Medical services, which are now available to any one from before birth to the age of the leaving school."

5. Thanks to Mr. H. C. Buck of the Y.M.C.A., Madras, the physical activities and exercises in Madras, that were introduced in 1917(?), with the purpose of increasing the "exercise value" or the body-build and a better physical health, have now grown up into the present form of "Physical education"—creation of the Y.M.C.A. College of Physical Education, Saidapet—aiming at "educational value." 1916-1917 was the period that witnessed the birth of the Indian Defence Force (I.D.F.), consisting of University students, the forerunner of the present University Training Corps, Mrs. Beasant's scout movement, and her propaganda for a citizen army. At present, there is more emphasis on the "educational value" rather than on the "exercise value" of physical educational activities—games and sports. All are convinced about the low physique and poor physical fitness of Indians in general and South Indians in particular; and there is much loose talk about physical health, even by responsible officers in position.

6. The demonstrations of physical activities of students and pupils, organised under Educational institutions and public bodies, do not touch the *cruce* of the problem, have no direct bearing on the physical health and well-being of the children, as one would naturally expect from such highly commendable physical activities and exhibitions. Physical education or training to-day has become synonymous with the playing of cricket, hockey, football, and sports, etc. It is not possible to get out of this groove immediately. Compulsory playing of games and sports will not give the strength and muscular development, which is needed in any sound system of physical education. The British Board of Education has recommended that "at least 2-3 hours should be devoted to *gymnasium and physical exercises, in addition to the time allowed for games*". The Skeen Committtee long ago recommended that "good physical stamina, sound and well-developed body, and pluck are certainly some of the qualifications, essential for an officer. * * * A definite policy should be laid out to raise the standard of physical fitness". But till to-day, neither the Government nor the public leaders have paid any attention to this pressing health problem. Propaganda is necessary, but where children and the youth of the land are

concerned, it must be directed along well-defined channels, if the aim and purpose of physical education is to be fulfilled, namely, to improve the health and physical well-being of the masses, with the *definite* object of increasing the physical fitness and efficiency of the able-bodied ; and thus contribute to the Nation's health and wealth, in all walks of life.

7. Of the various Nutrition Indices formulae, to determine the state of nutrition of the pupils, all have become obsolete, due to lack of uniform application, for all ages, heights, and weights. But all the same, Livi's formula has been worked out among the various nationalities in the World ; and I have worked this formula and made it applicable to South Indians. This could be made the basis for further researches into the nutritional index of South Indians, and to devise ways and means to improve the physical fitness. The latest method of assessing the "state of nutrition" and that adopted by the Board of Education, England, is that impression of the child, produced on the medical examiner, regarding the physical well-being, as 'Excellent,' 'Normal', 'Sub-normal' and 'Bad.'

A statement of the nutritional index and vital capacity of lungs of South Indians (my own figures) and a comparative statement with those of other Nationalities are appended. (Appendix.)

8. *Indigenous exercises.* It is necessary to refer to the revival of indigenous physical exercises to increase the body-build and development, health, and physical efficiency of Indians, which are in keeping with national sentiments and outlook on life, by such voluntary associations in Madras and the States, like—

- (i) Bratachari movement in Calcutta ;
- (ii) Sivaji Vyayam Mandal in Madras ;
- (iii) Physical culture associations in Mysore and other States.
- (iv) Talimkhanas to teach wrestling and gymnastics ;
- (v) "Keep-fit" system ;
- (vi) Kalari systems in Malabar ;
- (vii) Congress Volunteer Corps, Boy Scout Associations and similar organisations—their physical exercise activities ; and,
- (viii) Yogic Health Institutes in North India and Bombay.

The benefits of these voluntary physical Associations, should not be overlooked.

9. Now, unfortunately, these indigenous games are tabooed by the present Physical instructors, and an unwarranted controversy between the Indigenous exercises and foreign sports and games; bodybuild exercises *versus* "sportsman" exercises; and all the prejudices between the two types of exercises, exercise value *vs.* educational value etc., is raised. This mentality is undesirable. We have to take the best in both the systems and eschew the rest, for our ideal is higher than what either of these systems aims at.

10. Physical exercises, whichever be the type, to build body and health of the pupils would be useless, if the elementary conditions of health cannot be maintained—namely,

- (i) Good food; (ii) Sleep & Rest
- (iii) Exercise; and (iv) Cleanliness.

The *food or nutrition policy* :—There must be a well-nourished body to derive full benefit from physical as well as from mental exercises. The direct beneficial effects of wholesome food on the constitution are well-known. The problem of sound nourishment, what constitutes a satisfactory diet, and how best to apply our present knowledge on these matters, is of great importance. Sooner or later, a national nutrition plan and policy* would have to be evolved. A *satisfactory diet* to build health and body-build should satisfy the following conditions—physiological needs of the body; psychological motives that create and satisfy the appetite; social customs and castes; economic conditions; and environmental factors. Fetish should not be made of vitamins and vitamin products, "health-giving" and "body-building" special foods; and other motivated advertised foodstuffs.—"Smoke Passing Show Cigarettes, enjoy good health." People need to be taught how to feed more wisely, and to avoid dietetic errors, by the elimination of which *only*, could they look for any real measure of success in the physical training campaign. The problem of malnutrition (insufficient feeding) in India is more a question of injudicious feeding than in the nature of inadequate total supply of food.

11. *The present Outlook* :—The physical Educational authorities in Madras, are making fine distinctions between "*Physical Education*", "*Physical Culture*" and "*Physical training*". These distinctions do not serve any useful purpose now, for India is not

* Nutrition policy of India"—Indian Medical Journal, December, 1938.

even standing-by at the starting line of physical education, and much less in a position to understand them.

12. The *defects* in the present position regarding Physical educational policy are—

1. Lack of interest and enthusiasm among pupils, for exercises ;
2. Lack of interest among school-managers, regarding exercises and health of the pupils ;
3. Slow degeneration of physical health and body-build of pupils ;
4. Deletion of gymnasium and its exercise value ;
5. Present-day costly games and athletics ;
6. Absence of medical examination to determine the physical condition of the pupils ;
7. Poor economic conditions of the pupils ;
8. Present administration of Physical education is defective, and not conducive to organised and systematic work, with benefit to the individual or the Community.
9. No right “ leadership ” to guide physical exercise classes;
10. No definite policy of the Government, to bring Physical education into the realm of politics of the country ; and
11. There is no *gradual growth* of physical education and its activities, from Elementary schools to Colleges ; the physical education has begun at the wrong end, at the top, with grown up students, instead of at the bottom (elementary school pupils).

13. For the evolution of suitable physical educational policy, it would be most profitable to consult the following publications :—

- (i) The “ Physical training scheme,” prepared by Mr. H. G. Beall, Director of Physical Education, Calcutta (Report of the Calcutta University Students’ Welfare Committee, 1930—Appendix F.)
- (ii) Mr. H. C. Buck’s scheme of physical education ;
- (iii) the Reports of the Physical education Committees of the Bombay and Central Provinces Governments.
- (iv) The course of training in Germany, which has reached the high water-mark in Physical education and training.

14. Between the "physical training scheme," adopted at Calcutta University and that of Mr. Buck in Madras, there is not much difference, except that the former emphasises the "exercise value" to a greater extent.

15. As regards the *German school* of Physical training, the following principles and practical courses of Physical education are laid down by Dr. Rust, Minister for Education, Germany.

The gymnastics—all school children are divided into 3 groups, according to the age of the pupils. The 3 groups are—

(A) "I can;" (B) "I will;" and (C) "I must".

The *first group of children* (age 6-10 years)—"I can"—are to be divided into play for easy games—tricks of agility and exercises free from combative elements;

The *second group of children* (age 10-14 years)—"I will"—is intended to stress the will to achievement through competitive sports—running, throwing, jumping, and gymnastics—all these to develop the "will power."

The *third group of children* (age 14-19 years)—"I must"—The pupil's sense of responsibility and obligation to achievement are to be developed, under the motto, "I MUST"—competitions and duels are to be encouraged.

Another *fourth group* (age 19 years till the sunset of life):—

Kraft durch Freude (Strength through joy) movements, are encouraged, which are very popular among all classes of people in Germany—all these physical activities are undertaken with the *definite aim of improving physical fitness*, in the scheme of regeneration of her youths.

16. These courses of physical education and training all brought into real politics, with the sole object of making the German nation "physically fit" have reached such a high degree of perfection that they have drawn the open admiration and advocacy of the same principles and courses to be introduced into England, by a special delegation of British Educationalists, who toured Germany in 1937 to study the physical education and its activities.

17. *Universities and Physical Education*:—As early as 1826, the Harvard University enacted a statute that "it belongs by law to the faculty of the University to authorise exercises conducive to health. . . The students generally showing a disposition to take a

part, the corporation provided the requisite apparatus". The universities generally, and Madras University in particular, cannot absolutely divest themselves of their responsibilities, regarding physical education, inasmuch as they have

- (1) a University Training Corps ; and,
- (2) a part-time Officer in charge of physical education (games and sports). The responsibilities of the University towards the health and physical well-being of the scholars have been well emphasised by the Calcutta University Commission Report (1917-19); and also by the Skeen Committee. Not only this, a member of the British Education Fellowship Delegation, (Mr. S. Davies) has justly emphasised the University's role towards this pressing physical health problem.

18. The Madras University is roughly spending about Rs. 12,000 per annum on physical education. This amount could be better utilised ; and physical education on national and rational lines, could be re-organised and started on a sound basis, with a full-time paid Officer (University Director of Physical Education). This would result in economy and efficiency, and thus contribute to the physical well-being of the citizens of to-morrow.

Recommendations.

19. The aim, functions, activities, and the policy of Physical Education, to be pursued in Madras as elsewhere in India must be demonstrably in the interests of India—to raise the man power and make every citizen able-bodied and physically fit to carry his daily avocation in all walks of life. Therefore, my recommendations are—

- (i) a School Medical Service to be constituted, for periodical and regular examination of all pupils—Part I scheme.
- (ii) Government must chalk out a scheme of Physical Educational policy, on National lines on the model of Western countries ; as suited to the children of the soil.
- (iii) The following Acts must be enacted—
 - (a) Compulsory Physical Training Act.
 - (b) Public Health Act.

- (c) Report of weekly Census of mortality of the school-children—to study the definite causes of infantile mortality and to take necessary steps. This should be a special report and not included in the general report.
- (iv) Physical health activities should begin in Elementary schools and continue into the higher classes, in a gradual and systematic manner, till the physical education and its activities become merged into one, namely *community-hygiene and physical health* in after-school life ;
- (v) The “individual child” must be made the basis of the whole physical educational program ;
- (vi) Graded, regular, and systematic exercises to be given daily to all pupils ;
- (vii) Military drill to be made *compulsory* for all classes; and for this no permission of the Army Department is required ;
- (viii) A sufficiency of full-time paid Physical instructors, to carry out the policy of Physical training ;
- (ix) Teachers to be trained in gymnasium, games and athletics, and other kinds of remedial exercises, (Swedish drills), as an *objective* course ;
- (x) A Public Health Act to enforce the supply of *pure* foods;
- (xi) Provision of enough public play-grounds. The present school playgrounds are hardly worth commenting upon ;
- (xii) Propaganda : To carry on a “Physical fitness” campaign as in England to-day, not to speak of other advanced western countries ; and
- (xiii) Conduct refresher courses during vacation for the physical instructors, and hold District Conferences of the Instructors, and the Public, after the District tour is finished by every Inspecting Physical Instructor.

20. *Administration* : The administration necessary to carry into effect the above recommendations, regarding Physical Education, and training on the most modern lines, is as follows : (Appendix).

The staff must be full-time paid workers and their duty must not be diverted into any other channels of work, in the schools or Colleges, as is done at this moment. Every school or college should have one Physical instructor for every group of 200 pupils. Work would be thorough and efficient. These Instructors must be paid out of the school-funds. For the efficient supervision of the Physical educational program, an establishment of Inspectors is necessary; *a schema of the establishment* is appended. The establishment charges per annum amount to Rs. 17,000, nearly. (Appendix)

21. The School Physical instructors could be paid Rs. 35 per month. They will work during the working hours of the school or college, as the case may be, just like any other teacher. Then the effect of the Physical Instructor on the psychology of the students is really worth counting, and he will become a "force" in the College and not joked at, as at present.

22. *Conclusion*: To sum up, the Government should first frame a general *National health policy* while chalking out a scheme of physical education, and honour its proper and due status in the body-politic of our country. Its aim should be national, to secure the harmonious growth of the body and mind, and to improve the physical fitness, absolutely necessary for any situation in life. Its objective must be to live healthily, and to increase the efficiency and man power of India, the view advocated by the Skeen Committee and by Sir John Anderson, His Majesty's Lord Privy Seal, who has opined that "the man-power of India should be mobilised for the good of the Indian Nation." With this objective in view, all the above recommendations should be considered.

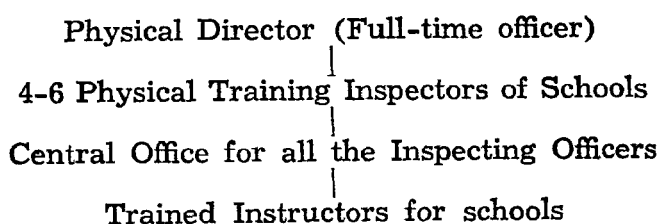
23. The School Medical Service (Part 1) and the Physical education (Part II)—both items of the National health policy, are organically related to each other; the former is an essential preliminary, for the proper ascertainment of the health of the pupils, while the latter ensures the physical health and body-build of the child and grown-up citizen, in the scheme of regeneration of Indians—as an able-bodied Nation. In one of his lectures at Madras, Swami Vivekananda stressed the necessity of physical health, in these words—"Be strong, my young friends, this is my advice to you. You will be nearer to Heaven through the football than thro' the study of the Gita * * You will understand the mighty genius and the strength of Krishna better with a little of strong blood in you. You will understand the Upanishads better

and the glory of *ATMAN* when your body stands firm on your feet and you feel yourselves as men. * The Atman can never be realised by the physically weak. He can be only realised "By the Strong, by the Hardy."

My scheme is economical and self-supporting. The provincial Governments, especially the Congress ones, are concerned in formulating educational, agricultural, prohibition, and other reforms, meant for the benefit of the masses. A health policy is a major question, and it is none the less important than the other reforms or policies. The present moment is the most propitious to inaugurate a Health policy. By adopting this health policy and physical training scheme, we can certainly raise the level of health and physique from C3 to A1 status of our youth within a decade from now. It is thus that the autonomous Provincial Governments would justify their existence and earn the gratitude of the Nation. "*If it were done, 't were well it were done quickly*".

APPENDIX I

SCHEME OF PHYSICAL TRAINING SERVICE



It has been roughly estimated that 200—300 students could be safely and efficiently attended to by one Physical Instructor. In Madras Presidency there are 31 lakhs of school children. Therefore, we should be requiring $31 \text{ lakhs} \div 300 = 10,333$ instructors. France has programmed to have 15,000 instructors for her school-population of 58,43,970.

APPENDIX II

MONTHLY SALARY

Phys. Director	Rs. 250	=	Rs.	250
Phys. Inspecting Officers	„ 120 × 6	=	„	720
				970
Annual salary expenses	970 × 12	=	„	11,640
Annual Office Establishment		=	„	5,360
			„	17,000

N.B.—The Physical Instructors will be paid Rs. 35 from the School funds, just like the other teachers. The Inspecting Physical Instructors will be maintained by the Government, out of the “medical fees” collected from the pupils, as part of the medical inspection scheme. The expenditure on this Physical Instruction has been estimated at Rs. 17,000 per annum.

APPENDIX III.

Record of Physical Fitness of South Indians.

Vital capacity of lungs	.. 2.29 litres
Vital capacity of lungs per Sq. Metre of Body-surface area	.. 1.85 litres

Livi's Index of Nutrition of other Races is as follows:—

English	.. 2.38
Belgians	.. 2.37
Dutch	.. 2.37
Swiss	.. 2.39
Jews	.. 2.39
Mysore students	.. 2.25
Bengal Hindus	.. 2.22
South Indian	.. 2.18

APPENDIX IV.

State of Nutrition—Percentage.

	* South Indian students. (16—20 years.)	English Boys (Below 16 years).
Excellent	.. 8.7%	14.6%
Normal	.. 60.0%	74.1%
Sub-normal	.. 24.2%	10.6%
Bad	.. 7.1%	0.7%

* This is the average of 2,000 College students, judged by myself.

REVIEWS

‘THE SECRET OF RECOGNITION, (PRATYABHIJÑĀ-HṚDAYAM) WITH AN ENGLISH TRANSLATION by Kurt F. Leidecker, M.A., PH.D. Adyar Library. Pp. xx and 214. 1938.

Saivism, like Vaiṣṇavism, is very old and has exercised a vast influence over the Indian people. Broadly speaking, there are two types of it. While both are theistic, one believes in the distinction between God and the individual soul, and the other identifies them. The former of these types is best represented by South Indian Śaivism; and the latter, by the Śaivism which first made its appearance in Kashmir and chiefly flourished there. The book under review gives a general outline of the latter. It consists of 20 *sūtras*, and is printed here along with the authoritative commentary of Kṣemarāja, who lived in the first half of the 11th century A.D. Some believe that the *sūtras* also are by him but, in the Introduction to the present edition (p. 8), they are ascribed to an unknown author.

Although this creed was once very popular, it later fell into neglect and was not well known even in the land of its birth until some years ago when, under the auspices of the Government of Kashmir, the chief classics propounding it were published. This work also has been included in them. But the present edition of it is not a mere reprint of the old for, in its preparation, the text has been critically compared with three new manuscripts and with a Telugu edition of it containing a different commentary. It also includes an English rendering of the work and historical as well as explanatory notes. In spite of the labour spent on its elucidation by modern scholars, the creed still presents many difficulties. But the general features of it are fairly clear. It is monistic, and resembles very much the teaching of the *Śvetāśvatara Upaniṣad*, so far as it is theistic. It believes in a single ultimate Reality which, though described as a personal Being (Śiva or Parama-śiva) is conceived both as the efficient and the material cause of the universe. That is, the universe, according to it, is not created by God but emerges from Him at the beginning of a cycle and re-enters into Him at its close. Thus, like the individual soul, the physical world also is never apart from God. The differentiation of the single Reality into the world and the manifold individual souls is explained by assuming a certain creative principle in it, which roughly corresponds to Māyā in Śaṅkara's Advaita. It is,

however, conceived here not as false but as real, being in fact regarded as identical with the divine. Accordingly, the things to which it gives rise may be finite and imperfect but are not illusory. The historical relation between these two doctrines—the Advaita of Śaṅkara and Kashmir Śaivism—is not clear; but that they are not unconnected with each other is shown, for instance, by the well-known ‘hymn to Dakṣiṇā-mūrti’ which is held sacred by the Advaitins and which, though referring to creation as illusory, is in other respects so very reminiscent of the present creed. There is also a tradition that Śaṅkara visited Kashmir about the time when this creed is known to have arisen there. The religion of the province, at the time, was a mixture of dualistic Śaivism and Buddhism; and it has been suggested that its transformation into the uncompromising monism which it became thereafter was, in all probability, due to his influence.

As in other religions and systems of Indian philosophy, here also man is regarded as being in bondage, and his goal in life is conceived as escaping from it. It will be seen from the above account that the primary source of bondage in this case lies in the wrong belief that one is different from God. Freedom is consequently taken to result the moment the individual overcomes that belief by realising his identity with all-comprehensive Godhead. The doctrine is thus not only monistic but also mystical. The knowledge or enlightenment that is the means to freedom is here termed recognition (*pratyabhijñā*), in order to emphasise the point that the individual is ever in reality free; and it is from this term that the doctrine receives its name of *Pratyabhijñā-Śāstra*. In addition to recognition, the grace of God (implying its complement of loving devotion on the part of man) is also mentioned in the present work as a means to freedom. A doubt is expressed more than once in the notes (e.g. p. 130) that this may not be a genuine feature of the doctrine, since it is otherwise so thoroughly ‘philosophically oriented’. But there seems to be no ground for the doubt, because there are several other instances in Indian thought of such combination of *jñāna* and *bhakti*. We have striking examples of it in the Bhagavadgītā, and in more formal systems like the Yoga of Patañjali and Advaita as expounded by Madhusūdana Sarasvatī.

The staff of the Adyar Library are responsible for the editing of the Sanskrit part of this volume. The English rendering and notes are by another scholar. They are, however, not original but authorised translations from the German of Dr. Emil Baer. The rendering is simple and accurate, and the notes section is packed

with information which is valuable not only to students of Śaivism but also to all that are interested in Indian thought as a whole. The account of the doctrine of *nāḍīs* and *cakras*, found on pages 143-9, is a good instance of the usefulness of these notes and of the care with which they have been prepared. The book also contains a contribution by Mr. Suryanarayana Sastri of the Madras University, in which the monistic and dualistic types of Śaivism are contrasted in a very lucid manner.

M. H.

LE PRĀKRṬĀNUŚĀSANA DE PURUṢOTTAMA, PAR LUIGIA NITTI-DOLCI, PARIS—1938. (*Cahiers de la Société Asiatique*-vi). pp. xxviii and 141; and LES GRAMMARIENS PRAKRITS—Luigia Nitti-Dolci, Paris, Adrien-Maisonneuve, 1938. pp. 227.

Students of Prākṛt dialects, their history and grammar will welcome these two books of Luigia Nitti-Dolci which constitute a very useful addition to the literature on the subject. The first is a critical edition with translation and notes (in French) of a work on Prākṛt grammar dating from the twelfth or more probably the thirteenth century A.D. The edition is based on a facsimile of a unique Nepalese ms. which bears a date in the Nepalese era corresponding to 1265 A.D. and which is preserved in the Khatmandu library. A second facsimile was presented to the Viśvabhāratī institute at Shantiniketan by the government of Nepal. The first two folios contain parts of some other work, also on Prākṛt grammar, and this anonymous fragment has also been edited here along with the work of Puruṣottama. The editor is inclined to identify our author with the author of *Trikāṇḍaśeṣa*, a lexicon supplementary to the *Amarakośa*, of the *Bhāṣāvṛtti*, a commentary on the *Aṣṭādhyāyī* of Pāṇini, and the *Hārāvalī*, a lexicon of synonyms and homonyms and rare words. The *Ekākṣarakośa*, *Dvirūpakośa* and *Varṇadeśanā*, are other partial lexicons attributed to this indefatigable lexicographer and grammarian. Puruṣottama was a Bengali Buddhist, and his Prākṛtānuśāsana belongs thus to the Eastern school of Prākṛt grammar, of which it is the earliest extant work. The first 87 sutras of the work comprising the first two chapters and perhaps the first sutras of chapter III, all dealing with Mahārāṣṭrī, have not been preserved. In the notes the Editor has traced all the parallels in other Prākṛt grammarians and cited examples to illustrate the rules of Puruṣottama wherever possible, a task by no means easy in the absence of a commentary or of any examples furnished by the author. There are indexes to the sutras, to

technical terms and to Sanskrit and Prākṛt words which facilitate reference. The date of Rājarāja, the patron of Keśavasvāmin of the Nānārthārṇavasamkṣepa, has embarrassed the editor (p.xiii, n. 1) ; the royal patron was Rājarāja II A.D. 1146-1173. (The Cōlas, ii, p. 551) .

Les Grammariens Prakrits is a very well studied work on some of the more important Prākṛt grammarians and the problems centring round their names and works. The author states distinctly : ' I have spoken only of the Prākṛt grammarians accessible to me ; citations will be found only from works that I have myself consulted ' (p. 4) . For this reason and as a better indication of the contents of this book, *Quelques Grammariens Prakrits* would have perhaps been a better title for it.

The estimates of the work of each grammarian studied and its significance are of great value to the student, and the attempt of the author to correlate the work of the grammarians to the literary texts of their acquaintance has generally yielded very satisfactory results. ' Vararuci is a very sure guide to the *Sattasāi* of the Hāla and in general for the *gāthā* in Mahārāṣṭrī ; the eastern grammarians knew Śurasenī very well, and in general the dialects employed on the stage. Hemacandra could be consulted with profit on the apabhramśa of the *dohā* and so on. But on the contrary we should not go to Hemacandra for particulars of Śaurasenī and Māgadhi which are very much neglected in his grammar ' (pp. 171-2) .

The author is inclined to uphold the antiquity and authenticity of Vararuci's text against critics who have attacked both, and points out that the discovery of the fragments of the dramas of Aśvaghoṣa demonstrates the danger of the usual arguments *a silentio* employed in discussions of this subject. Vararuci's influence on the Eastern school of Prākṛt grammarians (pp. 110, 115) and his relation to Hemacandra (157) are brought out in the chapters dealing with these later writers ; and the plan of a new critical edition of Vararuci is adumbrated (pp. 35 ff.) .

The chapter on Bharata is particularly valuable for the new edition of Bharata's verses on Prākṛt (from a Nepalese ms.) accompanied by a translation, and for the somewhat paradoxical conclusion drawn from Bharata's data, viz., that according to the Nāṭyaśāstra the characters on the stage speak in a Prākṛt akin to Mahārāṣṭrī and sing in Śaurasenī (88) .

Among the grammarians of the Eastern school, as Grierson designates them, Mārkaṇḍeya earns high praise from the author for his erudition and probity. He is so exact in his citations that

we may safely accept his testimony even for works that we do not possess any more (104). His date is sometimes stated to be the seventeenth century; but the facts that he cites no author later than the middle of the eleventh century and that his *saṭṭaka* called *Vilāsavatī* seems to be cited in the *Sāhityadarpaṇa* (end of the fourteenth century) have to be noted, and it is possible that Mārkaṇḍeya wrote in an earlier epoch than the period to which he is usually assigned. A new edition of Mārkaṇḍeya's *Prākṛt-sarvasva* is a desideratum (102).

In the revised scale of valuations put forward by our author Kramadīśvara and Hemacandra come out rather badly. The former is not nearly so useful as Cowell was inclined to think, and helps only to confirm the text of a sūtra of Vararuci, and even that only in cases of agreement (141). Hemacandra, 'who does not shine with any particular brilliance', owes his great name to Jaina propaganda somewhat hastily endorsed by both Indian and European scholars (148). Simharāja again is so little interesting that our author regrets the great zeal and competence lavished on his text by Hultsch (185). Lastly, 'though his faith and his good faith' are alike remarkable, Hoernle failed to recognise what was evident in the manuscript material handled by him, viz., that Caṇḍa's *Prākṛtalakṣaṇa* in its present form is a very recent work parts of which were translations from more ancient Prākṛt material (210).

Some general ideas that have gained currency since the days of Lassen on the history of Prākṛt grammatical writings are vigorously combated by the author. The most important of these are the notions that the age of a grammarian could be determined from the number of dialects dealt with by him, and that the high place accorded to Mahārāṣṭrī in all grammars generally is due to its close resemblance to Sanskrit. There is nothing, according to our author, to warrant the assumption that the later grammarians describe many more languages than the earlier ones. This depended more on the purpose of the author; a Jaina writer was interested for instance only in the language of the Jaina sacred literature, whereas a writer who wrote for the stage, like Bharata, had to treat of the many varieties of Prākṛt employed on the stage. The date of a grammar is thus independent of the number of dialects it treats of. Whatever might have been the true reason for Mahārāṣṭrī engaging the primary attention of the grammarians, the author's criticism of Pischel for his citing only one half of the verse on Mahārāṣṭrī (p. 2) is not tenable. It is surprising that Luigia Nitti-Dolci should say that Daṇḍin was not thinking of a linguistic classification of the dialects when he placed Mahārāṣṭrī

first among the Prākṛts ; for that is precisely what he was doing as appears from the verse immediately preceding *Samskṛtam nāma daivī vāk*.

Whether every one of the propositions put forward by the author of this excellent treatise commands assent or not, it will be clear from the brief indication given above of the nature and scope of some of these propositions, that they are based on long and careful study carried out with great critical acumen and conscientious thoroughness, and that they are thus entitled to the most serious attention of scholars.

K. A. N.

ANNUAL REPORT OF THE ARCHAEOLOGICAL DEPARTMENT, BARODA STATE, FOR 1936-7. By Jñānaratna Dr. Hirananda Sastri. 1938 (Baroda State Press). Price Rs. 2-7-0.

This is a record of the very good work done in the field of Archaeology in Baroda under the able and distinguished guidance of Dr. Hirananda Sastri. Perhaps even more interesting than the work already accomplished and reported are the plans adumbrated for the future, such as the systematic listing and classification of Archaeological monuments, the revision of Burgess and Cousens' *Architectural Antiquities of Northern Gujerat*, and the proposed memoir on the many interesting mural paintings in the State, of which one is reproduced and some others briefly described in the Report. Among the notable finds of the year under report are an interesting clay-mould found near a goldsmith's furnace—calculated to give some idea of the processes employed in the quick fashioning of repoussé metal work in the 3rd or 4th century A.D.; and a hoard of over 2000 silver coins of Kumāragupta I.

K.A.N.

THE SAMGRAHA CŪḌĀMAṆI OF GOVINDA AND THE BHATTARA-MELAKARTA OF VENKATA-KAVI, Edited by Pandit S. Subrahmanya Sastri, F.T.S., with a critical introduction in English by T. R. Srinivasa Ayyangar, B.A., L.T. The Adyar Library, 1938, pp. xxxix and 350. Price Rs. 5.

The publication of Samgraha cūḍāmaṇi by the Adyar library is an event of outstanding importance in the music world. This rare work is the lakṣaṇa grantha for modern South Indian music. Some scholars in the last century knew its existence and were even aware of its contents, but they kept it a guarded secret. Even Tachur Singaracharlu was not able to get at the work in its complete form.

The rāga system is the foundation upon which the structure of Indian music is built. The Janaka-Janya system of classification is many centuries old. But the scheme of 72 melakartas based on the twelve notes of the gamut originated with Venkaṭamakhi. The scheme is itself perfect and workable. On account of the paucity of rāgas with the full complement of the seven notes in both the ascent and descent in his time, Venkaṭamakhi was obliged to choose as melas even rāgas wherein the seven notes were just represented when the ārohaṇa and avarohaṇa were taken together. This accounts for Janya rāgas like Kedāragaula, Śrīrāga and Nabho-maṇi figuring as Janaka melas in his scheme. Govindāchārya who came after Venkaṭamakhi remedied the defects in the latter's system. He stuck to the view that Janaka melas must be krama sampūrṇas in both the ārohaṇa and avarohaṇa; in other words that they must possess the full complement of the seven notes in both ascent and descent and also that they should regularly ascend and descend, i.e., should not take a *vakra* or zigzag course. This conception of a Janaka mela is scientific and immediately appealed to the scholars and composers. Govindāchārya gave a new nomenclature for his 72 melas incorporating in it a few of the older names as well. It is this nomenclature, i.e., the Kanakāṅgi-Ratnāṅgi paddhati that has been followed by Tyāgarāja and other eminent composers. The author of the Samgraha cūḍāmaṇi also avoided the misleading nomenclature of Pañcaśruti Rīṣabha and Pañcaśruti Dhaivata of Venkaṭamakhi and substituted the real intelligible names: Chatuśśruti Rīṣabha and Chatuśśruti Dhaivata. Rare rāgas like Jaganmohini, Jingla, Manjari, Kapi-nārāyaṇi and Kuntalavarāli in which Tyāgarāja has composed splendid compositions are mentioned in the work under review and not in any earlier works. Govindāchārya took pains to collect all the Janya ragas of his time and codified them under the 72 melas. From the point of view of rāga lakṣaṇa his work may be said to be more complete than every other work written before him. The 72 melas of Govindāchārya live to-day in the compositions of Tyāgarāja and in the monumental work, the 72 Melarāgamālikā of Mahā Vaidyanātha Iyer.

The illuminating English introduction to the book offers solutions for many of the controversial points relating to the science of South Indian music. Mr. D. K. Joshi had access to the rāga lakṣaṇa portions of the Samgraha cūḍāmaṇi and he had them printed in his work 'Rāga Lakṣaṇam' (Arya Bhushan Press, Poona). The slokas in some places appear in a slightly modified form in his book. It is interesting to note that whereas Mr. Joshi's

work gives the current name for the 20th mela (Naṭabhairavi) the Samgraha cūḍāmaṇi gives the name as Narabhairavi. Both the prefixes however give the serial number 20.

Lakṣaṇa gītas illustrative of the Janya rāgas are given with notation in the latter part of the book under review. The thanks of the music world go to the Adyar library and the present learned Editor Pandit S. Subrahmanya Sastri for having placed before us this authoritative work.

P. SAMBAMURTI,

ROBERT J. T. BELL: CO-ORDINATE SOLID GEOMETRY, BEING CHAPTERS I TO IX OF 'AN ELEMENTARY TREATISE ON CO-ORDINATE GEOMETRY OF THREE DIMENSIONS'. Price 7sh. 6d. Macmillan.

This is an abridgement of Prof. Bell's original book for the benefit of the pass course student of British Universities, cutting out the more advanced chapters relating to the General Equation of the second degree, Intersection of quadric surfaces, Confocal Quadrics and Differential Geometry. Consequential alterations in the miscellaneous examples at the end of the book have also been made. Prof. Bell has also added an appendix suggesting simpler treatments of certain propositions.

The appearance of this book makes, however, no difference to students of most Indian Universities. For, the mathematics pass course in India comprises very little or nothing at all of co-ordinate solid geometry, while the honours course requires at the very least Confocal Quadrics and the General Equation of the second degree, which have been omitted in this new book.

Prof. Bell's Elementary Treatise is being widely used in India and has been deservedly popular as a text-book for the honours classes, for its clear exposition and analysis of the subject matter, and for its excellent exercises. But the modern tendency in the teaching of geometry is not so much to drill the student in the solution of problems, as to instil in him an understanding of the significance of 'invariance' and 'change of axes', and the ability to view metrical relations as a special case of projective or descriptive relations. An elementary text-book which is as clear as Prof. Bell's and is written from a viewpoint suitable for initiating the student into these ideas, is a great desideratum for the requirements of present day teaching in India.

R. V.

STUDIES IN SORGHUM*

By

G. N. RANGASWAMI AYYANGAR, F.N.I., I.A.S.

Sorghum is the premier cereal for tracts with low rainfall. It is an important food crop, especially of the poor. As a member of the grass family, studies on it have a wider import and applicability to the whole group of cereals and to the wider range of grasses. Unlike maize there are not different inflorescences accentuating the differences in the sex of the floral parts. Unlike maize and the Paniceae, Sorghum is awned. With its heteromorphous florets and typical grass inflorescence, it could be claimed to be an ideal object of study. It is a giant grass and many characters difficult of pursuit in small and minute grasses, could be easily studied in this Great Millet. Moreover, its grains are big and develop in the open and provide a comprehensive colour response, denied to grains enclosed in their husk.

Sorghum is African and Asiatic in origin. The realisation of its value as a cereal and the consequent early introduction into America, the land of maize, has given its study an invaluable impetus. Among big grasses, the bamboo is a giant, but is not a cereal. Sugarcane is big, but is not a grain producer. Maize is a big cereal, but its exacting requirements have impeded wide distribution. Sorghum is thus unique in the field. Providing a valuable food for man, and an abundance of valuable fodder for cattle, sorghum, with its drought-resisting qualities holds a high place in the economy of man. To a botanist and geneticist, it is an ideal object for study.

Through the courtesy of the Director, Royal Botanic Gardens, Kew, I have been able to get and grow a world wide collection of sorghums gathered for study by Mr. Snowden, under the Bentham-

* The Maharaja of Travancore Curzon Lectures of the University of Madras, delivered at the Agricultural Research Institute, Coimbatore, on the 1st and 2nd of December 1938. (Summarised.)

Moxon Trust. In these lectures I will endeavour to present some of the salient points of the latest knowledge about the botany and genetics of sorghum.

Seedling Colours. The child is the father of the man. Seedling characters are an index to the characters of the adult. Seedlings have a shoot and a root. The shoot may be purple, deep purple, or green. The root may be reddish purple, blackish purple or brown. When the shoot (coleoptile) is coloured purple (gene PC) the axil of the leaf-sheath is also coloured purple. When the shoot is deep purple, the axils are coloured deep purple and in addition to this the auricular junction (gene PJ), the outer margins of leaf sheaths and the nodal bands are also coloured purple. When the coleoptile is green all the above parts are green. When the root is coloured purple (gene P) the leaf-sheath and glume are also coloured purple. There are also patches of colour on midrib, leaf-blade, pith, internode, panicle branches, pulvinar region, pedicelled spikelets and grain. When the root is brown the leaf-sheath and glume are brown. In the shoot the pigment is only epidermal and develops in light. In the root both external and internal tissues are pigmented and the pigment develops even in darkness and is retained even after death. The mesocotyl responds like the shoot when exposed and like the root when buried.

The wild sorghums have mostly a deep purple coleoptile (shoot colour). This gives them a deep purple leaf axil and a purple auricular and nodal band. Their roots are mostly blackish purple (gene q) in colour and consequently their leaf-sheaths and glumes are blackish purple.

The bulk of the Asiatic grain sorghums which belong to the *durra* sub-series have got the common purple coleoptile. In the adult plant the axil only is coloured purple. The deep purple coleoptile with the attendant deep purple axil, and purple sheath margin, junction and nodal band is comparactively rare and is met with only in *S. caudatum*, *S. caffrorum*, *S. dochna*, and *S. nervosum*. The green coleoptile is very much in evidence in the *caffra* and *guineensia* sub-series of cultivated sorghums which are predominantly African.

The roots of most sorghums are coloured purple. When so coloured, the leaf sheath and the glume are also coloured purple. The purple of the organs viz., root, leaf-sheath and glume, may be reddish purple or blackish purple. The former is very much in evidence in the Asiatic sorghums, and the latter in the African sor-

ghums. All the wild sorghums have their roots coloured blackish purple. In cultivated sorghums there are more blackish purple roots than reddish purple ones. When the roots are brown (without purple) the leaf-sheath and glumes are brown. *S. Roxburghii* the group to which the *Talaivirichan cholam* of Coimbatore and the *Konda Jonna* of the Northern Circars of the Madras Presidency belong, has the largest number of brown rooted types. A green coleoptile and a brown root, make the plant green throughout and this minority type has the largest representation in *S. Roxburghii*. It has been found that there is a linkage between juiciness of stalk and purple in the leaf-sheath, and it is no wonder that in many of the *Talaivirichan cholams* the stalks have poor fodder value, being used more for fuel and thatch. Feeding tests at the Millets Breeding Station show that animals prefer stalks with reddish purple leaf-sheaths to those with blackish purple ones, a further preference among coloured sheaths.

PC (purple coleoptile) is a monogenic dominant to pc (green coleoptile.) Factor PJ (deep purple coleoptile and purple junction) which could express itself only in the presence of PC, is a simple monogenic dominant to pj. The coleoptilar pigment gene PC is linked to the root pigment P with a crossover value of about 18 per cent. Thus the colours of the shoot and the root of the seedlings of sorghum afford a clue to the distribution of the purple pigment in the adult plants.

Chlorophyll Deficiencies. Another important character seen in the seedling stage is chlorophyll deficiency. These deficiencies are common and are of various kinds. They may be albinotic, entirely or partially. They may be pale green. The pale greens may die early or survive. A new instance of seedling death has been met with. In this the seedling leaves are normal green. Five to 6 leaves are formed. There is then a cessation of growth, a drying of the leaves and death within a month of sowing. This deficiency and consequent death has proved a simple recessive to the normal healthy seedlings. A variant of this experience has also been met with. In this a few of the weak seedlings have a poor and dwarfish growth and manage to reach the heading stage and subsequently die without producing an earhead.

The occurrence of lethal and surviving pale seedlings has already been reported on. There are indications of a linkage between the purple pigmentation of the coleoptile and a type of chlorophyll deficiency resulting in lethal pale green seedlings. A new type of patchy pale has been met with in a selection from

Rhodesia. Light green patches develop on the early seedling leaves, the patches being evident more in the lower surface. These patches are confined to the first few seedling leaves, the later leaves being normal. The seedling mass is light green in colour. The plants developing from these seedlings are weak and are easily susceptible to the attack of the shoot borer. This character has proved a monogenic recessive to the normal green.

Depth of Leaf Green. There are three grades, dark green (*S. caffrorum*) green (most of the sorghums) and light green (broom corn and Chinese sorghums.) These have a genic background. The darker green is dominant to the lighter.

Leaf-tip Hairiness. The groups of sorghum, *S. caudatum*, *S. cernuum*, *S. durra* and *S. caffrorum*, have minute spinescent hairs towards the tip of the leaf blades on their upper surface. These are best seen in young and fully developed leaves. In older leaves they tend to fall off. In segregations with glabrous leaves, the hairy condition has proved a monogenic dominant. *S. Roxburghii* has glabrous leaf-tips. Its stigmatic tips show a tendency to be featherless. There is a linkage between glabrous leaf-tips and featherless stigmatic tips with a crossover value of about 25 per cent. *S. Roxburghii* is conspicuous in having no awns. There is a linkage between glabrous leaf-tips and nil awns with a 43 per cent crossover. Between nil awns and featherless tips there is a linkage with a crossover value of 18 per cent. There is thus a close relationship between leaf-tips, awns and stigmatic feathers.

Leaf-tip Drying. The tip of the leaf (from the fourth leaf onwards) dries up in one pure line of Sudan grass from Russia. Concurrently with this dessication there is the drying up of the tips of the panicle. This concurrent manifestation of dessication is a simple recessive to the non-dessicated condition.

Yellow Midribs. Midribs are coloured white when pithy and dull green when juicy. Both types have no pigment other than green. A type which develops an yellow pigment in the midrib of leaves when fresh, which pigment disappears in older leaves, has been met with in a few varieties from Baluchistan. This type is a simple monogenic dominant to the normal midrib colour and is independent in inheritance of the D factor determining the juiciness of stalk.

Junctions—Broad and Narrow. The normal ligulate and auriculate condition has been noted to be a simple monogenic

dominant to the e-ligulate and non-auriculate condition. When non-auriculate, the spikelet-free area in the panicle branches is very much reduced and the cushiony pulvinus at the base of the panicle branch is absent. The auricular structure which for the sake of convenience is called the junction (it is at the junction of the leaf-blade and the leaf-sheath) is usually broad and occasionally narrow. A broad junction is a monogenic dominant to a narrow junction. In both cases the pulvinus is present. When the junction is narrow, the spikelet free area in the panicle is comparatively less than when the junction is broad and the leaves make a narrower angle with the stem.

Nodal Band. There is a band of soft tissue above the nodes, and at the very base of the leafsheath. The colour response on this band is related to that on the grain and dry anther and is of two kinds. The first type of colour is anthocynaic and belongs to the coleoptile-axil purple. When the coleoptile and axil are deep purple, the nodal band turns purple. Along with this nodal purple the junction is markedly coloured purple and the factor giving a deep purple coleoptile has therefore been designated PJ. This purple is a monogenic dominant to the green in the band.

The second type of purple is darkish and manifests on a reticulated background. This is associated with a sienna coloured dry anther. When there is a brown wash on the grain (factor B) it inhibits this reticulated purple and leaves the node green. A similar effect is produced in red grained plants. This type of colour could show only in the yellow grains which have the W (whole colour) and I (intensification) factors and have not red or brown. The association between the sienna anther and the reticulated purple nodal band is so great that it is automatically a dominant or recessive to a green nodal band according to the segregate in which this sienna anther finds itself. The reticulated purple nodal band is a monogenic recessive to the ordinary purple.

Usually, whenever the nodal band is hairy, the glume is also hairy. This concurrent manifestation is only an aspect of a close association between the manifestation of hairiness at these different places. Experiences of a pure hairy nodal band with simple monogenic segregations for hairiness on the glume have been recorded and *vice versa*.

Purple in Leaf-axil. The presence of this purple is brought about by two complimentary genes. Ratios 9:7 have been obtain-

ed between P in the axil and no colour there. It has already been stated that this axil colour goes with the colour of the coleoptile (PC.)

Brownish Yellow Mechanical Tissue. The mechanical tissue in sorghum is usually not prominently coloured. A type of brownish purple coloured mechanical tissue that occurred as a mutant is already on record. Another type that is brownish yellow (without purple and African in origin) has been met with. In crosses with varieties in which the mechanical tissue is not coloured, 9:7 ratios of colourless to brownish yellow mechanical tissue have been obtained, showing the bi-factorial complimentary nature of the inhibitory factors at work.

Juiciness of Stalk. In sorghums with pithy stalks the midrib of the leaf is white in colour. Where the stalk is juicy the colour of the midrib is a dull leaden green. In juice extraction the dull is about twice the white. The white midrib (pithy stalk-factor D) is a simple dominant to dull midrib—(juicy stalk—factor d.) These two types of midribs are the commonest. There are other variants of these two types, and these are dull white and streaky dull. The dull white is about two percent more in extraction than the white and is a simple recessive to it. The streaky dull is about two percent less in extraction than the dull and is a simple dominant to it. There is a linkage between the juiciness in the stalk and purple in the coleoptile and axil. One of the two factors responsible for this pigmentation is linked to the streaky dull midrib with about 17 per cent crossover value and to the dull midrib with about 28 per cent crossover value.

Peduncle. The peduncles in sorghum earheads are usually straight. Some are slightly wavy. This waviness predisposes to goose-necking. In Sudan grass in which there is good emergence of the earhead the wavy peduncle shows itself well and is a simple recessive to the straight one.

Peduncular Scar. Below the panicle there is usually a scar from which occasionally an odd floral spur arises. This scar is very possibly ligular and auricular in nature. Proliferated abnormalities indicate that this is the vestige of the final leaf sheath fused to the peduncle. In plants that are e-ligulate and non-auriculate this scar is absent. Panicle abnormalities suggest that the grooved central stalk of the panicle has arisen by the fusion of the spikelet-free areas of many panicle branches. The broom corns

afford an illustration of this. The goose-necking of individual panicle branches in this sorghum provides additional evidence.

Panicles. Some panicles have the peculiar shape of a spindle which is acicular. This shape of panicle has proved a simple dominant to the common oval type. A medium compact panicle is a simple dominant to a compact one.

The central axis in a sorghum panicle usually ends with a bunch of branches. Stray instances occur in which the potentialities of the axils to lengthen out are shown by the odd occurrence of a spur which is sparsely spikeleted. In one of the pure lines of Sudan grass, this abnormality has proved recurrent.

Glume Texture. The glumes (both outer and inner) in grain sorghums are mostly coriaceous. When the leaf sheath is coloured purple, both the coriaceous glumes are coloured purple. When the leaf sheath is brown, the glumes are brown but may have a coloured base or coloured specks on the glume. In the *nervosa* sub-series of sorghum, *S. nervosum* has a herbaceous outer glume which does not take colour and a coriaceous inner glume which takes colour. In the same sub-series *S. membranaceum* and *S. melaleucum* have both the inner and outer glumes papery and non-receptive to colour. In *S. splendidum* both the glumes are neither papery nor coriaceous but crustaceous and receptive to colour. The inner glumes remaining coriaceous, the outer glume may be coriaceous or papery. The former condition is a simple monogenic dominant to the latter. Both the glumes being coriaceous is a simple dominant to both being papery.

Grain sorghums have evolved in a direction in which the outer glumes have become more and more coriaceous. Some glumes are herbaceous. Most of the leathery glumes are herbaceous at their top ends. In *S. dimidiatum*, the glumes are coriaceous in the lower half and herbaceous in the upper half. The division is sharp. In this sorghum there occurred a mutation which was wholly coriaceous. In crosses between the two types, the fully coriaceous glumes was a simple monogenic dominant. This throws light on the genic origin and evolution of the coriaceous glumes of the grain sorghums.

When the glumes are papery their edges could curve in. The curving-in may in some cases result in an interlocking between the edges of Glume II and III. This condition results in cleistogamy. The curved glume edge leading to interlocking in the papery glumes of some *S. papyrascens* is a simple recessive to the

normal edge. There could thus be a simple Mendelian segregation for Chasmogamy and Cleistogamy.

Glume Nerves. In coriaceous glumes the top of the glume is nerved. In herbaceous ones the nerves extend almost to the base of the glume. The top nerved condition is a simple dominant to the fully nerved condition. In coriaceous glumes the length of nerving at the top is influenced by the shape of the glume. When the glume is obovate the very top is nerved. When ovate the nerves are longer. The evolution of the sorghum glume seems to have been from an elliptic to an obovate condition. Glume nerves, a character that figures prominently in taxonomy, is thus Mendelian in behaviour.

Glume Wrinkling. The glumes are usually smooth rounded and convex. In some races there is a transverse wrinkle about the middle of the glume and in some instances below the middle. This wrinkle may occur in both the glumes. Complementary factors are at work. When either or both the factors are absent, the glumes are not wrinkled.

Glume Hairs. Glumes are glabrous or hairy. Hairiness is a simple monogenic dominant to the glabrous condition. When the hairs are thick and long the glumes are felty. *S. stapfi* has typical felty glumes. Felty glumes are a simple dominant to hairy glumes. A 9:3:4 ratio of felty, hairy and glabrous glumes has been obtained. The 4 "glabrous" glumes could, with care, be separated into 3 with a fringe of long hairs at the edges and 1 with short hairs. There are no absolutely glabrous glumes. Whenever the glumes are hairy the nodal band is usually hairy. In felty glumes, the nodal band has only ordinary hairs.

The hairs on the glumes, pedicels, and the callus are usually hyaline. In some African races these hairs show purple at flowering time for a short period. Purple hairs at these places are a simple monogenic dominant to hyaline hairs.

Awns. The awn in sorghum varies from being very rudimentary, to being very long. The long awn is a recessive to the very rudimentary awn. Dominant inhibitory factors have been at work. The inhibition may be absolute or partial. When partial there is 1:2:1 ratio of rudimentary, short and long awns, the shorts proving always heterozygous. Even in simple nil to long segregations the nils could be separated into those with strong and those with weak lemma tips. The weak lemma tip is heterozygous. The

rudimentary awn is likely to be confused with an absolutely nil awn. The real nil awn is a recessive to the awned conditions. Awns, when present may be constant or inconstant in manifestation. The condition of constant manifestation is a simple monogenic dominant to inconstant manifestation. There are genes affecting the length of the awn. In the absence of inhibitory factors, a long awn is dominant to a short awn. When inhibitory factors are present, a short awn is dominant to a long awn. In a Rhodesian pure line of *S. coriaceum* it was observed that the glume length was going along with the awn length and falling roughly into the segregates for awn length. Concurrently with the shortening of glume and awn length, there was a shortening of the length of the anther and stigma and the floral parts in general.

Purple Stigmas. Almost all the sorghums have a hyaline non-purple pigmented stigma. A few races have purple stigmas. These purple stigmas are a simple monogenic dominant to the normal colourless ones.

Hairy Styles. The styler arms of the stigma are usually smooth. In rare families as in *S. membranaceum* and *S. cernuum* they could be hairy. When so hairy the column of the awn which is usually smooth gets barbed. The hairy styler condition (barbed column) is a monogenic dominant to the normal smooth styles and columns.

In mature grains the styler bases usually fall off. In some families they persist and give a grain with a spiky tip. An instance in which the style with its hair persistent even after dessication, has been met with. -

Purple Blotched Anthers. Anthers with purple blotches on them somewhat similar to blotches on grains, have occurred in one rare instance. These coloured blotches are different from the colour that may appear on their whole surface or at the tip or the bottom of the anther sacs. In the case of blotched anthers the blotching is in spots that disintegrate the sac tissue and affect the pollen contents. The nett result of a number of blotches thus affecting the pollen is a degeneration of the pollen content, a shrivelled anther reduced in size and the consequent sterility. Blotched anthers have proved a simple recessive to normal anthers.

Non-elongation of Filaments. An interesting experience in anthesis (probably mutational in origin) has been noted in a variety of *S. halepense* from Palestine. Normally, at the time of

flowering the lodicules swell, the glumes open, the filaments elongate rapidly and the anthers come out and dangle. In this peculiar instance everything is normal except the fact that there is no elongation of the filaments. This results in the anthers being stuck up inside the flower. This unusual condition atrophies the development of the anthers, resulting in poor pollen content. There is dehiscence only in stray cases. The nett result of all this is sterility in the plants having this abnormality. Since, in the case of empty anther sacs there is normal elongation of filaments, it is deducible that non-elongation is conditioned by separate genic action. The stigmas being normal and receptive, there is much natural crossing. These reduced filaments are a simple monogenic recessive to the normal filaments. It is of fundamental interest to note the genic background to such a vital and well-known phenomenon as the elongation of the filament in gramineae, which is set down to a distension of the cell wall consequent on the rapid absorption of moisture from the anther. This rare phenomenon will be easily intelligible when we realise that it has been recorded that such a vital structure as the midrib in a grass leaf and so common and useful a phenomenon as tillering in grasses have been traced to the play of definite genes.

Pollen Sterility. Pollen mostly devoid of contents occurred in one of the South African selections. This proved a simple recessive to normal healthy pollen. In the hybrid condition the empty and normal pollen is about equal.

Brown Grain Linkages. There is a linkage between the Z factor (pearly-chalky grains) and one of the B factors for brown grains with a crossover value of about 30 per cent. One of the B factors is also absolutely linked to the factor that colours the tips of the basal lobes of the anthers, purple. Such a rare type was met with in *S. dochna*, var. *Irungu*. One of the B factors is also linked to one of the factors colouring the axil purple with a 5 per cent crossover.

Nucellar Brown Linkages. Many of the new African varieties with a brown coloured nucellus have acclimatized and are now growing well at Coimbatore, and in crosses with local varieties have given good populations. It has been found that a blackish purple leaf-sheath (q) is linked to the nucellar brown with a crossover value of about 21 per cent. The P factor is however independent in inheritance. Nucellar brown is linked with the factor arresting the development of starch grains resulting in dimpled

grains, with a crossover value of 32 per cent in the repulsion phase. The nucellar brown is also linked to the PJ factor that deepens the purple colour of the coleoptile and axil, and also colours the junction and other places. In this case the crossover value is about 22 per cent.

Multiple Seededness. This condition is the result of (1) extra fertility in the axil of one of the usually empty glumes, (2) the connateness of the grain, and (3) a combination of both of these. Connateness and extra fertility are governed by independent genes. The connate condition is a simple recessive to the normal single condition. In one of the connate races belonging to *S. caudatum* from Africa, the following repercussions to connateness were noticed—(1) stray twin midribs, (2) stray twin buds, (3) very rare twin panicles, and (4) twin flags.

Bulbils. In some double seeded varieties there is a tendency to the formation of bulbils. In one pure line the formation of stray bulbils is constant. The bulbillng tendency seems to be a concomitant of double seededness and a simple recessive to non-bulbillng.

Xenia. An experience of xenia giving one waxy grain to 15 starchy grains in a crossed earhead has been met with. In subsequent generations both 15:1 and 3:1 ratios have been obtained.

Scented Sorghum. A variety of sorghum from Tanganyika named "Kinungampombo" belonging to *S. conspicuum* var. *conspicuum*, Snowden, has scented grains. The scent is somewhat similar to scented rice. Seedlings emit the scent as also the adult leaves when crushed. In crosses with non-scented varieties the scented grain character has proved to be a monogenic recessive.

Mutations. Mutations occur occasionally in sorghum. Juicy stalked plants have appeared among pithy stalked ones; long awned plants among nil awned ones, and tall plants in a normal population. Compact earheads have occurred among the usual loose heads in both Sudan and Johnson grasses. The mutants may be homozygous or heterozygous.

Non-Mendelian Recurrent Abnormalities. (a) *Aestivation of the leaf-sheath.* The leaf-sheaths of sorghum like those of many grasses twist round the stalk alternately, clockwise and anti-clockwise. This constant alternation gives the plant a foliar balance. Instances have been met with in which a disturbance in this

orderliness has occurred. There may be two or more leaf-sheaths consecutively clockwise or anti-clockwise. As many as 13 could be so. When seeds from these aberrants are sown a few of the progeny reproduce the aberration. Sister heads that are normal also reproduce the same. The aberrating tendency lurks in the line.

(b) *Budless Stalks*. In all normal sorghum plants, every node except the topmost one has a leaf bud in the axil of the leaf-sheath. Even in the axil of the flag an axillary bud might occasionally develop and grow. A budless condition of the lower nodes is rare. There was one instance in which a pure line threw constantly a few budless plants. Heads from both the normal and the budless plants when sown, throw a few budless ones fairly constantly.

(c) *Headless Main Shoots*. Plants in which there is a suppression of the earhead in the main shoot are occasionally met with. In these the shoot develops normally and all vegetative parts including the flag are produced. The plant ends with the taper of the leaf-sheath of the flag. When the growing point is cut there are not even the rudiments of an earhead. The whole of the bud area is healthy. Though the main shoot does not thus elaborate the reproductive phase, the lower axillary buds could grow and produce an earhead. With the help of these heads this phenomenon could be perpetuated in a few of the progeny.

Striga-resistance. An African variety of sorghum, "Bongonhilo," is absolutely resistant to the attack of the flowering root parasite, striga. When crossed with a susceptible local variety, *Periamanjol cholam*, the F_1 plants were absolutely resistant. Back crossing with the local variety to tone up yield is in progress.

Genetics, Homology and Evolution. The study of genetics contributes its share in the investigation of problems determining the relationships of organs. If there is an essential structural identity or a concurrent response to the same stimulus, then a relationship can be adduced. For realising the importance of this aspect of genetics, the plant has to be looked at as a comprehensive whole, which is to-day the resultant of the dual actions of time and space. The evolution of the sexual parts from the vegetative ones is very ancient. The elaboration of the floral parts among themselves is relatively less ancient. Therefore, it is, that genes having their major effect upon the leaves have supplementary effects on the inflorescence but genes having their major effects on the inflorescence do not affect the leaves. With this limitation,

the helping hand that genetics gives in the understanding of the organic evolution of the plant and the broad trends of its racial history, is substantial.

The homology between the stigma and the awn in sorghum has been the subject of intensive study. In another instance, namely, the leaf and glume affinities, it is noted that there is plenty of evidence for their homology also. All previous observations in this direction have been confined to the lemma and that too in proliferated spikelets. The glumes were left severely alone. Awns occur very rarely on the palea also. The green nerves at the top of the glumes, the thicker lower portion and the thinner upper portion of the glume, the deeper green top and lighter bottom, the concurrent dessication of glume tip and leaf tip in certain families, the apical concentration of purple colour, the axillary purple pigment in both leaf and glume, the concurrent coloration or bleaching of sheath and glume are some of the points in support of this homology. In the series of leaves from the prophyll upwards to the inflorescence, the sheath at first constituting the whole leaf, becomes more and more subordinate to the blade. The blade increases in size and then decreases towards the flag. Odd plants are met with in which the flag is reduced even to rudiments. In x-rayed material blades are suppressed. When, occasionally, the sterile scar at the base of the inflorescence proliferates, it is found to tend towards a coriaceous sheath with little blade. "Callus" is the name given to the slightly elevated or projecting base of the first glume. When this is glabrous, the nodal band is glabrous. When this is slightly hairy, the nodal band (base of leaf-sheath) is hairy. When, as in *S. versicolor*, it has very long hairs, the nodal band has also long hairs. These points suggest the homology of the callus at the base of the glume and the nodal band at the base of the leaf-sheath. *S. dimidiatum* affords a direct proof in this homology. The lower coriaceous and the upper herbaceous zones of the glume and the fringe of hairs in the ligular and auricular area are very suggestive of a transformed leaf. When, in one instance the grain was hollow, the internode tended to be hollow also. The embryo and the leaf bud are both centres of reproduction. The intercalary and root zones are in proximity to the leaf bud. The nodal band protecting the bud is intimately connected to the pericarp of the grain and has affinities to it through related colour reactions. The sorghum plant could thus be visualised in terms of reproductive units. The genic analysis of the plant and the concept of homology give us a clue to the comprehensive grasp of this great cereal. The studies on it are thus likely to open our eyes to the wealth of data that awaits understanding in the wider world of cereals and grasses.

COMMODITY PRICES IN S. INDIA 1918-1935

By

DR. P. J. THOMAS AND MR. N. SUNDARARAMA SASTRY

SECTION I—CEREALS.

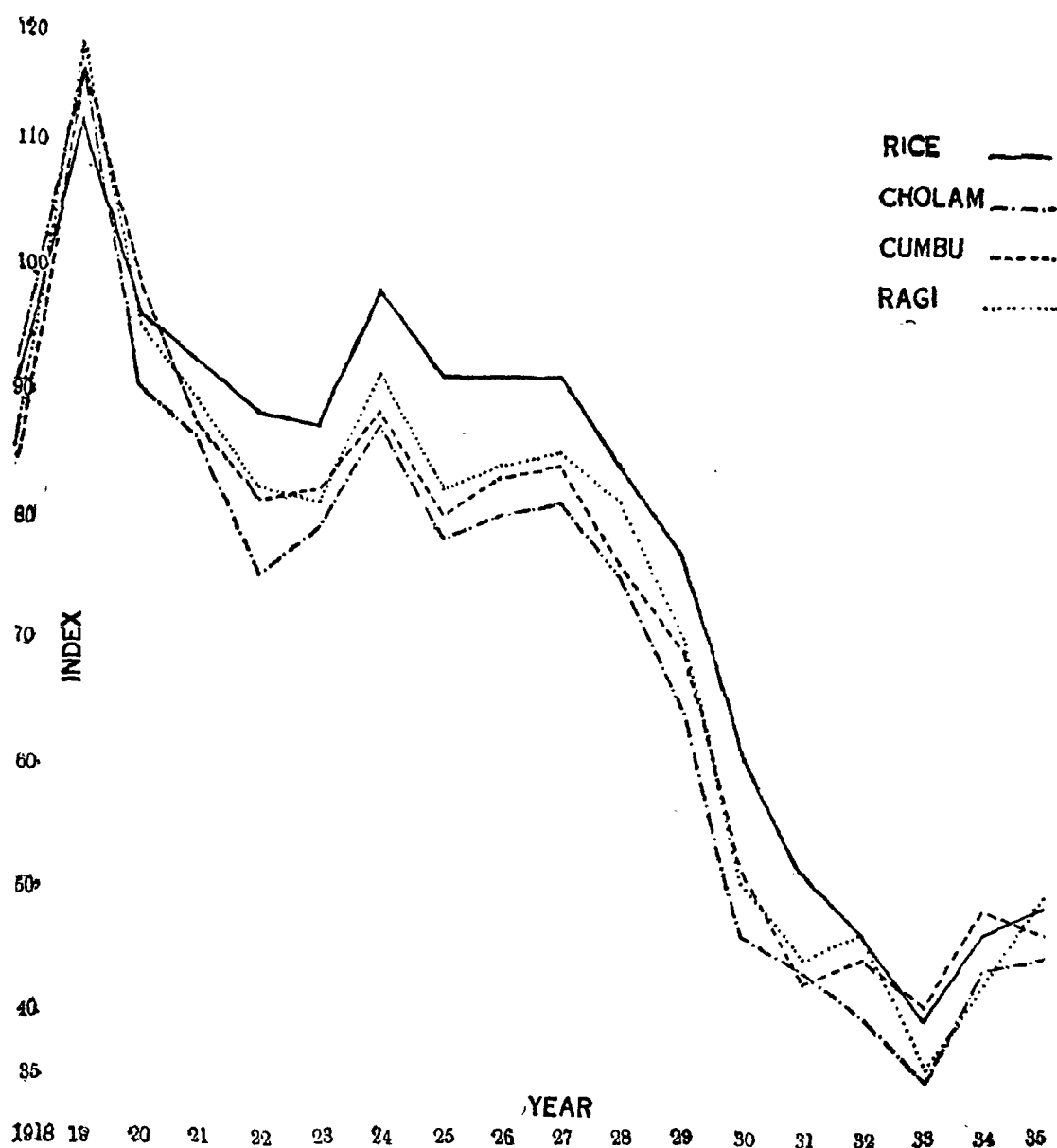
Rice and other cereals like cholam, cumbu and ragi are the most important of the crops raised in this Presidency occupying nearly two-thirds of the gross cultivated area. Rice is the largest single crop with an area of about ten million acres, and the other cereals occupy nearly 13 million acres. This clearly shows the very great dependence of the agricultural population on these commodities. Any changes in the prices of these commodities affect the great majority of the agriculturists who draw their incomes mostly from these crops.

Table I gives the average harvest prices of rice, cholam, cumbu and ragi for each year (fasli year) from 1918 to 1936. For convenience of study they are reduced to index relatives with the post-war quinquennium as base, and the following table gives the respective indices for each crop as also the 3 year moving averages. The graphs of all these series are given below.

TABLE I.

INDICES OF PRICES OF RICE, CHOLAM, CUMBU AND RAGI WITH THEIR 3 YEAR MOVING AVERAGES.

Year.	Rice.		Cholam.		Cumbu.		Ragi.	
	Index number.	Moving average.	Index number.	Moving average.	Index number.	Moving average.	Index number.	Moving average.
1918	91		93		85		86	
1919	112	100	116	100	116	100	118	100
1920	97	101	91	98	99	101	96	101
1921	93	93	87	85	88	90	90	90
1922	89	90	76	81	82	84	83	85
1923	88	92	80	81	83	85	82	86
1924	99	93	88	82	89	84	92	86
1925	92	94	79	83	81	85	83	87
1926	92	92	81	81	84	83	85	85
1927	92	90	82	80	85	82	86	84
1928	85	85	76	74	77	77	82	80
1929	78	75	65	63	70	66	71	68
1930	61	64	47	52	52	55	51	56
1931	52	53	44	44	43	47	45	48
1932	47	46	40	40	45	43	47	43
1933	40	45	35	40	41	45	36	42
1934	47	45	44	41	49	46	43	43
1935	49		45		47		50	



Index Numbers of Prices of Cereals.

From a glance at the table we find the following features common to all the commodities :

1. The maximum price for each commodity during the period under consideration is reached in 1919.
2. The minimum price was touched in 1933.
3. There was a sudden spurt in the prices of all commodities in 1919 followed by a recession in the subsequent year.
4. Between 1920 and 1927, the prices of all commodities fluctuated within narrow limits, with a slight tendency for decline in prices.
5. Fall in prices commenced for all commodities in 1927, this was slow in the first 3 years and very rapid after 1930.

6. The trough of the depression was reached in 1933 and afterwards there was a revival though the level of prices remained very much below the pre-depression level.

All these points are clearly brought out by the graphs, which indicate a very high degree of correlation between the prices of these different commodities. In fact, adopting Karl Pearson's product movement formula for correlation, the following results are arrived at.

Commodity.		Coefficient of correlation
Rice and cholam	..	0.97
Rice and cumbu	..	0.95
Rice and ragi	..	0.98

These results are to be expected because when there is a fall in the price of rice, more people from the poorer classes take up to it, and thus reduce the demand for millets, bringing down their prices also. On the other hand, when price of rice goes up, millets will be substituted at the margin, the demand for the latter increases, and consequently their prices also go up.

The following table gives the arithmetic mean, standard deviation and coefficient of variation of each of these commodities during the period under consideration.

Commodity.		Arithmetic mean.	Standard deviation.	Co-efficient of of variation.
Rice	..	72.7	19.0	26.1
Cholam	..	64.5	19.6	30.4
Cumbu	..	66.0	18.5	27.9
Ragi	..	67.1	20.0	29.8

We find that the average price of rice during the period was less than three-fourths of the base period and that of the millets about two-thirds. Rice occupies the first and cholam the last place in the series. From the column of standard deviations we find that the variations in prices are almost the same; but these variations are highest in ragi and lowest in cumbu. But as the mean values differ the coefficient of variation is a better measure of the variation. From that we find that the variation is highest in cholam and least in rice. This clearly shows that the price of rice was more stable with less fluctuation and higher average. On the other hand, the millets, out of which cholam is the worst, record greater fluctuations and a heavier fall compared with the post-war triennium.

Factors influencing the local price of rice

The normal price of a staple commodity like rice is settled by the cost of production at the margin, but when a country imports a necessary part of the commodity from another country, the marginal cost to be taken is that in the latter and not in the former. The following table gives the imports and exports of rice in Madras for the period under consideration.

TABLE II.
SEA BORNE TRADE IN RICE
(in thousands of tons)

Year*	Imports.		Exports.
	Burma.	Total.	
1918	219	219	121
1919	409	409	10
1920	244	244	38
1921	186	186	94
1922	234	234	86
1923	219	219	100
1924	257	257	91
1925	282	282	101
1926	176	176	153
1927	180	207	149
1928	276	417	147
1929		204	97
1930		241	104
1931		315	63
1932		298	66
1933		403	76
1934	742	1077	73
1935	897	1043	71

*Here the year is the official year from 1st April to 31st March.

From the above table we find that Madras Presidency is throughout a net importer of rice, and almost the whole of these imports are received from Burma. Of course for a couple of years between '33 and '34 there was the menace of large imports of cheap rice from Indo-China and Siam but this was soon curtailed by the imposition of import duty on rice. But during the last few years, specially after 1933, the volume of imports from Burma has increased tremendously. Just as cheap transport of the late 19th century shifted the margin of European wheat production to America, the influx of cheap rice from outside has reduced the price of rice in India to the level of Burmese prices. In Burma, the cost of production of rice is much lower than in India, because

it is cultivated in fertile rainfed lands paying less land revenue than similar land in India. It was estimated in 1934 that an acre under rice cost Rs. 24 in Tanjore and Rs. 17 in Burma. The cost of sea-transport between Burma and India is also lower than the rail transport between different stations in Madras. Therefore Burma has been able not only to beat out Madras rice from Ceylon but to sell rice in Madras itself.

That the Madras price of rice closely follows the price of rice in Burma may be seen from a comparison of the prices in Rangoon and some important centres in Madras during the last few years given in the following table.

TABLE III.

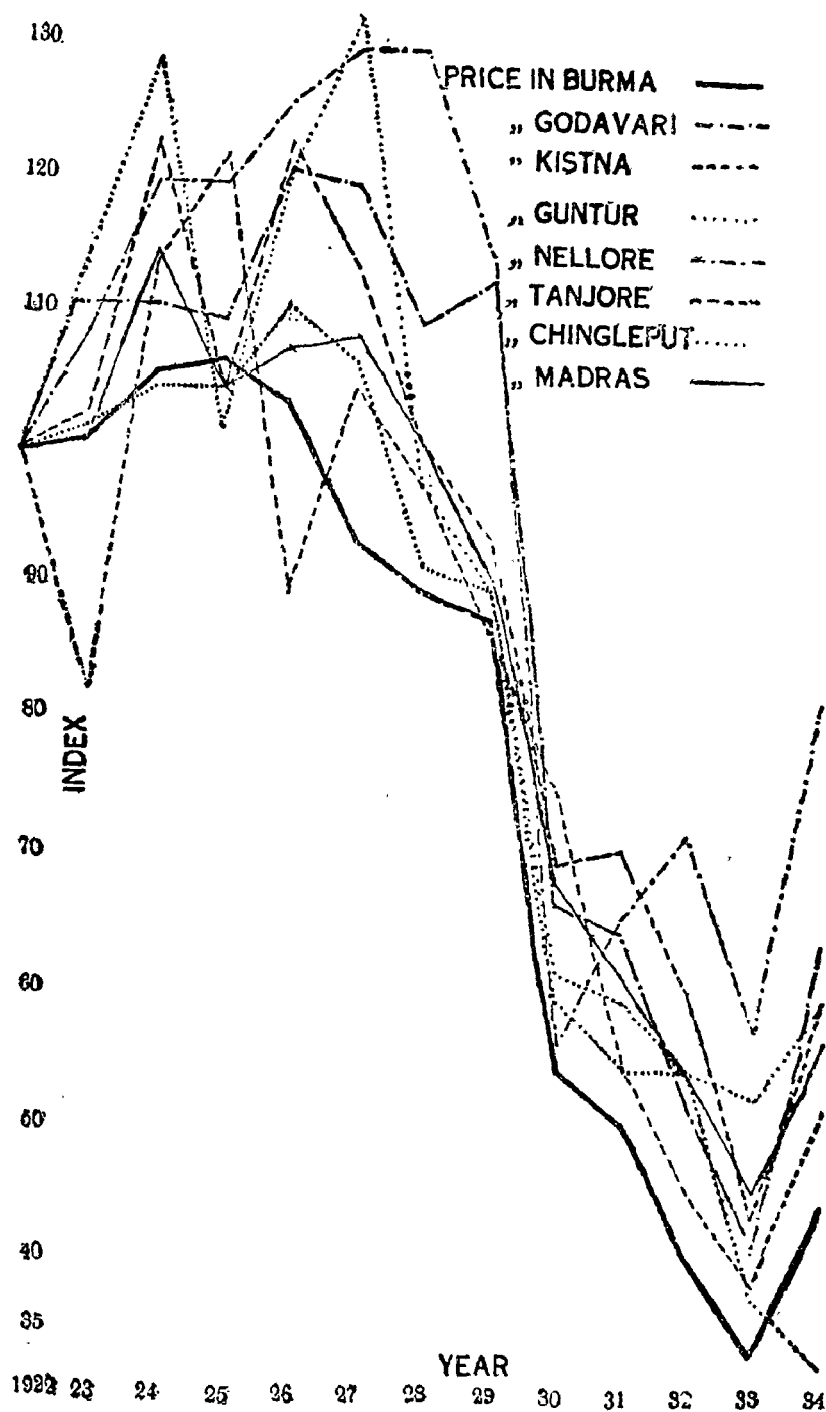
INDEX NUMBERS OF PRICE OF RICE WITH 1922 AS BASE.

Year.	Burma.	Godavary.	Kistna.	Guntur.	Nellore.	Tanjore.	Chinglepet.	Madras.
1922	100	100	100	100	100	100	100	100
1923	101	111	104	102	109	82	115	101
1924	106	111	123	105	120	114	128	115
1925	107	110	105	105	120	122	102	105
1926	104	121	123	111	126	90	121	108
1927	94	120	114	107	130	105	132	109
1928	90	110	101	92	130	98	98	101
1929	88	113	94	90	115	87	90	91
1930	55	67	70	60	57	75	62	69
1931	51	65	71	55	66	55	60	62
1932	41	52	61	55	72	46	55	55
1933	34	42	44	38	58	39	53	46
1934	45	64	60	33	82	52	60	57

Using Karl Pearson's product movement formula the following coefficients of correlation are arrived at.

Rangoon and Godavary	..	0.92
" Kistna	..	0.97
" Guntur	..	0.98
" Nellore	..	0.91
" Tanjore	..	0.89
" Chingleput	..	0.94
" Madras	..	0.96

The coefficients are very high and point out the great influence of price of rice in Rangoon in different markets. The accompanying graph also points out to the same conclusion.



Index Numbers of Prices of Rice.

Indo-China Rice and Indian Prices

In 1933-34 and 1934-35, there was a sudden increase in the rice imports from Indo-China and Siam and it was thought that this was the cause of the low price of rice in India at that time. With a view to counteracting this, a duty of 12 annas per maund was placed in April 1935 on imports of rice (not in husks) from foreign countries, but not on imports of paddy. As for the effect on prices, it was very limited. It is true that price rose from an average of Rs. 3.6 per maund in 1934-35 to Rs. 4 in 1935-36, but it

may not be correct to assume that the rise was entirely due to keeping out foreign imports; for we know that in that year rice production was at a rather low ebb in India (including Burma). According to the *Review of the Trade of India* for 1935-36, "The Rangoon market price of rice was generally on a higher level than in the preceding years" and "the quantity available for export between April 1935 and the end of the season was estimated to be smaller than in previous years" (p. 95). This led to some firmness in the Rangoon market and must have been the cause of the upward trend of prices in India. In spite of the continuation of the duty on broken rice in 1936-37, the prices continued to fall in that year due to a congestion in the Rangoon market on account of surplus production. Thus we see that the Rangoon market price of rice determines the price in Madras.

Evil Effects of the Fall in Prices

It has already been pointed out that rice and other cereals occupy a very important place in the agricultural economy of the province. So the continued depression in the prices of these commodities causes great misery to a very great section of the people both cultivators and farm labourers. The fluctuations of the price of rice immediately react on those of millets, and the former are shown to be regulated by the Rangoon market.

Raising Prices

The one conclusion that emerges from a study of the price trends is that in the present circumstances a rise of prices in India cannot take place so long as the Burmese prices remain low. But the immediate prospect of a rise in Burma is remote, considering the shrinkage in its foreign markets. In 1913-14, Burma exported 1835 thousands of tons of cleaned rice to foreign countries and even in 1931-32 the exports came to 2000 thousands of tons. But markets have contracted since and in 1935-36 exports came to only 1218 thousands of tons. Exports to Europe have greatly declined and even greater has been the fall in Chinese demand. It may be said that low prices may lead to substitution resulting in reduced production. But this may not always happen in countries where peasant economy prevails.

Economic recovery in Europe is bound to raise the price of rice, sooner or later, but if Burma and India are to benefit by it, we must improve the quality and grading of our rice and must carry on an active propaganda in Europe and America. Unless

such action is taken, it will not be possible to recapture lost markets.

Another alternative will be to restrict rice production. Restriction may be anti-social in the case of cereals in India, seeing that the existing production is hardly adequate for the proper feeding of her teeming millions. But it may be more justifiable in the case of Burma; for while Indian rice is produced mostly by peasants chiefly for their own consumption, the bulk of Burma rice is produced for the export market.

If prices continue to remain low in Burma, India will have to take action within the country. If prices are to rise, either demand must increase or supply must be restricted. In a country like India with millions of people unemployed or under-employed—and therefore underfed—the slightest increase in purchasing power will have immediate beneficial repercussions on the demand for foodstuffs. Hence the great advantage of an increase in employment at this juncture. Such increase may come from private enterprise or from public undertakings, and there is great scope for both in India to-day. But such attempts at raising prices internally will be nullified unless we control the imports of rice. When prices look up, stocks from Burma or Indo-China may come in and depress prices again. But it will not be advisable to keep out Burma rice by means of tariff. Even after separation, it is to the interest of both India and Burma to maintain friendly trade relations. It may be necessary, however, to regulate the imports of rice from Burma with a view to preventing a glut in the Indian market. Having regard to the conditions of the crops and the stocks available from time to time, licenses must be granted to importers. The object of the regulation, however, must be to prevent not only glut but also scarcity; for, we have to remember that rice is the staple food of the majority of India's population and that a great many more people are interested in it as consumers than as producers. For any such regulation, more accurate forecasts of rice crop are essential, and hence the importance of improving our crop statistics.

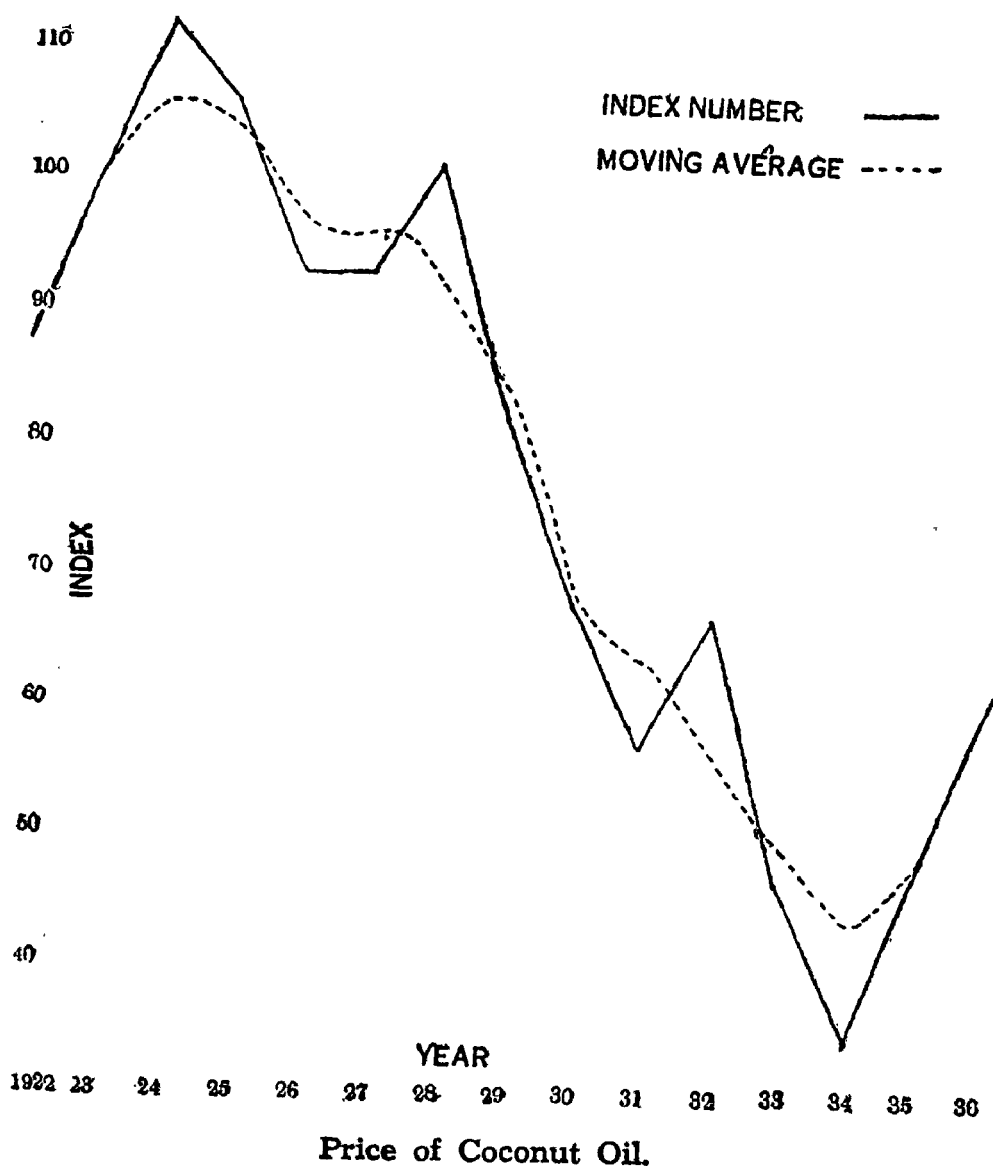
SECTION II—OIL-SEEDS

Next to food grains, oil-seeds occupy the largest area under crop with a total area of about $5\frac{1}{2}$ millions of acres out of a total cultivated area of 39 millions of acres in 1933-34. Among the different kinds of oil-seeds groundnuts occupy the first place with an acreage of about 38 lakhs of acres, followed by sesamum with

8 lakhs and coconut with nearly 6 lakhs. The other kinds of oil-seeds account for about 5 lakhs of acres. Of the above three, sesamum seeds are used mainly for domestic consumption and figure very little in either export trade or industrial production. But coconut products occupied a very important place in pre-war exports and are now extensively used in the production of soaps and margarine in the country. As regards groundnuts, they formed only a small part of export trade in pre-war years, but in the post-war period they proved the most important articles of export among oil-seeds and were to a very large extent responsible for the prosperity of the producers and traders. In the following it is proposed to consider the trends in the prices of these two commodities in the post-war period.

COCONUTS

Coconut palm supplies the means of subsistence to a large number of people in South India, especially to the West Coast.



In the distribution of this crop in this Presidency, Malabar district occupies the first place with an area of about three hundred thousands of acres. Next in order come E. Godovari with an acreage of a little over fifty thousand acres, S. Kanara with a little below fifty thousand acres and Tanjore with about thirty thousand acres. The rest of the districts account for about a little over a hundred thousand acres. The concentration of this crop in the West Coast is due to the existence of better natural facilities exploited by the hardworking, resourceful ryots of those areas.

The most important markets for coconut products exist in the Indian States of Travancore and Cochin. In the following table the Cochin annual average prices of white oil per candy of 684 lbs. in different years are given. The data are obtained from the *Indian Trade Journal*. Oil is selected because it is the chief product for which accurate figures are readily available. There is a high correlation between the prices of oil in different markets of the States and neighbouring British provinces and as we are interested only in the trend of prices the above figures are taken for want of accurate data in the Madras centres. The table in the Appendix gives the monthly average prices for the different years.

TABLE I.

PRICE OF COCONUT OIL FROM 1922 TO 1936.

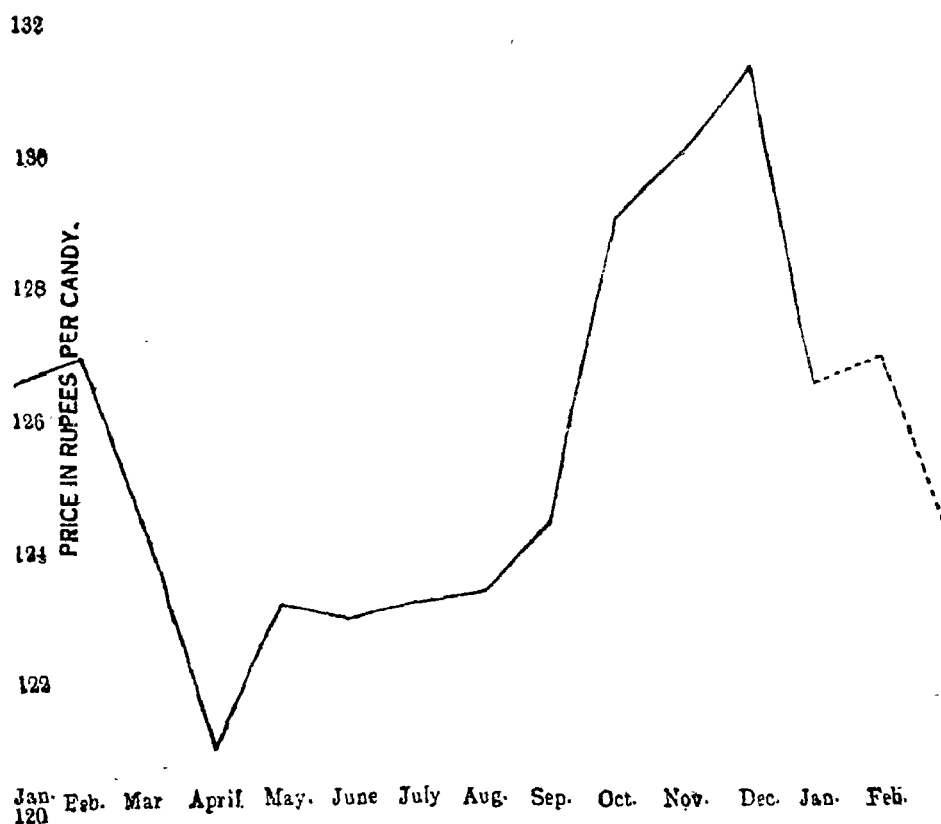
Year.	Average Price in Rs. per candy.	Index no. of price.	Three Year Moving Average.
1922	143.6	88	
1923	163.5	100	100
1924	182.1	112	106
1925	173.3	106	104
1926	151.3	93	97
1927	100.9	93	96
1928	164.4	101	92
1929	133.1	82	84
1930	110.8	68	69
1931	93.0	57	64
1932	109.7	67	57
1933	77.3	47	50
1934	57.0	35	44
1935	80.0	49	49
1936	100.7	62	

Note.—The base period for the index numbers is the triennium 1922, 1923 and 1924.

From the above table we find that the price touched the maximum level in 1924 and reached the minimum in 1934. From the year of maximum price there has been a tendency for fall in prices, until it reached the minimum value except for a slight spurt in 1928 and again in 1932. The rise in prices in 1932 is explained by the damage caused to the crop by the cyclone in May 1931 in the Malabar and Tanjore districts. The tendency of the fall in prices started much earlier for coconuts than for the food grains, and as in the case of these grains the fall was heaviest in the depression period. There was slight revival after 1935, though it could not reach even to two-thirds of the base period level. It will be interesting to see whether the prices of this commodity exhibit any seasonal variation. For this purpose, the average price during each particular month of the different year is calculated, and these values are given in the following table. The graph shows the monthly variation of these prices.

Month.	Average price during the period. Rs. per candy of 654 lbs.	
January	..	126·7
February	..	127·1
March	..	124·3
April	..	121·1
May	..	123·3
June	..	123·1
July	..	123·3
August	..	123·5
September	..	124·5
October	..	129·2
November	..	130·2
December	..	131·5

From the above table we find that the price of coconut oil is maximum in December and minimum in April, the difference between these two being only about 10%. The prices in May, June, July and August are almost steady; and they begin to rise in August reaching the maximum in December. The last quarter of the calendar year marks the period of maximum prices. They again begin to fall from January and reach the lowest figure in April. This phenomenon can be explained by the fact that conditions are favourable for the manufacture of copra and extraction of oil during summer when the supplies are plentiful bringing down the prices. The restriction of supply during and after the monsoon is responsible for the fall in prices during that period.



Seasonal Variation of the Price of Coconuts.

Causes for the Fall in Prices

The fall in the price of coconut oil during the period under consideration is caused by two main factors, namely, the general fall in prices of all commodities after the post-war boom period, and secondly the achievements of science which brought a number of rivals to this commodity. In addition to the two above mentioned factors, we must bear in mind the remarkable progress that has been taking place in coconut plantations in different tropical islands. From a study of the relative position of the coconut producing countries of the world, it will be found that whereas in India the area under the crop increased by only 17% between 1921 and 1930, in the whole world it increased by so much as 30%. In 1921, India had the largest acreage, while in 1930 this position has been snatched from her hands by Dutch East Indies and Philippines having come up to her level. Apart from the acreage, the new rivals are producing the crop under a completely different method. By adopting large-scale methods both in production and sale they are able to effect economies and compete very strongly with Indian produce not only in foreign but also in the local markets. Whereas India was having a prosperous trade in copra and oil in the pre-war years, of late we have been seeing the strange phenomenon of claims of protection from heavy foreign imports.

Competition in Foreign Markets

In pre-war years the international trade in copra comprised of an average export of 500,000 tons, four-fifths of which was from the Asiatic zone. The principal figure was that of Dutch East Indies followed by Philipines, Ceylon and S. India. Exports from Oceanea were about 50 thousand and from Africa about 25 thousand tons. During the war the export trade came down to 350,000 tons. But whereas exports from Dutch East Indies fell down to a quarter of the level and those from British India became almost extinct, export from Philipines, Ceylon and Oceanea far exceeded those of pre-war levels. In later years when the demand for copra revived, Dutch East Indies, the Philipines Islands, the British South Sea Islands, British Malaya and Ceylon prospered, and India completely went out of the picture. This loss of foreign trade was to a great extent compensated by the increased demand from home market. But in recent years the cheap imports from Ceylon are proving a menace even in the home market. The following table illustrates these changes in the foreign trade.

TABLE III.
EXPORTS AND IMPORTS OF COPRA AND OIL

Year.	Exports.		Imports.	
	Oil in 1000's of gallons.	Copra in tons.	Oil in 1000's of gallons.	Copra in tons.
1918	3,885	1	22	7,807
1919	3,012	7,344	1	1,145
1920	1,794	2,582	1	1,025
1921	956	2,762	4	196
1922	806	13,856	1	6
1923	153	3,906	7	57
1924	112	292	13	63
1925	117	1	17	56
1926	186	2,034	—	7
1927	69	197	2	8
1928	78	—	24	45
1929	66	1	—	1
1930	43	—	2	14
1931	31	—	36	117
1932	20	—	364	5,853
1933	23	—	194	3,942
1934	29	—	650	5,101
1935	25	—	567	7,044
1936	9	—	695	14,855

The above table shows that the large export trade of about four million gallons of coconut oil at the beginning of the period dwindled to nothing by the end. On the other hand, since 1932, very heavy imports of oil are noticed. As regards copra, the export trade came to nothing even in 1928, and the continuous increase in imports is noticed from 1932. These facts clearly illustrate the great competition that India has to stand from the new plantations of other countries. This competition is accentuated by two factors, namely, the large number of acres planted in boom years in foreign countries and which are now bearing fruit and secondly the diminution in the market for coconut oil from the rise of a number of substitutes.

Improvement in oil technology and fall in demand for coconut oil.

Coconut oil has from a long time been used by the natives of eastern countries as an edible fat and as an unguent. But invention in 1880 of a process of rendering neutral the acidity and flavour made the refined oil popular for edible purposes on the European and American markets. Towards the end of the last century the introduction of improved methods in the making of margarine rendered it possible to use the oil in its refined state so that within a short time a great demand for it was created. But in post-war years oil technology has so much improved that many other inferior oils also came to be used for making margarine so that coconut oil lost its monopoly. At the same time the supply of copra increased very much resulting in a fall in price of the product. The heavy fall in the price of copra and coconut oil has been attributed to the following factors apart from the general causes (vide *Empire Marketing Board*, Vol. VI, pp. 168-70).

1. Heavy stocks of whale oil, which is in active competition with coconut oil in the manufacture of margarine and soap.
2. Increased production of groundnuts and oil palm fruits whose oil also is an important competitor with coconut oil in the manufacture of margarine and soap.
3. Increased production and low price of butter which limited the market for margarine and resulted in decreased demand *inter alia* for coconut oil.
4. The reduced demand in Europe for oil-cakes as cattle food owing to the abundance of pasturage and fodder crops and the very low prices ruling for cereals.

Prospects of Future Rise

The one conclusion that emerges from the figures of trade and prices is that the market for our oil is now almost completely con-

fined to our country, and any prospect of rise in prices is dependent upon the increase in the buying capacity of the Indian consumer. Yet we cannot disregard the influence of world factors. U.S.A. is now the principal consumer of coconut oil outside the copra producing areas, her consumption being more than double that of France which comes second in order of importance. United Kingdom comes next, and Germany which occupied the first place in pre-war years comes fourth. U.S.A. uses such a large quantity of this oil because it uses very little of whale oil in its margarine and soap industries unlike the continental countries. But nearly 90% of the American demand is met by Philippines and of late the demand from the former is not keeping pace with the increase in the supply from the islands, so that the balance is coming to the European market to compete with other countries. But since 1924, the demand from Europe is contracted by the increased use of whale oil and other oils like groundnut oil and the decreased sales of margarine since 1930 with increased sales of butter.

Hence unless the demand for soap and margarine increases with the general increase of population and standard of living and at the same time coconut oil can stand the competition from other oils, the prospect for this commodity is not very bright. Of course, the large increase in the share of coconut oil in the margarine industry in U.S.A. and its increased utilisation for making hard soaps, suitable for toilet and laundry purposes in England, point out the special qualities of this oil which make it preferable to other oils. But price considerations also play an important part in the choice of substitute fats and oils, and unless the price of animal and marine fats rises as a result of increased demand for them and restriction in the world livestock population and the whaling catch, coconut oil will continue to have serious competition from these substitutes. Coming to the local conditions, the demand for this oil is bound to increase with the growth of population and standard of living. But the heavy imports of cheap oil specially from Ceylon are coming and depressing the local markets. Unless some means are found to regulate these imports it will not be possible to increase local prices. But this problem bristles with several difficulties, namely the trade relations with Ceylon and Strait Settlements with which we have got an active balance of trade, the burden on the general consumers who are suffering from the fall in purchasing power, etc. At the same time, the need for relieving the distress of a very large population in the West Coast who depend entirely on this product for their subsistence must be recognised.

APPENDIX.

MONTHLY PRICES OF COCONUT OIL (WHITE) IN RUPEES PER CANDY OF 654 LBS.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Average.
1922					144·0	143·0	138·0	138·0	140·0	145·5	148·0	152·0	143·6
1923	154·0	156·0	162·5	162·5	162·5	155·0	155·0	155·0	163·0	169·0	179·5	187·5	163·5
1924	183·0	185·5	176·5	173·0	172·5	171·0	182·0	187·0	179·0	189·0	196·0	191·0	182·1
1925	175·0	169·0	163·0	162·0	176·0	170·0	169·0	178·0	173·5	187·0	180·0	183·0	173·3
1926	155·0	157·0	159·5	155·0	147·0	149·0	159·0	152·0	150·0	146·0	145·0	141·0	151·3
1927	135·0	137·5	136·0	134·0	138·5	146·0	153·0	147·0	156·0	174·0	176·0	178·0	150·9
1928	167·0	170·0	163·0	166·0	166·0	170·0	168·0	166·0	167·0	161·0	159·0	159·5	164·4
1929	149·5	141·0	135·0	137·0	130·0	130·0	129·0	129·0	129·0	133·0	127·5	127·5	133·1
1930	121·0	121·8	115·0	116·0	115·0	113·0	113·0	102·0	106·0	104·0	103·0	100·0	110·8
1931	93·0	93·0	103·0	93·0	86·0	82·0	82·0	84·0	85·0	97·0	101·5	116·0	93·0
1932	115·0	119·0	121·5	108·0	102·0	104·0	101·5	110·5	108·5	104·0	108·5	103·5	109·7
1933	96·5	90·0	79·0	75·5	79·0	84·5	78·0	74·0	72·5	67·0	68·0	63·5	77·3
1934	60·8	58·0	55·5	51·5	52·4	54·5	52·8	53·0	61·5	63·0	61·0	60·5	57·6
1935	61·5	80·0	72·0	68·0	81·0	78·3	75·3	78·0	76·0	91·5	95·5	98·0	80·0
1936	102·5	102·0	99·0	98·5	99·3	91·0	93·8	98·8	99·8	103·0	103·8	111·5	100·7
Monthly Average.	126·7	127·1	124·3	121·1	123·3	123·1	123·3	123·5	124·5	129·2	130·2	131·5	

GROUNDNUTS

Madras Presidency occupies the first place in the production of groundnuts in India, having an acreage of about 60% of the total. The following table shows that the rapid increase of production and export of groundnuts is a development of the post-war period. During this period it displaced cocoanuts from the first place in the exports of oil-seeds and during the last decade individually it contributed the largest part of the exports of oil-seeds. A very large portion of these exports are sent to the European markets among which France and Germany are the most important.

TABLE I.

AREA, PRODUCTION AND EXPORTS OF GROUNDNUTS.

Year.	Area in 1000's of acres.	Production of Groundnuts in shell in 1000's of tons.	Exports of Groundnut kernels in 1000's of tons.
1918	100	442	8
1919	1144	569	70
1920	1600	740	86
1921	1459	678	209
1922	1754	823	225
1923	1812	746	224
1924	1904	948	330
1925	2599	1264	370
1926	2680	1207	318
1927	3337	1671	472
1928	3679	1830	584
1929	3209	1522	583
1930	3572	1765	457
1931	2635	1234	496
1932	3517	1729	350
1933	3779	1777	455
1934	2351	920	436
1935	2525	1204	332
1936	3427	1652	639

From the above table we find that at the beginning of the period the area under groundnuts was just one million acres, and the exports were about 8 thousand tons. But from year to year both the exports and production increased at a very rapid rate. Thus increased production found ready markets both at home and abroad till 1930, when on account of the great economic depression and other factors foreign exports shrank in volume. The

minimum figure for exports for the whole period was in 1935, but the subsequent year proved to be the most prosperous with record level of exports.

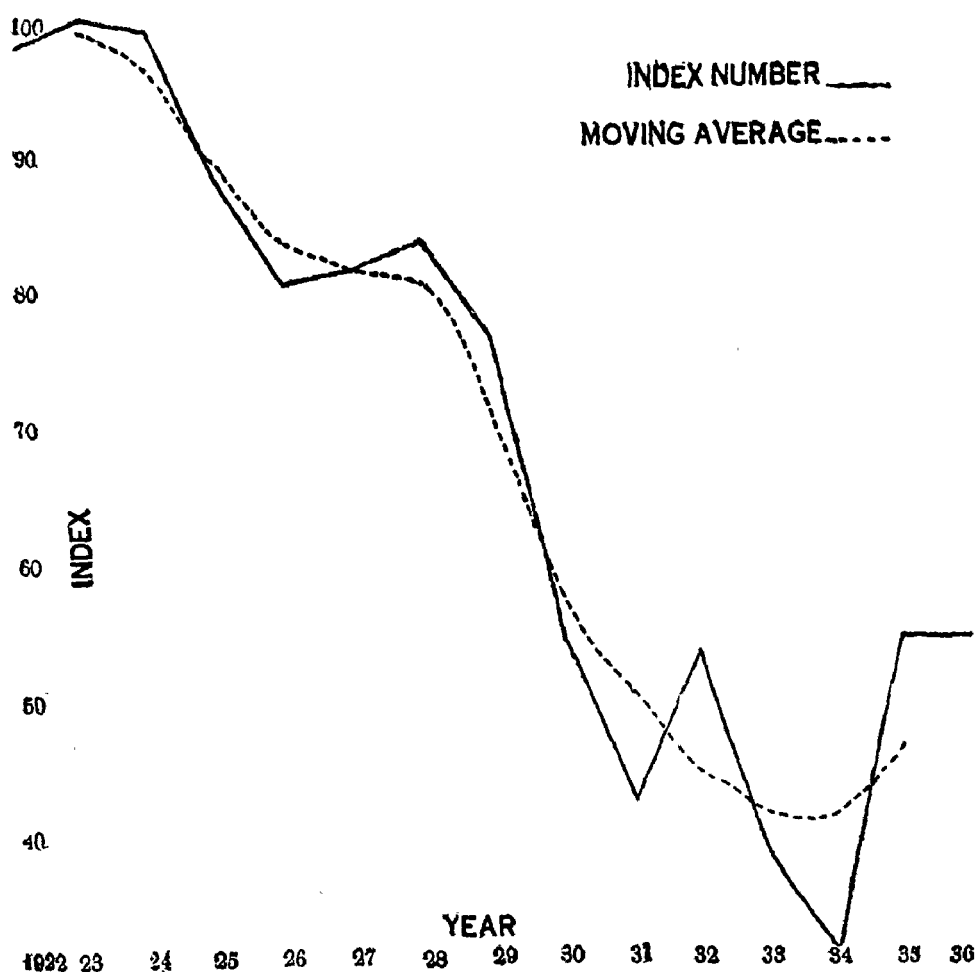
Trend of Prices

The average monthly values of Madras prices of machine decorticated groundnuts per French candy of 500 lbs. are given in the appendix. The data are obtained from the *Indian Trade Journal*. The following table gives the average prices in each calender year computed from the monthly prices. For convenience of handling, these figures are converted into index numbers with the triennium from 1922 as base and the following table gives the 3 year moving average also.

TABLE II.
PRICE OF GROUNDNUT KERNELS.

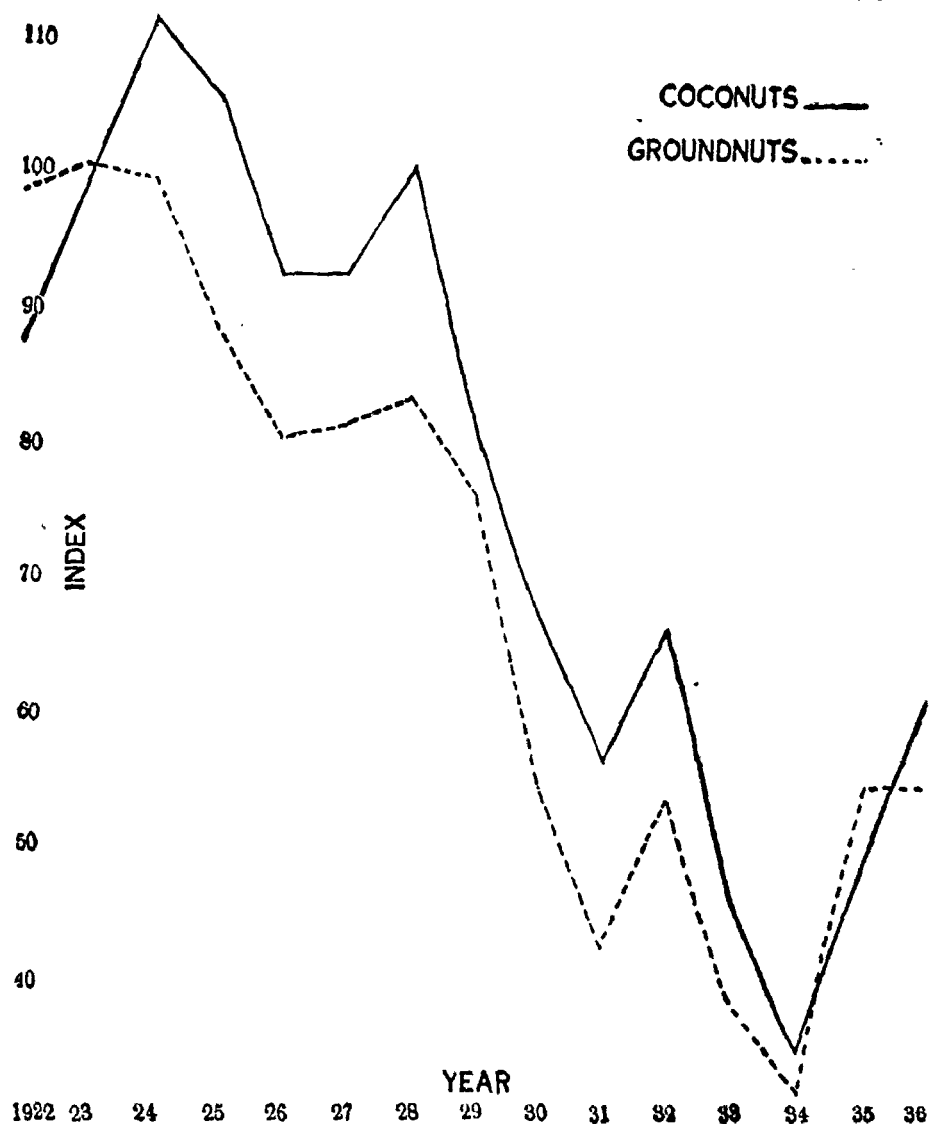
Year.	Price per French candy of 500 lbs.	Indices of Prices.	3 yearly moving average.
1922	63.8	99	
1923	64.9	101	100
1924	64.7	100	97
1925	57.3	89	90
1926	52.0	81	84
1927	52.8	82	82
1928	54.4	84	81
1929	49.5	77	72
1930	35.6	55	58
1931	27.6	43	51
1932	35.1	54	45
1933	24.9	39	42
1934	20.9	32	42
1935	35.7	55	47
1936	35.4	55	

From the above table we find that the price was steady during the base period. But there was a sudden drop in 1925 which continued in subsequent years also. But the heaviest fall in prices occurred during the depression years and the worst year of the period was 1934 when the price was even below a third of the base year price. There was a recovery in the succeeding year which was maintained in the next year also. Still the price in the last two years was just equal to the price in 1930 when depression started and was a little more than half that of the base period. It may be surprising to notice that the great increase in exports



Price of Groundnut Kernel.

should synchronise with a period of falling prices. But this itself may explain the phenomenon. It is well known to all people in trade that groundnuts were good competitors to coconuts in European markets during the post-war period, and were to a large extent responsible for the contraction of the demand for the latter. Price of the commodity is the most important factor in influencing substitution at the margin, and when the price of coconuts was falling, groundnuts also had to follow suit to consolidate the ground already captured and make fresh attacks. The very fact that the area under production increased at a time of falling prices itself shows that this crop was giving better returns to the cultivator than the other substitute crops. But during the depression when the prices went down to very low levels, area under the crop was reduced and it did not show signs of increase till the prices looked up. That the prices of these two oil-seeds (coconut and groundnuts) were moving in the same direction can be illustrated from the following table.



Index Numbers of Prices of Oil seeds.

TABLE III.

INDEX NUMBERS OF PRICES OF COCOANUTS AND GROUNDNUTS.

Year.	Coconuts base 1922-24.	Groundnuts base 1922-24.
1922	88	99
1923	100	101
1924	112	100
1925	106	89
1926	93	81
1927	93	82
1928	101	84
1929	82	77
1930	68	55
1931	57	43
1932	67	54
1933	47	39
1934	35	32
1935	49	55
1936	62	55

We find from the product movement formula that the coefficient of correlation is nearly 0.9. The high correlation is partly due to the general secular trend of fall in prices of all commodities during the period under consideration, but still the marked sympathetic fluctuations of prices of these commodities is easily noticed.

Seasonal Fluctuations

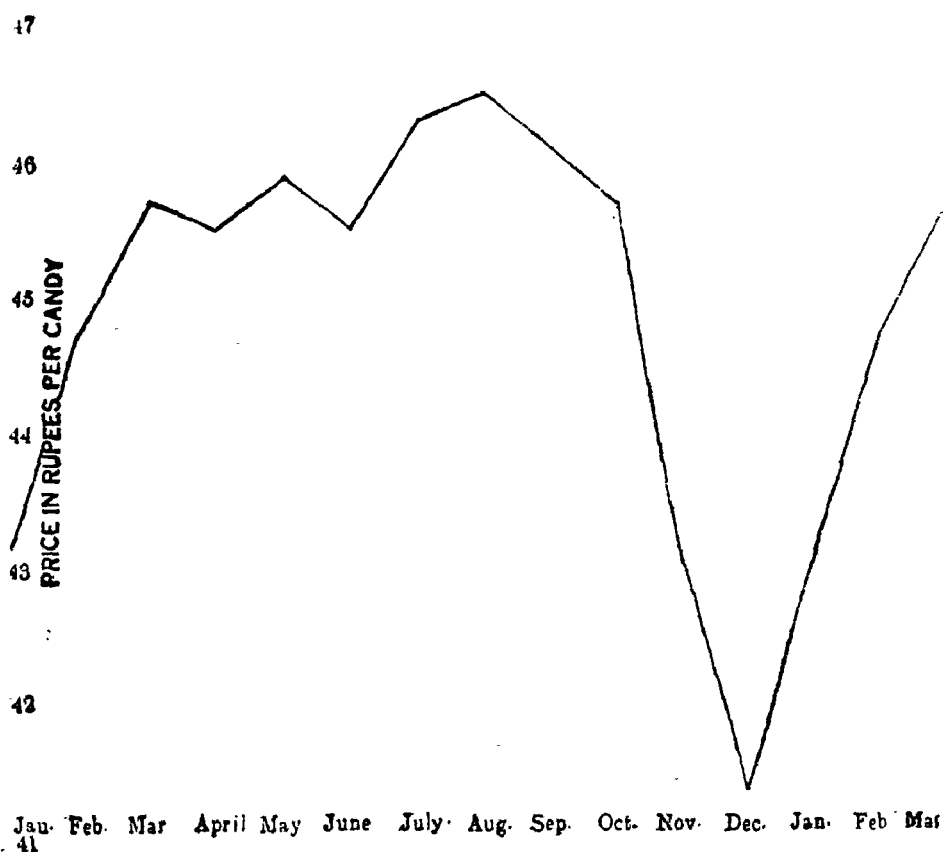
It will be interesting to see whether the price of groundnuts exhibits any seasonal variations. For this purpose, the average price for each month during the period under consideration is calculated. The figures are given in the following table and the results shown in the accompanying graph.

Month.	Average price during the period (Rs. per French candy of 500 lbs.)	
January	..	43.2
February	..	44.8
March	..	45.8
April	..	45.6
May	..	46.0
June	..	45.6
July	..	46.4
August	..	46.6
September		46.2
October	..	45.8
November	..	43.1
December	..	41.4

The monthly values do not exhibit marked seasonal variations. From March to October they vary very slight about Rs. 46 per candy. As compared with previous months, there is a fall in November which continues in December also. But from January the prices go up. The fall in prices coincides with the harvest season when there are plentiful supplies.

Factors which influence the price of groundnuts

It has already been pointed out that the price of groundnuts depends to a very large extent upon the price of other oils especially coconut oil, and the demand for these oils in the European markets. During the period under consideration, advances made in oil technology pushed up this product as a cheap substitute for coconut oil in the preparation of soaps and margarine. This was



Seasonal Variation of the Price of Groundnuts.

mainly responsible for the fall in the exports of copra and coconut oil, and very large increase in the exports of groundnuts. So any rise in the price must be brought about by an increased demand for the oil-seeds from the European markets.

Apart from the competition of other oil-seeds the Indian exports are facing obstacles from other sources also. During the depression period, when the exchange position of Germany became very bad, they had to restrict imports of all kinds of raw materials. Germany is a very important market for Indian groundnuts, and the closure of that market caused serious loss of trade to India. France, who has proved to be the most important single market in recent years, passed a decree in 1933 under which an import duty was levied on groundnuts other than those grown in French colonies. This restriction of the market had a disastrous effect on prices. In the subsequent years it again passed another decree regulating imports on a quota system under which a definite percentage is reserved for imports from French colonies. In 1935-36 the import duties on groundnuts were further raised in France. The net result of all these decrees was a contraction of that market for Indian groundnuts. In the Empire market India is facing the serious competition from South Africa. The great trouble for our products is that they are produced on uneconomic holdings and

sold in a highly disorganised market, and hence are not able to stand the competition of better organised countries. Thus the restrictions in some markets and competition in others are proving disastrous to the products of this country.

APPENDIX

MONTHLY PRICES OF GROUNDNUT KERNELS IN MADRAS

(Rs. per French Candy of 500 lbs.)

Year.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1922	55.3	57.0	68.5	70.0	71.5	69.3	69.3	64.8	60.8	62.5	60.0	57.0
1923	59.5	63.8	67.0	66.3	63.0	63.5	64.3	61.9	65.6	68.5	68.8	67.0
1924	63.8	65.0	64.0	62.0	59.8	59.9	64.3	70.8	72.0	74.2	63.3	57.0
1925	57.3	57.0	58.6	58.8	64.0	64.6	60.1	62.5	62.4	53.0	51.8	47.3
1926	47.3	47.0	51.1	54.3	56.0	60.0	57.5	54.5	52.0	54.0	45.5	44.8
1927	46.0	52.8	55.7	54.7	55.5	55.5	54.5	53.0	53.2	54.0	51.3	48.0
1928	51.5	50.5	50.7	50.3	51.4	54.5	56.0	54.5	54.3	61.2	58.6	58.7
1929	57.8	56.9	50.4	47.6	49.5	43.8	48.0	50.0	52.0	47.7	45.0	45.0
1930	41.5	40.5	38.8	41.5	40.4	37.5	36.8	36.1	33.5	28.8	27.3	24.8
1931	22.8	23.9	28.5	28.5	26.5	24.3	29.3	29.8	27.8	31.5	29.8	28.5
1932	30.8	38.0	41.4	37.8	35.5	34.0	39.0	37.8	35.7	32.8	29.3	29.3
1933	31.8	30.0	25.8	23.8	26.1	27.1	27.1	24.3	22.5	20.8	20.6	19.4
1934	18.4	17.8	16.4	16.7	18.4	17.5	17.5	22.5	25.0	27.5	27.3	25.8
1935*	30.6	39.1	37.2	37.9	38.6	38.4	34.6	35.8	35.8	34.8	34.1	31.6
1936*	35.4	32.8	32.9	33.7	33.4	33.7	37.0	40.3	39.6	35.1	33.8	36.8
Monthly Average	43.2	44.8	45.8	45.6	46.0	45.6	46.4	46.6	46.2	45.8	43.1	41.4

*The Prices are of machine decorticated kernels.

THE GENERAL SALES TAX

By

B. TIRUMALACHAR, M.A.,B.L.

1. IMPORTANCE OF SALES TAXATION

One of the most remarkable developments in the field of finance in the post-war period has been the introduction of the General Sales Tax or Turnover Tax into the fiscal systems of many countries of the world. Faced with a financial crisis, such as was never experienced before, many European nations cast about for fresh sources of revenue in order to cover the ever widening gaps in their budgets. Extraordinary methods were adopted regardless of the principles of sound finance. Huge national debts were piled up in addition to the already existing ones; capital levies were imposed; and currency depreciation to an unprecedented degree was indulged in. Some countries introduced steeper and steeper progression into their income and inheritance taxes. But those countries which could not rely to a large extent on direct taxes, resorted to indirect ones, the most important of which was the General Sales Tax or Turnover Tax.

The General Sales Tax, however, was not entirely new in origin. It was known even in the days of antiquity. It was collected in ancient Athens; in Egypt under the Ptolemies and in Rome by Augustus and the later Emperors. The rate of the tax was generally ten per cent *ad valorem*, though in some cases, it was as high as 20 per cent.

The General Sales Tax appears to have been common in ancient India also. For instance, there is a reference to a trade tax in the Arthasastra of Kautilya: "The amount of Vyāji or trade tax due on commodities sold by cubical measures is 1/16th of the quantity; that on commodities sold by weighing balance is 1/20th of the quantity; and that on commodities sold in numbers is 1/11th of the whole."¹ Besides this, a sales tax was collected from the highest bidder, whenever immovable property was sold in public auction.² There are also many references to sales taxes in the Śukranītisāra and other works, though the rate of the tax

1. Arth. Bk. II Ch. 16.

2. Arth. Bk. III Ch. 9.

appears to have been very much lower than in the days of the Mauryas.

In mediæval Europe numerous taxes on sales of commodities were levied but the most noted of these was the *Alcavala*, which was introduced in Spain as a national tax in 1342 and continued to exist till the middle of the 19th century. Adam Smith condemned this tax for the harshness of its administration and the inequality of its burden on the taxpayer, and even ascribed to it the decadence of Spain.

In the modern period, many important countries have adopted the Sales Tax in one form or another. It was however, the financial emergency created by the Great War, that brought the Sales Tax into prominence as a fruitful source of revenue. Theoretically the General Sales Tax has not received much support from economists. In fact, Seligman condemns it strongly. He says "The General Sales Tax is the remnant of an outworn system; it is essentially undemocratic in its nature; and it would, if enacted exaggerate rather than attenuate inequalities of wealth and prosperity."³

Yet, it has spread rapidly over the world during the last twenty years. Germany adopted it first in 1916 and other countries soon followed. At present, apart from 32 States in the United States of America, it is found operating in more than thirty countries of the world. Great Britain is the only important exception, as it is believed that the General Sales Tax is harmful in its effects on trade and industry.

In India, the General Sales Tax has attracted much public attention at present. The Provincial governments are now engaged in carrying out far-reaching programmes of financial and social reform. On the one hand, they are pledged to carry out a policy of complete Prohibition and also to reduce the heavy burden of the land revenue on the small agriculturists. On the other hand, they have launched upon costly schemes of nation building, which necessitate the raising of large revenues. But the existing Provincial sources of revenue such as the excise, the land revenue, stamps, etc., have been tapped to their maximum limit. Further, the Provincial governments cannot hope to get much relief under the Niemeyer Award from the Government of India as that Government will have to face increasing expenditure in the near future on account of defence and the introduction of federation. The Provinces are thus in a state of financial emergency, and have been

3. Seligman: *Studies in Public Finance*, pp. 137-138.

compelled to resort to fresh sources of revenue, such as the Sales Tax, the Property Tax, the Employment Tax, the Tobacco Tax, the Electricity Tax and the Petrol Tax.

Of all these new taxes, no one has been subjected to such keen controversy as the Sales Tax. In Madras, public opinion is sharply divided as to the necessity and the justice of the tax. Businessmen, individually and through their chambers of commerce, have entered an emphatic protest against the measure, as they fear they may have to bear the entire burden of tax, without being able to shift it on to the consumer. On the other hand, it has received very strong support from official quarters for its productivity and practicability. A dispassionate study of the tax in all its aspects would be of great help to clear the issues involved and to arrive at a correct judgment of the problem.

2. THE SCOPE OF THE TAX.

(i) *Different forms of the Sales Tax.*—The Sales Tax is a levy imposed on the sales of all commodities and services. It assumes various forms, being imposed at a number of stages of manufacturing and marketing. The most usual form is a tax on sales in general. This form of the tax is found in Germany, Austria, Hungary, Poland and the U.S.S.R. It is such a General Sales Tax that is proposed to be levied by the various Provincial Governments in India.

The General Sales Tax has the great merit of having the broadest base. It yields large revenues at a low rate and is on the whole uniform in operation. But such a tax results in the integration of industries in order to escape the payment of it, while its general application at a uniform rate makes it regressive and covers numerous irregularities.

On the other hand a Manufacturers' or Producers' Sales Tax, such as is found in Canada, Australia and New Zealand has certain merits which a General Sales Tax lacks. Its administration and collection are cheap, being limited to a comparatively small number of taxpayers, whose transactions are relatively large. In industrial countries, it yields a large revenue. Its rate of levy may not be so low as is the case with the General Sales Tax. At the same time, it does not lead positively to any direct acts of industrial integration.

But the Producers' Sales Tax suffers from certain obvious disadvantages. The taxing authority must face the influential protests of the manufacturers, who are richer and better organised than the

general body of taxpayers. The rate of tax must be higher than that of the General Sales Tax, if an adequate revenue must be obtained. Besides, the manufacturers, while paying the tax, will add interest charges upon it till they recover it from the consumers. This means an enhancement of the price to the consumer, not only by the amount of the tax, but also by the amount of the interest on the tax.

A third form of Sales Tax is the Retail Sales Tax. This is imposed on a large number of retailers, which makes its cost of collection heavy and its administration complicated. It is not so productive as either the General Sales Tax or the Producers' Sales Tax. But the Retail Sales Tax does not encourage any integration of industry. Further, the tax, being imposed on the last sale to the consumer, does not involve much interest charges to the seller for carrying the tax. Besides being imposed at one stage only, that is when goods pass from the retail seller to the consumer, it is not cumulative in its effect.⁴

Finally, there is a fourth form of Sales Tax, namely, the Luxury Sales Tax. It has been introduced in France, Hungary and Poland in order to overcome the regressive effects of the General Sales Tax. But it is not found to be very successful, because of its unproductivity and difficulty of administration. It is hard in many cases to make a precise distinction between a luxury and a non-luxury. It has therefore been abandoned by certain states which had adopted it; e.g., Germany and the free city of Danzig.

(ii) *Exemptions.*—The levy of any tax requires, first of all, a clear and definite description of the taxable commodities and services. Every country which has a General Sales Tax, always grants wide exemptions from its operation. In the first place, these exemptions include foodstuffs which are necessary for subsistence and raw materials which are required by the industries of the country. Very small transactions are excluded from the scope of the tax, because they involve heavy costs of collection and also press hard on the poorer businessmen. In Madras, the Sales Tax will be levied only on businesses, whose estimated turnover exceeds Rs. 10,000 per annum. It will thus generally exempt small traders who deal in articles of food, clothing, etc. In addition to this, the Government can by notification, exclude any other goods which it deems fit, from the scope of the tax. It is however felt in some

4. Vide The Indian Taxation Enquiry Committee Report pp. 296-297.

quarters that the exemption limit is too low and that it must be raised to Rs. 50,000 per annum. Otherwise, it is argued, the tax will kill many small concerns which are on the margin of existence.

In the second place, exports are brought within the exemption limit, as for example in Germany and France. This is done in order to see that the indigenous businessmen may not be at a disadvantage in their competition with those in other countries, which have no Sales Tax or which have it only at low rates. This disadvantage is felt very acutely when one State or Province employs a Sales Tax and a neighbouring one does not. Some of the States of the United States therefore expressly exempt from the Sales Tax commodities which are the subject of inter-state commerce.

In Madras, suggestions from influential quarters are made for the exemption of exports, such as hides and skins, handloom products, cotton textiles, etc. It is argued that business will shift from that Province to the neighbouring Provinces or States where no Sales Tax exists. But this argument overlooks many facts. Firstly, a small difference of a half a per cent in costs due to the tax will not be enough to induce business to migrate. Secondly, those businessmen who do migrate, will have to face other and perhaps worse ills which they know not of. It is however likely that the Madras Bill may exempt exports in its final form; or at least the tax may be imposed only once on the last sale.

In fact, the Select Committee on the General Sales Tax Bill has provided for certain specific exemptions from its operation in addition to the general exemption of all transactions below the estimated value of Rs. 10,000 per annum. Stocks and shares, bullion, cotton yarn and handwoven cloth sold by persons dealing in them exclusively are to be exempted wholly from liability to pay the tax. Hides and skins are to be taxed at one stage only. In the case of fully manufactured goods exported to places outside the Province, provision is made for a 50 per cent rebate. All these specific exemptions have been incorporated in the Madras Sale of Goods Act.

The reasons for these exemptions are not clear. Stocks and shares, securities and bullion are exempted probably because the profit on turnover in their case is very small. The exemption of cotton and yarn and handwoven cloth and the rebate allowed in respect of the exports of manufactured goods are based presumably on the ground that expanding industries may not be handicapped in their competitive power. In the case of hides and skins, it may be that the trade cannot stand a cumulative tax.

A third kind of exemptions includes imports of basic raw materials or other products so that they may be obtained cheaply by indigenous industries. For instance, France excludes the imports of hides, wool, silk, rubber, hemp, jute, flax and natural phosphates. On the other hand, Canada and Germany levy a higher rate of Sales Tax on imports which compete with goods produced at home. It may be suggested that in Madras also the imports of raw materials for the major industries of the province may be exempted from the General Sales Tax.

Finally, there is a fourth class of exemptions from the General Sales Tax. They refer to the services of professional men such as doctors, lawyers, accountants, headmasters, etc. In France, they are exempted because it is believed they do not engage themselves in business with a view to make a profit. But if they do so, they must also pay the tax. Since the Madras Sales Tax is a general tax on the sales of commodities, there is no question of exempting services at all.

(iii) *Rate of the tax.*—The rate at which the General Sales Tax is levied is usually very low. The rate is between one and two per cent and ranges from a small fraction of one per cent up to 6 per cent. Rates vary with the volume of transactions, with the classes of taxpayers or with the commodities and services. Since the World Depression of 1929, however, there has been a noticeable increase in the rates, as it was necessary to augment the revenues to cover the rapidly growing deficits in the national budgets. For instance, Canada raised the rate from 6 to 8 per cent in 1936.

Compared with the rates obtaining in other countries, the rates proposed for Madras are very low. Beyond the exempted limit of Rs. 10,000 per annum, every dealer will have to pay annually a tax on sales according to the following scale :—

	Rs.
(a) If the estimated turnover in the previous year was more than Rs. 10,000 and less than Rs. 20,000.	75
(b) If such turnover exceeded Rs. 20,000 and did not exceed Rs. 40,000.	150
(c) If such turnover exceeded Rs. 40,000.	Half a per cent of the amount of such turnover.

The Select Committee of the Legislative Assembly has substituted the following scale, which has been incorporated in the General Sales Tax Act.

	Rs.
(a) If estimated turnover in the previous year was more than Rs. 10,000 and less than Rs. 20,000.	5 per month.
(b) If such turnover exceeds Rs. 20,000.	Half a per cent of the amount of turnover.

On the whole, the rate will be about half a per cent for all taxable transactions. This percentage will represent approximately, a rate of one pie per rupee of the turnover. Obviously, it cannot be considered very high, particularly in view of the fact as stated in the Statement of Objects and Reasons to the Bill that it is not even one-third of the amount, which is usually set apart by most businessmen in the Madras Presidency for charitable purposes, in the form of 'Mahimai.' This very low rate certainly cannot affect business seriously. It cannot kill the 'goose that laid the golden egg'; nor can it be expected to drive business out of the Province.

However, it may be that in certain industries, which comprise a number of stages, as, for example, the cotton mill or the hides and skins industry, the rate of a half a per cent at each stage may make the total rate high. The cumulative effect of the tax may be burdensome; but considering the fact that these industries generally make a profit of at least ten to twelve per cent, that is about one anna per rupee, even a total percentage of about four or five per cent may not be quite oppressive. Beside these industries do not contribute much at all to the Provincial revenues; and it is but fair that they should do so. The Select Committee has in fact proposed taxation of hides and skins at one stage only.

But there is one point to be noted. The uniform rate of half a per cent on all taxable transactions will have an unequal effect on business. The burden of the tax will be heavier on the smaller businessman than on the large scale businessman; for it is obvious that the taxable capacity of the latter is more than in proportion to that of the former. A progressive scale of taxation may therefore be levied instead of a tax at a uniform rate. It can be done either by raising the rates for all turnovers above Rs. 40,000 per annum or by lowering the rates on the small turnovers. The latter alternative is preferable, as it makes the burden lighter and so avoids the objections of the businessmen to a large extent. The present

scales of Rupees 75 and Rs. 150 may be reduced by a quarter or even a half, so that the rate of tax on the small transactions will be less than half a per cent while those on the larger turnover will be about half a per cent. But this reduction of the rate can be undertaken only if it does not affect the productivity of the tax. But if thereby, the revenue from the tax proves to be inadequate, then the other alternative of raising the rate on turnovers above Rs. 40,000 per year must be adopted on a progressive scale, leaving the present scale of half a per cent on small business untouched. The Sales Act has in fact adopted the reduction of the rate on small turnover between Rs. 10,000 and Rs. 20,000 per year.

(iv) *Administration and collection of the Tax.*—There are various methods of levying the Sales Tax. Different countries have adopted different bases for its levy. For instance, in France, Germany, Austria, Hungary, Poland and the U.S.S.R. the basis adopted is the total turnover. In Belgium and Italy, the tax is levied on all sales of commodities except at retail. On the other hand, in Canada, Australia, New Zealand, and the Philippine Islands, it is a Producers' and Wholesalers' Tax. France has also a supplementary Luxury Tax. In Madras, the Tax will be levied on the sale of commodities in general and will be based on the estimated total turnover of businessmen as in France and Germany. A special tax at an enhanced rate is levied on the sale of tobacco and petrol.

In the beginning when the General Sales Tax was first introduced, grave doubts were entertained in many countries, regarding its satisfactory administration and collection. It was feared that the collection of the tax from innumerable small businessmen would be costly, that opportunities for evasion would be great and that it would be felt to be most inquisitorial and irksome by the tax payers. However, it was found in course of time, that these difficulties were not as great or as insurmountable as they appeared at first to be.

The maintenance of account books even by small traders has made the assessment and collection of the tax generally easy. In India too it is customary for petty dealers to make a note of the sum total of the daily sales as shown in their bills for cash or credit sales. It is therefore not difficult to assess their taxable capacity on the basis of such accounts. But in those countries, where account books are not maintained, a tax based on general estimates of the taxable capacity of the businessman as in France is eminently practical.

However, a Producers' or a Wholesalers' Tax is more advantageous than a General Sales Tax, from the point of view of administration. These classes of businessmen usually keep better accounts and are less numerous than retailers. Further, there is less possibility of evasion in the case of the Wholesale Tax, as the business concerns are more prominent and better known than small traders; or, if they are not known, they are easier to check on account of the smallness of their numbers and the big size of their transactions.⁵

But tax evasion, in any case, can be easily prevented by means of the stamp method for each transaction as in Belgium or the licensing method as in Canada or Pennsylvania in the U.S.A. These methods also minimise the cost of collection of the tax.

The General Sales Taxes are commonly collected through a national agency, sometimes with the assistance of local officials. In Madras, the Revenue authorities are charged with the administration of the Sales Tax. They are required to assess and collect the tax from business concerns as if it were a revenue demand. The assessments are based on the returns which every business whose turnover is over Rs. 40,000 per annum is obliged to submit to the taxing authority. In the case of the smaller business men, whose turnover is below Rs. 40,000 per annum, the assessment will be based on estimates of their taxable capacity fixed by the taxing authority after checking available external indices, pertaining to such a concern. However, the small dealer can also submit his returns, if he wishes to do so. Provision is made for meeting attempts at tax evasion by granting extensive powers to the taxing authority to enter business premises and inspect the accounts of the dealers. Besides, heavy penalties are laid down for attempts at evasion of the tax. Finally, chances of evasion are minimised to a large extent as the collection of the tax is in the hands of an efficient revenue administration with an extensive and experienced personnel behind it.

As adequate data are not available it is not possible to estimate exactly the cost of collection of the General Sales Tax. In certain countries, as in Canada and Germany, where the existing tax personnel has taken over the administration of the Sales Tax, costs are low. In Madras, also they may be expected to be low, as the levy and collection of the tax is given over to the existing Revenue authorities. It is however, estimated that even in countries with a

5. See Comstock, *Taxation in the Modern State* Ch. IX.

separate machinery, the collection costs of the gross Sales Tax has not exceeded 4 per cent of the receipts. In some countries, as in West Virginia in the U.S.A., it is as low as 1 per cent.

The revenue from the General Sales Tax is usually employed for national purposes though in some countries a portion of it is diverted to the use of the local authorities, as for example in France and Germany. In Madras, the General Sales Tax is levied to meet the growing demands made on the Provincial government; in particular, to make up the loss of liquor excise as a result of Prohibition. But it may be suggested that in course of time, when the Sales Tax becomes more and more productive, a part of it may be given over to local authorities, whose revenue resources are generally small but who are saddled with costly functions.

APPENDIX TO SECTION 2.—GENERAL NATIONAL GOVERNMENT SALES TAXES IN VARIOUS COUNTRIES.

Country.	Title of Tax.	Law establishing the tax.	Payment of the tax.	Basis of tax.	Rate.	Administration		Disposition	Exemption.
						Assessment.	Collection.		
Australia	Producers' Sales Tax.	Law of August 18, 1930.	Monthly.	Total sale of commodities by importers and producers.	5%.	By Department of Revenue.	By Department of Revenue.	To National Government.	Exports sales of agricultural foods, articles used in extractive industries and specified articles.
Canada	Sales Tax.	Law of July 1, 1920.	Monthly.	Total sales of producers, manufacturers and importers.	6% Annual License \$2.00.	By Commissioner of Excise.	By Department of Revenue.	To National Government.	Exports, agriculture, sales of essential foods, fuels, raw materials, equipment used in extractive industries.
New Zealand	Sales Tax.	Law of March 9, 1933.	Monthly.	Total sales of wholesalers and manufacturing retailers.	5%.	By Collectors of Sales Tax.	By Collectors of Sales Tax.	To National Government.	Exports, agriculture, foods, machinery and implements and other special articles.
Austria.	Turnover Tax.	Law of April 1, 1923.	Annual.	Total business turnover.	Generally 2% to 8%, but vary with classes of commodities.	By National Tax Office.	By National Tax Office.	60% to National Govt. and 40% to Local Govts.	Exports.
Belgium.	Transfer Tax.	Law of August 28, 1921.	Monthly.	All business sales of commodities except at retail and for use in business.	Usual rate 2.5% with variations according to commodities.	By Tax Administration.	By Tax Administration.	To National Government.	Exports, Govt. purchases, sales of prime necessities.
France.	Turnover Tax.	Law of June 25 1920.	Monthly for larger and annually for smaller taxpayers.	Total business turnover on special industries.	2% on ordinary articles, 3% to 10% on luxuries and various rates.	By Indirect Tax Administration.	By Indirect Tax Administration.	90% to National Govt. and 10% to Local Govts.	Exports, agriculture, professions, Government enterprise, and transactions liable for special taxation.
Germany.	Turnover Tax.	Law of Dec. 24, 1919.	Annual.	Gross income of business and professions.	0.5%. 2.5% on retailers with annual sales of 1,000,000 marks.	By Finance Office.	By Finance Office.	70% to National and 30% to State & Local Govts.	Exports, Govt. enterprise, transactions liable for special taxation and a few foods.
Italy.	Transfer Tax.	Law of Nov. 24 1919.	Monthly.	Sales of commodities for use in business except at retail.	2.5%.	District Tax Office.	By Postal Department.	To National Government.	Exports, Government Industry, Sales of essential foods.

Country.	Title of Tax.	Law establishing the tax.	Payment of the tax.	Basis of tax.	Rate.	Administration		Disposition	Exemption.
						Assessment.	Collection.		
Hungary.	Turnover Tax.	Law of 1921.	Annual.	Gross receipts.	2% on ordinary articles, 10% to 25% on luxuries, various rates on special industries.	Sales Tax Bureau.	Sales Tax Bureau.	10% to 25% to Local Govts. & rest to National Government.	Exports and essential foods.
Poland.	Industrial Tax and License duty.	Law of July 15, 1925.	Monthly for larger and Quarterly for smaller, taxpayers.	Gross income of business and professions.	Industrial tax 1.5% to 2.5%, license duty varies.	Fiscal Office or Tax Administration.	Fiscal Offices.	Local Govts. may add 25% to Industrial tax & 30% to licence duty.	Exports, State industries, Utilities, railways, non-profit associations of workers, certain raw materials and semi-manufactured articles.
Soviet Russia.	Industrial Tax and License duty.	Law of July 26, 1921.	In 5 instalments through the year.	Total Annual Turnover.	Vary according to classification.	Information not conclusive.	By State Banks.	Divided between National & Local Govts.	Information not conclusive.
Danzig.	Turnover Tax.	Law of July 7, 1922.	Annual.	Amount of receipts.	3%, ordinary rate, 1% on retailing, 1.5% on agriculture, 10% on restaurants,	By Tax Bureau.	By Tax Bureau.	40% to State & 60% to Local Govts.	Exports and imports.
Philippine Islands.	Sales Tax.	Law of 1904.	Quarterly.	On gross receipts of printers, publishers, contractors, public utilities, laundries, etc.	1% to 1.5%.	By Bureau of Internal Revenues.	By Bureau of Internal Revenues.	About 10% to Sular Govt. & remainder to Local Govts.	Agriculture, small vendors and producers, and specially taxed articles.
Madras.	General Sales Tax.	Law of 1939.	Annual.	Gross total turnover of dealers.	Rs. 75 on gross sales between Rs. 10,000 and Rs. 20,000; Rs. 150 on gross sales between Rs. 20,000 and Rs. 40,000; and ½% on turnover of over Rs. 40,000. [Rs. 5 per month on gross sales between Rs. 10,000 and 20,000; and ½% on turnover of over Rs. 20,000 (as modified by Select Committee).]	By Department of Revenue.	By Department of Revenue.	Provincial Government.	Small transactions below Rs. 10,000 per annum; specially taxed articles and other goods which the Govt. deems fit. [Stocks and shares, securities, bullion, cotton yarn and handloom cloth; hides and skins at only one stage; 50% rebate on wholly manufactured goods exported outside the province (as modified by Select Committee) and adopted by the Sale of Goods Act of 1939.]

3. INCIDENCE OF THE GENERAL SALES TAX.

A study of the shifting and incidence of the General Sales Tax is essential in order to estimate the ultimate effects upon the different sections of the community. Unfortunately it is not possible to say exactly upon whom the burden of the tax will fall in the last resort.

The General Sales Tax is an indirect tax ; and as in the case of all indirect taxes, the incidence of it does not rest on the person who bears the impact of it. In other words the full burden of it does not rest generally upon the person who pays the tax in the first instance. The taxpayer, whether producer or seller, shifts the tax forward to the consumer in the form of higher prices ; or, he may resort to lower the quality or reduce the quantity of the taxed commodity, without raising the prices.

But the shifting process is not always so simple or so complete. The consumer can, under certain circumstances, resist the attempt of the producer or seller to transfer the burden of the tax on to him. In such a case, the producer or seller must bear a part at least of the burden. In others, the consumer will have to shoulder the burden in full himself.

The shifting of the General Sales Tax depends upon the changing conditions of the supply of and the demand for the taxed commodity. On the side of supply, the commodity may be one which is produced under conditions of monopoly or of competition. But in actual business, production is subjected to varying degrees of monopoly and competition. It may, however, be generally stated that, other factors remaining the same, the chances of shifting the tax are greater if the commodity is produced under competitive conditions than if its production is carried on under monopoly conditions. Again the greater the mobility of labour and capital from the taxed fields to the non-taxed ones, the greater is the scope for shifting the tax to the consumers. As a matter of fact, it will be a long time before any changes take place in the investments of labour and capital from one industry to another, even under conditions of perfect competition. It is therefore only in the long run that a General Sales Tax on the volume of sales can be shifted to the consumers through a readjustment of supply or an increase of prices.

On the side of demand, the final incidence of the Sales Tax depends upon the elasticity or inelasticity of the demand on the part of the consumers for the commodity. The greater the elasti-

city of demand which depends on changes in habits, tastes and fashions or on the availability of substitutes the larger will be the scope for the consumer to resist the transfer of the tax to him by the seller. He may reduce his purchases of the taxed commodity or change over completely to a substitute. On the other hand, if the demand for the commodity is inelastic, as in the case of a necessity, the consumer must bear the tax himself, as he is obliged to purchase the same amount of the commodity as before in spite of a rise in prices or a reduction of the quality or quantity of the commodity sold to him as a result of the tax.

On the whole, the General Sales Tax, like all indirect taxes, tends to be shifted to the consumer in the long run. The consumer, on whom the incidence of the tax falls, may bear it in one of two ways: either by reducing the consumption of non-taxed commodities or by the sacrifice of savings in order to pay the higher prices of the commodities taxed. In any case, the General Sales Tax is certain to affect the standard of living of the masses of consumers in the long run.

4. EFFECTS OF THE GENERAL SALES TAX.

Having briefly analysed the shifting and incidence of the General Sales Tax, we can now proceed to examine its effects first on business and secondly on consumption, in order to finally assess its peculiar merits and defects.

(i) *Effects on Business.*—One of the strongest objections against the General Sales Tax is its alleged detrimental effects on business. In the first place, it is pointed out that under ordinary conditions of imperfect competition, the tax cannot be completely shifted to the consumer so that a part of it at least rests as an unequal burden on business. A uniform tax based on gross sales or gross receipts is unequal in its incidence as it evidently ignores the ever changing ratios of profits, capital investments, efficiency and credit in relation to sales in different kinds of business. Secondly, as long as sales take place, the General Sales Tax must be paid, regardless of profit or loss to the taxpayer. The tax becomes a tax on capital, for, when no profits are made, the tax is an additional loss which must be borne by the capital invested in the business. Finally, the inequality of the General Sales Tax is accentuated if discrimination by way of exemptions or differential rates is made in the levy of it.

The following table shows clearly the unequal weight on different kinds of business of a General Sales Tax based on gross sales at a uniform rate of 1 per cent.

WEIGHT OF A 1% GENERAL SALES TAX⁶

	A Retailer	B Wholesale grocer	C Food Manufacturer
	\$	\$	\$
Gross Sales	1m	1m	1m
Net Profits	30,000	10,000	50,000
Tax at 1% on gross sales	10,000	10,000	10,000
Profits after the tax is paid	20,000	Nil	40,000
Percentage of tax on profits	50%	..	25%

THE CASE OF THREE SHOE RETAILERS

	X	Y	Z
	\$	\$	\$
Gross Sales	100,000	100,000	100,000
Net Profits	4,000	2,000	6,000
Tax at 1% on gross sales	1,000	1,000	1,000
Profits after tax is paid	3,000	1,000	5,000
Percentage of tax on profits	25%	100%	20%

A second serious effect of the General Sales Tax on business is that it fosters industrial integration and so disturbs the industrial organisation of the country. Integration of industry is brought about in two ways. Firstly, in so far as the tax rests on business, it is an addition to cost. Any addition to cost must force marginal producers and sellers out of business. Business integration thus sets in with its unequal effects on wages, employment and prices. Again, many small concerns try to escape the payment of the tax by real or fictitious integration, as multiprocess concerns pay smaller scales of tax than the single process ones.

In fact, the tendency towards integration is observed in France, Germany, Austria, Canada and Australia. All these countries have taken measures to counteract this tendency. For instance in Austria, the tax is levied at a varying rate according to the number of processes involved in the business, though the business is carried on as a single concern. But this method of taxation is extremely difficult for adoption in countries like Germany and the U.S.A. where the taxable processes being too minute, are not easily distinguishable, the types of industrial organisation are too numerous and economic conditions are rapidly changing. However in Germany and Belgium the small businessman is safeguarded by pro-

viding that, when a sale forms one of a series and the seller has never had the goods in his immediate possession, the transaction is exempt from taxation.

To sum up the effects of the General Sales Tax on business. When the tax is not shifted—and it cannot be easily shifted in many cases—it is a tax on gross receipts and therefore a highly unequal tax on business enterprise. Moreover though the Sales Tax is shifted to the consumers, in the long run, it stimulates business integration and business instability; and any open discrimination in the rates or exemptions will further enhance the inequalities.

In Madras there are many factors which counteract the injurious effects of the Sales Tax on business. In the first place, the exemption limit of Rs. 10,000 per annum excludes the numerous small concerns, which form the chief feature of business organisation in the Province. Secondly the rate of the tax, being as low as half a per cent, is too small to induce business integration or bring about any other radical changes in business. Finally any tendency towards integration—even if there should be any—can be met by adopting single sales taxes on producers or retailers.

(ii) *Effects on consumption.*—By far the most important objection to the General Sales Tax at a uniform rate has been that it is regressive in its effects on the consumer. The incidence of the tax, being generally on the consumer, it becomes a tax on expenditures. It presses most heavily on the expenditures of the poorest classes, as they spend a larger part of their income on necessities than the richer classes do. It thus trenches upon their standard of living. Again the marginal utility of money is higher to the poor than to the rich; and any tax which falls upon their money income inflicts a greater burden upon them than upon the rich. Further, the General Sales Tax, being based on the gross expenditure of the consumers, is not equitable in the distribution of its burden among them; for, it disregards the number of dependents on the taxpayers, their sources of income, their methods of spending or their savings from income. Finally, the inequality of the General Sales Tax is increased by the usual exemptions from the tax of the personal services of household servants enjoyed by the rich and of the services of professional men such as doctors, lawyers, teachers etc.

The burden of the General Sales Tax is felt more acutely by consumers during times of depression than in periods of prosperity. The tax reduces their already diminished purchasing power and so deepens the depression. But there is a counteracting factor. The

taxes collected by the Government are spent on ameliorating the conditions of the consumers and this expenditure takes the place of private consumers' expenditure.

Most of the countries which collect the General Sales Tax employ various methods to overcome its regressive effects. Extensive exemptions are granted for essential foodstuffs, fuel, light and power, sales of agricultural produce by the farmers themselves and transactions of small traders. Again in certain countries, as e.g., France, Luxury Sales taxes are levied as a supplement to the General Sales Tax. While the ordinary sales tax rate is 1 to 2% the luxury tax rate is 10% to 15%. Even then the luxury taxes have not been adequate to overcome the regressive effects of the General Sales Tax.

But the incidence of the General Sales Tax and the equity of its distribution must be considered in relation to the tax system of a country as a whole. A tax system, the burdens of which are equitably distributed, includes taxes the effects of which are compensatory. In other words, while consumption taxes press heavily on the expenditures of the masses, it is possible through progressive income and inheritance taxes to counterbalance this inequality.

In Madras, the wise exemptions of food, clothing and fuel, the further power of the government to exclude by notification other goods, the very low rate of the tax and the existence of a progressive income tax and luxury taxes at high rates—all tend to mitigate the regressive character of the General Sales Tax. Besides, the revenue from the Sales Tax will be utilised by the government for the betterment of the people, while the extension of the prohibition policy in the Province must undoubtedly increase the purchasing power of the masses on whom the burden of the General Sales Tax ultimately falls.

5. THE MERITS OF THE GENERAL SALES TAX

So far, the detrimental effects of the General Sales Tax both on business and on consumption have been considered. The methods of mitigating them, if not, of removing them altogether, have also been dealt with. But the tax possesses inherent merits of its own and has offered certain definite advantages to those countries which have adopted them as part of their fiscal system.

In the first place, the General Sales Tax has a broad base in that it is spread practically over the whole community. Numerous sellers and producers will be included within the scope of the tax, permitting large revenues to be collected at a low rate of taxa-

tion. Besides, the basis of the tax, being either gross sales or gross receipts, is more easily defined than that of the net income tax.

Secondly, the payment of General Sales Tax may be so arranged as to suit the convenience of the tax payers. It may be collected monthly, quarterly, half-yearly or annually according to the habits of the business community or the needs of the treasury.

Thirdly, since it is a tax on sales in general, the burdens of the tax do not rest upon one section or class but are diffused throughout the community and spread over the processes of production and consumption. It has therefore the unique merit of being able to reach those who cannot be otherwise taxed adequately. In this respect, the General Sales Tax is far superior to the taxes which now exist in the provinces of India. It is more widespread than the liquor excise or the land revenue which press heavily on one section and that the poorer section—of the community. The middle men and merchants who are now contributing very little to Provincial finance will also be reached by the General Sales Tax, so that the burden of provincial taxation will be more equitably distributed among all the sections of the community than before.

Fourthly, the General Sales Tax is a definite tax, being based on business receipts. The tax-payer knows exactly what he has to pay as soon as his accounts are made for the given period.

Fifthly, the Tax is an economical one. The costs of the tax administration to the Government are low, because in all cases, the responsibility is placed on business for making up the proper returns of taxable receipts on sales. Nor has the businessman to incur any special cost for this purpose, as it is habitual for him to maintain accounts in due course of business.

Sixthly, from the point of view of business, the advantage of the General Sales Tax is its tendency to be shifted to the consumers in the long run. The sellers feel that it is the consumers that pay the tax. To the extent that the sales tax can be shifted, it does not reduce profits, as it is added to the cost, which is covered by the enhanced price in the market.

Seventhly, from the point of view of the consumers, the regressive effects of the General Sales Tax are not felt by them seriously. The rate being generally low, and exemptions being usually wide, the weight of it is not so heavy on them as in the case of other taxes. Besides the consumers pay, without their being conscious of it in small instalments whenever they buy a taxed commodity or service. Further, under conditions of imperfect competition the whole tax is not shifted to them.

Eighthly, the General Sales Tax does not offend the susceptibilities of the free trader as do the customs duties. Nor does it wound the feelings of the Prohibitionists as does the liquor excise. Particularly in India now, the excise revenue is considered to be tainted money; and so, the General Sales Tax, being absolutely free from any moral imputation, will be a most welcome substitute for the excise revenue.

Finally, by far the most outstanding merit of the General Sales Tax is its productivity. Many countries have found by experience that the tax yields a large revenue at little expense. The yield varies with the scope and the rate of the tax, business conditions and administrative efficiency. However, the General Sales Tax has become a major source of revenue in a number of countries, yielding more than the Income Tax and Customs duties in a few cases and nearly as much in others.

The following table shows the comparative position of the Sales Tax as a source of revenue with those of the Income Tax and Customs tax.⁷

INCOME, CUSTOMS AND SALES TAX
Revenues expressed in percentages.

Country	Year	Income Tax.	Customs	Sales Tax.	Total
France	1934	19·5	15·1	17·5	52·1
Germany	1932-33	9·4	22·3	19·1	50·8
Hungary	1932-33	10·6	4·8	12·0	28·3
Czechoslovakia	1933	14·6	6·5	23·0	44·1
Austria	1934	19·4	16·0	21·2	56·6

In Madras, many have "amused" themselves by estimating the probable yield of the new sales tax. Their estimates have ranged from Rs. 3 crores to Rs. 15 crores. It is not, however, possible at present to arrive at even an approximate estimate of the yield from the Sales Tax, because of the woeful lack of statistical data on which to base any scientific calculation. Anyhow, with the general improvement in the economic condition of the masses as a result of Prohibition and other measures of social uplift the Sales Tax may be expected to yield enough to cover the total loss of exercise revenue and the partial loss of land revenue, both of which together is estimated to entail a loss of Rs. 6½ crores annually to the public fisc.

7. Findlay Shirras, *Public Finance*, Vol. II, p. 607.

APPENDIX TO SECTION 5

COMPARISON OF THE YIELD OF THE SALES TAX WITH INCOME-TAX AND CUSTOMS DUTIES IN CERTAIN COUNTRIES

Country and Year	Income Tax	Customs Revenue	Sales Tax
Australia, 1934	£9,315 thousands	£22,327 thousands	£8,696 thousands
Canada, 1934	£61,399 thousands	£66,305 thousands	£106,576 thousands includes taxes on sales, cheeks and transportation.
New Zealand, 1934	£2,961 thousands	£6,485 thousands	£1,847 thousands
Austria, 1934	Schillings 99,482 thousands	Schillings 198,091 thousands	Schillings 262,056 thousands
France, 1934	Francs 6,860 thousands	Francs 5,312,000 thousands	Francs 6,151,000 thousands
Germany, 1932-33	Marks 463,307 thousands	Marks 1,105,969 thousands	Marks 948,093 thousands
Hungary, 1933	Pengos 37,466 thousands	Pengos 32,500 thousands	Pengos 83,500 thousands

(From the "Tax System of the World" 6th Edition, 1936).

CONCLUSION

Although the General Sales Tax was introduced as an emergency measure in the war and post-war periods, yet it has to-day become a permanent and major source of revenue in a number of important countries. It has entrenched itself securely even in the tax systems of these nations which depend much on direct taxes for their revenues. It is even more eminently suited for adoption in a country like India, where the Income and Inheritance taxes cannot be expected to yield revenues enough to meet the ever growing demands on the treasury.

Again, apart from acting as a powerful supplement to the existing taxes, the General Sales Tax is the most welcome substitute for the liquor excise in the Provinces of India. It is more equitable; it has a broader basis; it is less regressive in its effects on consumers; and it is absolutely free from any moral or political bias.

Besides, any regressive effect of the Sales Tax on consumers will be considerably lightened in course of time. The Provincial Governments which collect the tax spend the revenue on ameliorating the economic conditions of the masses. Their taxable capacity is bound to increase with an improvement in their economic condition. They will thus be in a position to bear the new taxes more easily than before.

Further, with the spread of Prohibition in the country, the purchasing power of the people will increase. Such an increase will enable them to buy more and more of other commodities than liquor. Trade transactions will thereby receive a tremendous stimulus. A small Sales Tax of half a per cent on the turnover cannot be such an intolerable burden on business as it is pictured to be.

Above all, the introduction of the General Sales Tax has a wider significance. It really marks an important stage in the reorganisation of India's tax system. It has been repeatedly pointed out that under the existing fiscal system, there is an unequal distribution of the burden of taxation among the tax-payers⁸; the small agriculturists and the large mass of rural labourers who cannot really bear the burden, are more heavily taxed than the trading classes and the urban population. In fact, the merchants

8. The Indian Taxation Enquiry Committee Report, Chap. XIV, and Sir W. Layton's memorandum to the Simon Commission Report. Part VIII.

and middlemen do not contribute much towards Provincial revenues. Reforms such as the introduction of higher progression into the income tax and the imposition of death duties are undertaken to bring about a more equitable distribution of the tax burden among the tax payers. But any increase of revenue from the income and inheritance taxes go entirely to the Central Government. On the other hand the new General Sales Tax will not only bring about a more equitable distribution of the tax burden, but will also give an expanding source of revenue to the provinces which stand in such urgent need of it.

On the whole, in spite of its deterring effects on business and its regressive effects on the consumers, the General Sales Tax is one of the most practical, productive, economical and equitable taxes. It is easily collected; it is dependable; and it is elastic. Business men feel it is not an additional burden upon them, as it can be shifted to the consumers. On the other hand, consumers will not feel the burden of the tax very much, as they pay it in tiny instalments, without any conscious effort on their part. Finally, the Sales Tax enables the Government to collect a large and increasing revenue in the most painless way and with the least expense and trouble.

The General Sales Tax is a new tax which is being introduced in India. A new tax is considered to be a bad tax and is always subjected to much criticism. Even the Income-tax met with strong opposition when it was introduced in England. But the Government machinery must be run. Every citizen—rich and poor—and every section of the community—producer, seller and consumer must contribute according to his ability towards this end. No other tax appears to be so admirably suited to achieve this end as the General Sales Tax, which excludes none, but includes every one in its all-embracing orbit. The Sales Tax must be viewed as one among several impositions that constitute the tax system of a country. Taken by itself it appears to have a few demerits but regarded as part of a general system and as one among alternative sources of taxation it has several excellent advantages.

SOCIOLOGY

By

DR. KEWAL MOTWANI

Sociology, as any other science, has been defined in various ways. The definitions alone, given by leading sociologists, would fill many pages. But I think the best way to define our subject would be to take a group of people, a community, or a nation, study its social life in all its manifold aspects and then distil out of the materials thus presented a definition of sociology. We shall take the example of contemporary India, make a general survey of the totality of her life, of her entire culture-complex and then define our subject at the end.

By culture we mean something more than what Matthew Arnold meant, "the study of perfection, the disinterested search for sweetness and light," which consists "in becoming something, rather than in having something, in inward condition of the mind and spirit, not in outward set of circumstances." Culture, in sociological parlance, means, as Tyler defined it, "that complex whole which includes knowledge, belief, art, morals, law, custom and other capabilities and habits acquired by man as a member of society." By culture, we mean the totality of group-life, both in its objective as well as subjective aspects. Culture is the tool-making, institution-making, value-making ability of man. Culture is a human product; no species of animals is known to have culture in this sense.

Now, two types of cultures with vastly different ideologies and values have come face to face in India, and are engaged in a deadly combat. India, with her rural, agricultural, handicraft culture, with an integrated view of life, with its emphasis on indefinable, qualitative values, on individual uniqueness, on dharma, on self-imposed poverty, on social synthesis, on a subjective, broad-based nationalism, on man and not the machinery of the government, on a life of religious experience and unfoldment, on power through repose, is confronted by a culture that stands for science and machine, for an urbanised, industrialised order, for an analytical view of life with its emphasis on neuroses and complexes, for mass-production, for quantitative values, for struggle for existence and survival of the fittest, for accumulation of wealth and economic imperialism, for assertive, arrogant na-

tionalism, for democracy and dictatorship, for religion of scientific humanism and rationalism. India has sought the vision of the Whole, not of the parts; she has been interested in living, not merely in the means of life. She has combined philosophic contemplation with action; she has stood for beauty and dignity, not mere utility. But, to-day, the culture of science and machine has taken a firm grip of India and is slowly seeping into her soul.¹

This conflict of cultures, this process of acculturation, is producing a considerable amount of social disorganisation. Let us take an example. When the steam-engine, material trait of culture of the West, came to India, it not only served to knit the various geographical regions into an organic whole, but also affected our social attitudes and organisation. It struck a death-blow at our caste-system. All castes, high and low, began rubbing shoulders at the railway station and in the train compartment. The process of communication became accelerated, and social distance between various communities and groups of people, artificially maintained by tradition and custom, began to take wing. Our static society began to yield before the machine of the west. The caste-system began to run away on the wheels of the train, the street car and the automobile. Communication is the heart and soul of all social and cultural change, as Professor Cooley pointed out many years ago.

India's life has gone through a considerable transformation during the last hundred years or so. The culture of science and machine has come to us, with all its products and social processes. Cheap Manchester fabrics and prints ousted the village weaver, and now Manchester itself is ousted by the Indian Manchesters of Ahmadabad, Bombay and Madras. Village sugar industry was crushed out by imported sugar; that, in its turn, is replaced by indigenous sugar industry, with enormous capital invested in it. The American oil replaced oil from the hand-press of the village. Village pottery and brass-ware have yielded their place to aluminium and enamelled iron-ware of local and foreign makes. Every industry of the village has been affected. Mechanised, large-scale agriculture is beginning to make its appearance and the signs of its displacing the peasant are on the horizon. The village smithy is being replaced by the modern repair shop. The village craftsmen are leaving their hereditary occupations on account of foreign competition. There is migration of labour to the

1. A fuller analysis of the two cultures is given in the writer's forthcoming book, "India: A Conflict of Cultures."

cities. The railways have destroyed the economic self-sufficiency of the village. The old system of barter and payment of wages in kind has given place to money-economy. The village, which has been the basic unit of our culture, is in ruins, and unemployment is rising every day.

The city has prospered at the cost of village. Our cities are growing in number and size. They combine financial, educational and industrial functions, as do the cities of the west. The mill-centres, the engineering workshops, the leather factories, the jute mills, these and other specialised centres of industry are rising in India very rapidly. The machine has raised its mausoleums of coal, smoke, iron and steam, of dirt, squalor and over-crowding; of coolie-lines and human ware-houses, in India also. The voluntary, spiritual co-operative communism in which all groups worked together for the welfare of the whole village, has disappeared, and India is to-day being broken up into two camps, arrayed against each other: capital and labour. Look where we will, we meet with this one problem in one form or another. The big landlord, the zamindar, the petty rajah, the industrialist or the capitalist on one side, and the hari, the peasant, the kisan, the jat, the wage-earner on the other. Strikes, lock-outs and sabotage are as common here as in the industrialised west. Conflict, not co-operation, is the pattern of our economic life to-day. India is fast being dominated by Marxian philosophy of class struggle. The capitalistic class is undoubtedly a formidable group already opposed to the interests of labour. Some of the legislation of socialistic hue, rushed through the various provinces, and the amount of opposition it has given rise to, bear testimony to the extent to which class conflict has gone in India. Industrialism, capitalism, class-war, this is the natural sequence. Once science and machine have gained admission into a nation, they must move on in their relentless course. There is no retreat, no matter however much that nation may shut its eyes. More science and more machinery, both yoked to the nation's welfare, is the only sane attitude.

Another very powerful factor, contributing to our general disorganisation, is the rapid increase in our population. Our population has doubled during the last hundred years or so, and if the statistics may be relied upon, it may be double of what it is at present by the close of the present century. The life expectancy is very poor. The average in India is 25 years, while it is 55 years in the U.S.A. and 58 in New Zealand. The average stature and weight of an Indian are decreasing. The average cultivated land is less than an acre per individual in India,

while it is 2.3 acres even in Britain. Such a great pressure of population on land must mean a steady decline in fertility of the soil as well as low standard of living. The vital statistics of our nation reveal some appalling tendencies. But we still continue to multiply indiscriminately and export our surplus population abroad, creating thereby serious international complications.

With the rural life uprooted and the land-man ratio upset, struggle for existence must become keener. Science and machine, in their present uncontrolled state, are no friends of the family institution. They are dealing sledge-hammer blows to the sanctity of marriage wherever they have gone. Divorce and abortion put in their appearance, and woman clamours for rights. The modern movie, a new contraption of science and machine, takes a hand in the game and puts virtue on the defence. Under such circumstances, the woman of a mechanised India will be a replica of her sister of the west. Cinema actresses of Hollywood and Gaumont brand will soon replace Savitri and Sita. Glamour so graphically depicted on the screen and the seductive arts so well portrayed on the stage must mean a good-bye to modesty that has characterised India's womanhood. The joint family system is breaking up, as it broke up in Europe with the advent of industrial civilisation. Family, like the village, is a group of primary contacts. An individual finds his place, his *locus standi*, there and becomes a person. Torn from the moorings of these primary groups, he becomes a physical and spiritual nomad. Walking, cycling, motoring round the world, are all signs of restlessness in a mechanised order of life. Fantastic experiments in marriage,² disintegration of joint family, increase in divorce, abortion, all have their roots in machine and science.

Social diseases, which came to us from the west, are now no longer confined to sea-ports and large cities, but are invading our rural regions as well. The health and vitality of our nation are at a very low ebb. Fortunately, we are just waking up to the greater value of our indigenous systems of medicine which are comparatively more efficacious and economical than those of the West. But the day is still far off when every man, woman and child in need of medical attention will get it. Cancer, known to be the disease of civilisation, is beginning to be common in India. Malaria,

2. See an essay on companionate marriage in India, submitted by a student as his thesis for M.A. degree in the Department of Sociology in the University of Bombay.

plague, cholera and kala-azar, though partially controlled, still claim a heavy toll of mortality. Artificial rejuvenation is beginning to be quite common in India.

Movie-houses multiply by the dozen in large cities, and the travelling picture-shows are invading our rural life. The Ras-Lila is fast being forgotten. Our people witness the movies screened in India or abroad, but they are cast in alien spirit; and there is an emotional reaction which is not Indian in tone. Everything is being westernised, vulgarised, mechanised. Profit-making motive is taking possession of arts and entertainment. Our daily metropolitan newspapers give more space to sports, games, stocks and shares, races, sex and cinema than to the actual news.

Crime, which is the unfailing index of social disorganisation, is on the increase. Train and mail robberies, rape, kidnapping, traffic in women and children, are quite common in India now, and the papers publish the news in flaring headlines. If we read the official reports submitted during the last year by the Inspectors-Generals of Police of the various provinces, we find one and all complaining of the rise in crime. The criminal in India emulates his colleagues of the west whose exploits he sees in the cinema and presses science into service. Hatchets and daggers are fast being replaced by pistols and guns, stolen from the government armouries. It will be quite a different story when the embargo over arms is removed by the government and the volatile temperament of the tropics gets control of them.

Amidst this wide-spread social disorganisation, there is very little intelligently organised social welfare work. We have yet to learn how to organise our charities so as to make every rupee go the longest way. Social welfare work is a science, and not mere soft sentimentality.

Our education cannot help representing the success of philosophy of science and machine. In the first place, all our institutions of higher learning, universities and colleges, are situated in cities, creation of machine and science. The success of physical sciences has led to our indiscriminate homage to the philosophy they represent. Consequently, the philosophy of struggle for existence and survival of the fittest has fought its way into our educational theory. There is no adjustment between education and life around us. While unemployment increases, while the village is in the process of disintegration and men herd together in cities in search of work, the universities continue to receive and send out graduates by the thousand. Meanwhile, the proportion

of possible employments to the number of claimants grows narrower, and there is a wide-spread dissatisfaction.

The number of subjects in our universities has certainly been increased; sometimes, one feels that the syllabuses are unnecessarily over-burdened. A want of idealism still clings to our educational system. Our students are compelled to develop a mania for success in examination. They want the greatest number of marks with the strictest economy of knowledge. Annotations abound. There is a great emphasis on natural sciences, and the social sciences are offered in a truncated manner. There is no binding link between them, they function in isolation and without reference to the realities of larger group life. The younger generation does not leave the halls of learning sufficiently strengthened to adjust itself to the new environment created by machinery and science, and discharge its duties to community on its return to the life of the world. When every boy and girl from the village comes running and seeks admission to the college and the university, the professors must be over-worked. The emphasis is on quantity, all along the line. There can be neither creative study on the part of the students, nor efficient teaching on the part of the teachers. Both must work under pressure and for a set purpose.

The philosophy of machine and science is conflict, and the relationship between the student and the teacher is based on conflict. The teacher can no longer be considered as one who imparts knowledge and should therefore be revered; and the student is no more a candidate for wisdom. Both become cogs in the machine, the former to earn a living, the latter to pass an examination and get out. Consequently, there is a continuous friction between the teacher and the student. The students have learnt to go on strikes in exactly the same way as the industrial workers do in the mills and the factories. They demand the dismissal of teachers and officials whose lives have been dedicated to India's service for decades. There is not a day that we do not come across a report of school and college strikes or leakage of examination papers, which is another form of sabotage. This is a sad commentary indeed on a country whose educational ideals and institutions have been models for imitation by other civilisations of early times.

The commercialised entertainment, the movie, the radio and the race course surround our young men and women in the cities; it is only natural that there should be a craving for sensation. False ideals of "getting rich quick" dominate the minds of the students, wealth becomes the criterion of appraising the greatness of individuals. The seeds for scramble for worldly goods are sown in the early school and college days of the students. Our

younger generation is no longer prepared to accept the social and the religious controls which the last generation has known, the link with the past is being quickly broken. Sex is already rearing its head and becoming a major problem in our educational institutions. In a situation such as this, it is only natural that our higher educational system should come in for a good deal of criticism, and the demand for its over-hauling become insistent.

When we come to view India's political scene, the effects of conflict with the western culture assume alarming proportions. Democracy, a child of science and machine, is being transplanted in India, with all its appalling futilities. We, like the West, are beginning to believe in the hallucination of numbers. We must have large electorates, legislatures with large numbers of representatives ; whether these representatives attend the sessions regularly, look upon their tasks as grave responsibilities, and whether they have the brains to fully understand and appreciate the significance of the complex problems of a changing social order or not, is another matter. We judge the strength of our political organisations by their size. Quantity reigns supreme ; quality is at a discount. It is the mob psychology that prevails. Those who wear a particular kind of headgear or have been to jail for a few months, have earned the right to sit in the deliberative bodies of a nation that places one brahman, one man of wisdom, above the heads of "the madding crowd." Our National Congress has a tremendous task before it if it only realised its significance.

The modern technique of propaganda is throwing up into lime light a new type of leader, who is very much like the political boss of the west. With the printing press and the platform at his disposal, he exploits the enthusiasm of the masses under the cloak of patriotism. Self-interest, not service of the people, is what counts. We have developed a plethora of parties ; in one province alone, there are no less than nine. Our politicians are picking up the art of lobbying and jobbery. The capitals, provincial and federal, will soon be peopled by representatives of high-pressure groups who will always want some "protection."

One of the most interesting fields for study of effects of the new culture of machine and science is that of inter-provincial relationships. Fate called India to a synthesis of peoples, races, religions, philosophies. People moved freely from province to province, made their residences far away from their homes. This free mingling of people was further augmented by railways and other mechanical devices of the machine-culture. But by a curious

twist in our psychology, we have become victims of petty provincialism, division, isolation. Our petty provincialism is very much analogous to the aggressive nationalism of the western nations, some of which are smaller than our districts. If the Congress High Command has been compelled to accept this balkanisation of India, it is because the philosophy of conflict and self-interest has come to stay with us. We are subverting the processes of history, and with our limited vision, we are segregating people into their respective provinces. The Provincial Public Service Commissions advertise widely for applications for government posts, but they don't fail to make it clear that only the residents of the province need apply! We are sacrificing talent for the sake of provincial preferences and nepotism. But when viewed as processes of social life, they are exactly the same as those national hatreds that have made Europe a shambles and produced the holocaust of blood and flames of 1914-18. Only we have no weapons to carry on warfare, but the conflict-patterns, both in India and the west, have a family-likeness. To look upon India as a part of the world and envisage her problems from national and international points of view is something very much different from thinking of it in terms of a community, a party, and a province. That way lies death. The nemesis that has overtaken the west will be India's fate. Mobility, spatial and social, that is, migration of people from one province to another and along the sliding scale of social hierarchy, is one of the most vital elements of social progress.

The philosophy of rights, aggressive and assertive, is a creation of mechanical civilisation. The possessors and the dispossessed are always engaged in a mutual war. We, in India, are immortalising these legal fictions in our Constitutions. Duty, dharma, an intelligent adaptation to environment, with one's feet firmly fixed in the eternal verities, finds no place in our life. Our future generations, drilled in these dogmas of rights and privileges, in this philosophy of success at the cost of the other fellow, will rush at each other's throats, as will these provinces fight with each other. The repetition of Europe's history, in a slightly different form, is not a remote possibility in India. No matter how stable our political organisations and party programs, the process of national disintegration can slip through and clutch at our very souls. The present struggle between the Indian National Congress and the States gives us a foretaste of what can come in the near future.

How can any higher feelings or spiritual values supervene when the educational institutions give no attention to the problem, when social, economic and political institutions and ideologies are

based on conflict ? Religion which smoothenes social life, helps the individual to find his niche in the social cosmos and fulfil his dharma, which imparts enthusiasm to his efforts for service of fellowmen, which softens the blows of fate, enriches and expands his inner life and sustains him in his sorrow, that religion has no place in a mechanical milieu. Money-making becomes the *sumum-bonum* of life, people are all the time goaded on to success. The sources of friction, however trivial, between the two major communities of India, begin to multiply, and there is a continuous fear of a general disruption. Separation, Pakistan, is only an echo of the provincial balkanisation sanctified by the National Congress. They are all phases of the machine-mind. We are in danger of accepting a materialistic philosophy of life and a rationalistic religion of the same type and on the same scale as the west. The modern barbarian has his habitat here as in any other part of the world. Evidences of a new materialism in India are not wanting.

The present social disorganisation that we are witnessing in India is born of conflict of two cultures and has to be intelligently understood and controlled. But how are we to do it ?

Our first task would naturally be to understand the history, evolution and functioning of these two types of cultures. We must get a clear grasp of the underlying social processes that eventually incarnated into these two cultural patterns or configurations. We shall have to begin with the study of the relationship between the organic and the inorganic environments and their relationship to and effect on man and his group life. Next would come the cultural history of the people, their ways of thinking and acting, their folkways and *mores*. We would then have to close in and concentrate our attention on man, his original nature, his biological endowments, the human nature acquired through the process of interaction between him and society, on the development of his social attitudes and ideas, on the processes of competition, conflict, accommodation, and final assimilation into the social order, on the mechanisms of social control by means of which society controls the centrifugal tendencies of its members, on the collective behaviour of people, men in mass. The problems of population, both in the quantitative and qualitative aspects, the standards of living, are significant aspects of social life. The techniques of propaganda and the formation of public opinion, would form another branch of study. Social mobility, both horizontal and vertical, that is, from one calling to another and along the sliding scale of social hierarchy, would give us a clue to the dynamics of the social order. The

major social institutions, such as education, marriage, family, economics, politics, religion, arts and sciences, their evolution and adaptation to the changing order, and the process of their maladjustment or atrophy, would give an idea of the direction in which the social life of the people is moving. Further, we would study the two types of communities, the rural and the urban, in which people live, their effects on man and the trend of civilisation. An interesting phase of study would be that of social change, evolutionary or sudden, the anatomy of revolution, the problem of social disorganisation, the techniques of social repairs, and social reconstruction. Finally, we would have to face the problem of values, and answer the question whether there is such a process as social progress, consciously willed and planned, or whether human life must drift along like an uncontrolled boat on an uncharted sea. If we attempted this procedure of understanding life of any group or nation, we would be studying **SOCIOLOGY**.

It is quite obvious that a subject, thus defined, will be suspected of encroaching on the boundaries of other social sciences, such as history, geography, anthropology, psychology, pedagogics, economics, politics, ethics, philosophy, religion; and of robbing them of their uniqueness. But on closer scrutiny, it will be found that it is not so much an encroachment as a drawing together into an organic unity these various social sciences that have remained and functioned in isolation, and not unoften in mutual antagonism. Sociology stands for synthesis. Its one imperative demand is that there shall be a co-ordination of these social sciences, representing different segments of social life. We can see the necessity of this synthesis if we take a concrete social problem and notice the inter-relationships of these social sciences. Let us take crime. The natural and social environments causing crime relate it to the region of human ecology; racial and hereditary factors connect it with cultural history, anthropology and biology. Maladjustment of behaviour, physical and mental disabilities, bring in psychology and psychiatry. Educational theory and practice reveal inadequate equipment given to an individual for creative living and earning a livelihood. Economics point to the direction of unemployment, poverty, poor wages, poor housing, pressure of population, old age, public health measures. Crime is connected with statistics, politics, jurisprudence, ethics and religion from their respective angles. All these social sciences are closely inter-linked in a pragmatic manner, and find their fulfilment in the architectonic science, **Sociology**.

Just as Biology studies the general phenomenon of life, which finds concrete expression in botany and zoology, the plant and the animal worlds, so does Sociology study associated life which finds expression through manifold institutions of man, represented by various social sciences. Indeed, the emergence of Sociology has given birth to many new connecting social disciplines, such as human ecology, social and cultural anthropology, social biology, social history, social psychology, social economics, social politics. The derivative and synthetic character of Sociology has turned out to be its strongest point ; it has helped in filling out the unoccupied spaces between various disciplines and then synthesising their methods and points of view. In the institutions of higher learning in the west, particularly in those of America, it is being increasingly realised that no social science, taught in isolation, has a meaning, unless it is related to other social sciences. The Institute of Human Relations at Yale University or Graduate Schools of Social Research and Social Welfare in different universities are well-known. Here, the contributions of various social sciences are brought together and focussed on the one central problem of social life. The nineteenth century was a century of physical and exact sciences ; the twentieth is that of social sciences. The era of analysis and monistic interpretation of human phenomena is passing away. Humanity has definitely taken a turn in the direction of synthesis and Sociology.

LOGICAL ANALYSIS OF THE THREE PROBABLE STAGES IN THE EVOLUTION OF PIE COMPOUNDS

By

C. R. SANKARAN

In a previous note on the same subject (NIA I. 1939. p. 744), I pointed out that the determinative karmadhāraya stage in the PIE is the *crude* substance-attribute stage. It was only sought to imply through this statement that true abstraction aside from mere receptivity must have been far beyond the uncivilized mind which must have been "incapable of comprehending many particular impressions under one general aspect or of fusing them into one whole, though such unification may not be purely conceptual but suggested by the percepts themselves" [Vierkandt, *Naturvolker und Kulturvolker*, p. 230. Hanns Oertel, *Lectures on the study of Language*, p. 320].

Here I wish to point out that the entire reasoning throughout my previous note is in strict consonance with the natural hypothesis that the PIE tongue was of a simple isolating structure, only superficially resembling the modern analytic type, the one reflecting fragmentary thinking and the other the developed analytic thinking. But far too strong a generalisation in the other direction is made, however, by some who believe that there has been a continuous movement from complex to simple structure and that man's earliest speech was of complex structure. However, there is still no good reason to reject the very natural hypothesis. [See my paper, "The Double-Accented Vedic Compounds" *Madras University Journal*, 1936, p. 68 f.n. 4 and p. 78; cf. also Carl Darling BUCK *Comparative Grammar of Greek and Latin*. Chicago-Illinois, pp. 58-9]

In this connection, it must be remembered that Armenian gives us a deep insight in regard to the primitive state of affairs with reference to a particular archaic feature of the PIE. In the latter, the augment was evidently not an integral part of the verbal form. [Vide my paper, "Accentual variation in relation to semantic variation" *J.O.R.M.* Vol. X. 1936, p. 320. f.n. c.f. also my paper, *Madras University Journal*, 1936, p. 82. With regard to the question of the accent of the augment, see my paper in the *Kuppuswami Sastri Commemoration Volume*, p. 138; Meillet, *Esquisse d'une com-*

parée del' arménian classique, p. 93, Vienna, 1903]. "In Armenian the augment is attached to past tenses of verbs which would otherwise be monosyllabic, but not to the polysyllabic forms a strongly original use." [Vide Edith Frances Claflin, *The Indo-European middle Ending —r Language*, Volume 14, 1938, p. 5].

Even according to the old Indian theory, the possibility of any thinking without language is disclaimed and language and conceptual thinking are made out to be identical. [See *Śatapatha Brāhmaṇa*, 8, 1, 2, 7]. What can certainly not be denied is that through a kind of abbreviation of associations, much perceptual thinking is carried on in words rather than in images. [cf. Stanley, *Language and Image*, *Psych. Rev.* Vol. IV, 1897, p. 67; *zt f. Psych. u. Physiol, d. Sinnesorgane*, Vol. XVII, p. 302; Pershing. *The Disorders of speech in Twentieth Century Practice of Medicine*, X, 1897, p. 769; Stout, *Thought and Language in Mind*, XVI, 1891, p. 181; Wundt; *Die Sprache und das Denken*, in his essays 1885, p. 244; Erdmann, *Die Psychol. Grundlagen der Beziehung Zwischen Sprechen und Denken*, in *Archiv f. systematische Philosophie* II, 1896, p. 355; III. 1897, p. 31, 150; Hanns Orertel, *Lectures on the Study of Language*, p. 317].

Finally, it must be admitted that the points brought forward in my previous note on the subject of the logical analysis of the three probable stages of the PIE compounds must necessarily remain somewhat problematical, since *no direct* proof can be supplied in support of the statements made there, and the question therefore now reduces itself to whether the intrinsic reasons offered far outweigh the absence of positive historical evidence.

THE CLUSTER PHONEMES -SK- AND -SKH- IN PRE-HISTORIC GREEK AND THEIR RELATION TO ACCENT

By

C. R. SANKARAN

(The object of this paper is to demonstrate how the hypothesis I have formulated in my paper published in the Wackernagel Number of the *New Indian Antiquary* can be further verified.) In support of my rule regarding the pair of cluster Phonemes -sk- and -skh- in Greek,¹ I give below, in the first place, more instances. *skheîn* (H. Hirt, *Der Indogermanische Ablaut*. Strassburg, Page 182), *skhésō*, *skhēma*, *gnóskō*, *blóskō* (C. D. Buck, A.J.P. 17 p. 281), *thnéskei* (H. Pedersen, *Hittitisch und die anderen Indoeuropäischen Sprachen*. Copenhagen, p. 81), *bibrósko* (Edmund Sandbach, *die Indogermanischen Zweisilbigen Schweren Basen und das Baltisch [Litauische] Präteritum*. Heidelberg 1930 pp. 15 and 50), **éikskō* (**wewikskō*) in contrast to *eískō* (Hanns Oertel, *Lectures on the study of Language*, p. 233, "Dissimilatory changes"), *ararísko* (George S. Lane, *Problems of Tocharian Phonology*. Language Vol. 14, p. 23).

A living category is not constituted in any sense by a considerable number of forms with present reduplication in *i*. This is applicable both to Thematic and Athematic verbs. But the reduplicated verbs in -skō which apparently were not generally obscure, hold an exceptional position. Instances are *gignóskō*,²

1. See my paper, **Gṃsk₁ó versus *Gṃskh₁ó*, *The Indian Antiquary*, Jan. 1939, Vol. I, pp. 632-636.

2. See also George S. Lane, *Problems of Tocharian Phonology*, Language Vol. 14, 1938, p. 29. "Such Hittite forms as *da-aś-ki-mi*, 'I am taking'; *da-aś-ki-si*, 'you are taking'; *da-aś-ki-iz-zi*, 'he is taking'; *Pi-es-ga-u-e-ni*, 'we are giving'; *Da-aś-ki-it-te-ni*, 'you (pl.) are taking'; and *pí-es-kán-zi*, 'they are giving' contain a suffix ending in a variable vowel, and it is safe that all scholars would identify it with the thematic of Greek *gignóskō*, etc." See E. H. Sturtevant, *The Source of the Hittite Hi-Conjugation*, Language Vol. 14, 1938, pp. 11-12. See also H. Hirt, *Idg. Ablaut*, p. 80, Section 212, p. 197, Section 838. Cf. "In many languages roots can only be found as imaginary forms, by comparing a group of words and getting at the common part belonging to them all. Thus in Latin it appears from *gnosco*, *gnotus*, etc., that there must be a root *gno*, which carries the thought of knowing. Going on to

bibróskō, *mimnéskō*, and *didrásko*.³

Some reduplicating presents had so altered their appearance on account of sound changes that it is no easy task to divine the original existence of a reduplication. Such a one is *dizēmai* < **didiāmai*.⁴ Possibly, though very doubtful, *mísgō* < **mimzgō*.⁵ But it is more usually and convincingly supposed to come from **migskō*- strong root **mezg-*, cf., Latin *mergo*-.⁶

Further, we have instances like the following in support of my rule. Gk. *-eskhārā-*, Gothic *-azgo-* (with Idg. *-sgh-*), Old Norse *-aska*, O.H.G. *asca* (with Idg. *sg*; *gh* > *g*). (See Holger Pedersen, Kuhn's Zeitschrift 32. 1893. p. 273).

It is necessary to point out that a comparison between the Germanic and the Baltic group, on the one hand, Goth. *-ga-raips* 'fixed, appointed', O.E. *geraēde* 'ready', Gothic. *geraidjan* 'prepare', etc., Lettish. *raids* 'ready', *riedu*, *rist*, 'arrange' and Tocharian, on the other, A *rituw-* 'be joined, bound', B *ritt*, with sbs. A *retwe* 'com-

Greek, there is found in *gignóskō*, *gnōsis*, *gnōmē*, etc., the same *gnō* with the same meaning." Edward B. Tylor, *Anthropology*, 1913, p. 144. See further for *gignóskō*. Latin, (g)*nōsco*; Irish, *gnáth*; old Bulgarian, *Znati*; Lithuanian, *Zinóti*. E. Zupitza, *Die Germanischen Gutturale*, p. 193.

3. Walter Petersen, *The vocalism of Greek Vowels of the type pitnēmi*, Language Vol. II, 1926, p. 14, footnote 1. "In case of *-ískhō* < **si-skh-ō* (strong root *-sekh-* in *eikhon* < **e-sekh-o-n*). This factor was assisted by other sound changes in other forms resulting in the present *-ekho-* and future *-exo*, so that the various irregularities could not have been interpreted according to any system." Walter Petersen, Language Vol. II, 1926, p. 15.

4. Fick, *Vergl. Worterbuch* I³ 108, 620. See also Walter Petersen, *op. cit.*, p. 15.

5. Wackernagel, *Miszellen Zur Griechischen Grammatik*, Kuhn's Zeitschrift Vol. 33, 1895, p. 39.

6. "Ein *-sko-* Präsens in gr. *mísgō-* < **mig-skō*, weiter gebildet in Latin *misceo*." See H. Hirt, *Idg. Gram.* Teil IV, Heidelberg, 1928, p. 336.

In this connection it must not be forgotten that Ligurian suffix *-asco*, *-asca*, is not probably Indo-European (Krahe, *Hirt-Festschrift*, II, 252-253). The Indo-European *-sko-* is found as *-s-* besides *-sk-* in the *-B-* dialect of Tocharian. Hittite exhibits a tendency to use the suffix in iterative-durative sense while in Tocharian we find it used in causative sense. "It is also interesting that, while Tocharian is merely archaic in its use as the adjective in place of the genitive, a trait common to Slav as well as Luvian, it makes specially frequent employment of these suffixes A-*ši*, B-*šše*, which is I.E. *-skiyo*, found in Armenian as *-oçi* and in the Slav *-isku* as well as in Germanic *-iska*." See A. B. Keith, *The relation of Hittite, Tocharian and Indo-European*, Indian Historical Quarterly, Vol. XIV, pp. 214-218.

binations, composition', B *raitwe* 'arrangement', is plausible.⁷ "The identity with the Tocharian renders imperative the separation of the Germanic forms from the root **reidh-* 'ride', and the connection with the base *(*a*)-*rēi-* 'join, fit' (in Greek, *ararísko*, etc.) all the more probable."⁸

Beside Gk. *phōs* from *pháwos* 'sun', an equivalent stem **phōs* with original *ō* on account of Homeric *phoōs* (contamination of *pháos* and **phōs*) must be assumed in order that the derivatives of the type *phōskei*, *diaphōskō*, *phōstēr* and Attic *phōs* (*pháos* from *pháwos* would not contract) may be accounted for.⁹

While -*aiskhúlos-* is in conformity with my rule, -*diaskopein-* is an exception.¹⁰ Similarly, -*aiskhos*, -*aískhistos-* *Aískhrōn* are exceptions. But contrast these with -*aiskhrós*, -*aiskhúlos*, from *aiskh*, *aiskhríōn* and *aiskhrōs*.¹¹ Exceptions to the rule again are Greek *panaískhēs*, -*eúaiskhros*, -*kállaiskhros*, *sklabēnós-*, Slavonian -*slovén-inu*, pl. -*éne* and also Gk. *sklábos*. But it must not be lost sight of that -*áskra* Hesych. and *skhoinous*, Arcadian -*skhoinos* Boeotian, obey the rule.¹² Among still further noteworthy exceptions are -*skēné*, -*skēnos*, Latin *castrum*, Greek -*skēnéō*, -*skénōma*,¹³ *aiskēthés*, Irish *scathaim*.¹⁴ As against these, cf. -*iskhnós*, *ésketo*, Old Bulgarian -*iseknati*, Russian -*sjáknuto*, Lithuanian -*sèkti*, Lettish -*sīku*, **sinku*, Sanskrit -*ásakra-*, *ásaccant*, *vīśaktām*,¹⁵ Greek -*epibaskémen*,¹⁶ -*skúzonai*,¹⁷ Gk. *ískhō*, *éskhon*, *skázō*. *Borouško*

7. Sieg, Siegling, and Schulze, *Tocharische Grammatik* 3, 462f. Lévi, *Fragments de Textes Koutchéens*, Cahiers de la Societe Asiatique 1^{re} Serie II, Paris 1933, p. 140.

8. Cf. Walde-Pokorny 2. 397. George S. Lane, *Problems of Tocharian Phonology*, Language Vol. 14, 1938, p. 23.

9. See Brugmann, *Grundriss* 2.² 536, 578; Brugmann-Thumb, *Griechische Grammatik*⁴ 75; Walde-Pokorny, *VWIS* 2. 122. E. H. Sturtevant, *Hittite h initial = Indo-European bh*. Language Vol. 13, 1937, pp. 116-117.

10. Jules Bloch, "Voir" en Indo-aryen; J. Wackernagel *Festschrift Antidoron*, Göttingen 1924, p. 148.

11. Vide, *Indogermanischen Eigennamen als speigel Der Kulturgeschichte* by Felix Solmsen, Heidelberg, 1922, Carl Winter, pp. 9 and 128.

12. Felix Solmsen, *Ibid.*, pp. 128, 51, 59, 51 and 60.

13. Ernest Zupitza, *die Germanischen Gutturale*, Berlin, 1896, p. 212.

14. Fröhde, *Bezenberger's Beiträge*, Vol. XVI, 1890, p. 182. See also Osthoff, Paul Und Braune's *Beiträge*, Vol. XIII, 459 Fick⁴ II, 308.

15. *Rg Veda*, I, 117. 20. Cf. J. Schmidt, *Kritik. d. Sonanten th.* 64. Also E. Zupitza, *Die Germanischen Gutturale*, p. 138. Cf. my paper, *Journal of Oriental Research*. Madras, 1935, Vol. IX, p. 129, for *a-sācāt-ā* (*Rg Veda*, I, 160, 2a).

16. See K. Brugmann, *Grundriss*, Band IV, Teil II, p. 60.

17. K. Brugmann, *Ibid.*, pp. 60, 26, 108, 38, 422.

is an interesting word (in conformity with the rule) in that it is the name of a tribe found by the humanist Stella in the Sarmatia of Ptolemy's Geography whence the name Prussian ('Borussian').¹⁸

On the other side are *-sk-ór*, *skat-ós*, Sanskrit *-çák-r-t*, *-çak-n-é*, (Latin *-stercus*). "*-Ces formes ne s'expliquent que par une flexion Sá-k-r-t dat : sk-n-A'i.*"¹⁹

The exception *-áskhetos* can perhaps find a possible explanation in the fact that "syllabic divisions like *he-któs* and *á-skhetos* are forbidden by the long quantity of the initial syllable in these words."²⁰

-sképtomai is also an exception which can be easily explained away, for here we meet with the well-known phenomenon—metathesis.²¹

Possible real exceptions to the rule are: *-skirtēmátōn*, *eskedástlēsan*, *skeuasthēnai*,²² *skélé*,²³ *skándaloes* = snares,²⁴

18. R. Priebisch and W. E. Collinson, *The German Language*, Faber and Faber, Limited, 1934, p. 9.

19. de Saussure, *Mémoire sur le système primitif des voyelles dans les langues Indo-Européennes*, Leipzig, 1879, p. 225. "*-skór*, Gen. *ska-tós*, Skr. *Avaskara* (excrement, place of same). In *chr̥ṇa*, *sch* is due to contamination of *sker* with *schid* (Norse, *skide*), though Skr. *ch* < *skh* is perhaps found in *iccháti*: Old Bulgarian *iskati* (Wackernagel, I, Section 132)."

"For the sake of *-deti* cf. English *gives* for *makes* or *does* (*gives* a cry, *dat. gemitum*). An accusative *prius* from *skor*, again governed by *dū* (giving, making), in the old Bulgarian gerundial *skare-dū* (nasty, American Journal of Philology, Vol. 37, 1916, p. 169. *Pro Domo Mea*. Part II. *Operandus*)."
E. W. Fay, *Irradiation and blending*, p. 157, Section 68. Studies in honour of M. Bloomfield. See further for *skōr*, Kurylowicz *Études Indo-Européennes*. Kraków, 1935, p. 7.

20. Roland G. Kent's Review of H. Hirt's *Indogermanische Grammatik*, Teil V, Language Vol. V, 1929, p. 264.

21. For the earlier **spéptomai*. Brugmann, (*griech gramm.*).³ p. 296, Sec. 344, Note II) derives *sképtomai* from **spékiomai* (Latin *specio*) which before becoming *sképtomai* first became **skepiomai*, formed on analogy with *bláptō*, *krúptō*, *túptō*. (See also Hanns Oertel, *Lectures on the study of Language*, pp. 226 and 231.).

22. A. Prévot, *L'Aoriste Grec en-thēn*, chapitre V. *L'Aoriste en-thēn* Après Homère. Collection Linguistique Publiée Par La Société de Linguistique de Paris, XXXIX, Paris, 1935, pp. 53 and 145.

23. E. W. Fay, *Irradiation and Blending*. Studies in honor of M. Bloomfield, p. 138, Footnote (1).

24. Leo Tolstoy, *A Confession and What I Believe*. Translated by Aylmer Maude. The World's Classics, p. 371. Oxford University.

skállō, skáptō,²⁵ *skéraphos, skídnamai, sklērós* (Doric *sklārós*), *skeletós, skólōps*, (Latin *scalpo*), *skulon, skutos*.²⁶

Gr. *ískhō* < **si-skhō* (strong root *sekh-* in *eikhon* < **-sekh-o-n*) resulted in the present *ékhō* and future *héxō*, reduplication being assisted by other sound changes in other forms.²⁷

More important exceptions are *áskhetos, skairo* < **skō-rjō* L. *pario*.²⁸

As a refreshing contrast to *pá-skhō*²⁹ -*fendo*, we have *pháskō*.³⁰ Without much comment, I proceed to give a few more exceptions, if only for the sake of completeness : Idg. *skelā* V. ii. Greek *aposklēnai, sklērós* doric *sklārós*,³¹ *skeletós, skéraphos*, Idg. *skere, skiá*, Idg. *skejā, skídnēmi, skuros, skutos, skirtāō, skairō*,³² *hrēskoménōn* (contrast it with Homeric *skhésō*), *éskhēmai* (contrast it with *aréskō*), Attic *éskhēka* (but contrast it with *schēma, skeletós, skhéματος*. Hanns Oertel, *Lectures on the Study of Language*, p. 274.), Attic *aposklēnai*, Epich. *exesklēkótes*, fr. 106 Ahrens) ; compare *sklērós*.³³

25. Edmund Sandbach, *Die Indogermanischen Zweisilbigen Schweren Basen und das Báltische (Litauische) Präterium*, Heidelberg, 1930, pp. 30 and 45.

26. H. Hirt, *Idg. Gramm.*, II, Heidelberg, 1921, pp. 123, 79, 183 and 136.

27. Walter Petersen, *The Vocalism of Greek Verbs of the type pítnēmi*, *Language* Vol. II, 1926, p. 15.

28. Vide H. Hirt, *Idg. Gram.* V, 1929, pp. 210 and 212. Compare also Greek *dusklewés* = Skr. **duhṣravás*. Fick, *Bessenberger's Beiträge Zur Kunde Der Indogermanischen Sprachen*, Vol. V, 1880, p. 184.

29. Grassmann, *Ueber das ursprüngliche vorhandensein von wurzeln, deren anlaut und auslaut eine aspirate enthielt*. Kuhn's *Zeitschrift*, Vol. 12, 1863. See also my article, *The New Indian Antiquary*, Jan. 1939, Vol. I, p. 634, Footnote 4.

30. K. Brugmann, *Grundriss*, Band IV, Teil II, p. 63.

31. H. Hirt, *Der Indogermanische Ablaut*, Strassburg, 1900, Section 790, p. 162, also Section 301.

32. H. Hirt, *Ibid.*, pp. 91, 84, 101, 197, 15, and Sections 477 and 425. Bechtel, *Die Hauptprobleme der Indogermanischen Lautlehre seit Schleicher*, Göttingen, 1892, p. 115.

33. Compare Bechtel, *Ibid.*, pp. 191 to 193. The influence of the *i* of Greek *ístēmi, títhēmi, pímplēmi*, etc., on Greek *Skídnēmi* beside the aorist *eskédasa* was suggested by Holger Pedersen, *Die Präsensinfix n*. *Indogermanische Forschungen*, Vol. II, 1893, p. 293. Walter Petersen, *Language*, Volume 14, 1938, page 57, f.n. 24.

In support of the rule are *enskherō*,³⁴ *apothnéskōn*,³⁵ *episkheró*,³⁶ *kikléskō*, *skhedíēs*, *epaurískō*, *epískopos*, *iskhanāō*, *titúskomai*, *lissésketo*, *kikléskousin*.

In the foregoing, I have given fairly representative examples from which it can be easily seen that the real exceptions to the rule are not numerous and it need not be pointed out that in view of this fact there is a high degree of probability for the rule to have operated in pre-historic Greek.³⁷

ADDENDUM

In other Indo-European Languages this law did not seem to operate. There, after initial *s*, there is only non-aspirate occlusive. cf. J. Kurylowicz, *Études Indoeuropéennes*, p. 53. We have in Lithuanian *skiemuō*, *skíemeni*, *skíemenys*, *skiemeniū*, *skiedziu*, *skaitmuō*, *skaitmeni*, *skaitiū*, *skaito*, *skaūdu*. (Holger Pedersen, *Études Lituanienes*, pp. 45-46 and 58.). We have in Hittite too, *śeskiški/a*—*Uś-kien-nu*, *Uškēnu*.

[Albrecht Götze and Holger Pedersen, *Mursilis Sprachlachmung* = Det Kgl. Danske Videnskabernes Selskab. Historisk-filologiske Meddelelser, XXI, No. I, Copenhagen 1934, pp. 18, 33, 35, 37.] *ku-ís-ki*, *pí-es-kán-zi* (zum Typus des gr. *pháskō*), *pí-en-ni-es-ki-iz-zi* [H. Pedersen, *Hittitisch und die anderen Indoeuropäischen sprachen* 1938. Copenhagen, 174-82, also p. 67.]. "Hittite thematic verbs of the 'm-conjugation' are, for example, the verbs in suffix *-ske/a-* (*da-as-ki-mi-*, *da-as-ki-ši-*, *da-as-ki-iz-zi*)" E. H. Sturtevant, *Language* 14, 1938, p. 291. [H. Pedersen, op. cit. p. 97; also pp. 104-5, 131-3.]. The iterative stem *taršk-* in Hittite (e.g. *tar-ši-ki-mi*, Forrer, *Boghasköi-Texte in Umschrift*, 2. 23. A 2. 15) shows that the extended form of *dar-* had the suffix *ś* instead of *is*, *es*. It is well known that in the Indo-European the *sko-* suffix was a conglomerate (*s+ko*) (Brugmann, *Grundriss* 2². 3, 350f). "The Hittite iterative *śk* was similarly found, as is shown by such series of stems as *au-* 'see'; *aus-*, *ušk-*, *halza-*, 'call'; *halziś(ś)-*, *halzišk-*, *hanna*, 'decide a law suit, litigate'; *hanneśsar*, 'justice, law suit'; *hannešk-*, *istamaś-*, 'hear' [See Holger Pedersen, *Hittitisch und die anderen*

34. H. Hirt. *Idg. Gram.* V. p. 287.

35. G. Herbig. *Aktionsart und zeitstufe, Beiträge zur funktionslehre des Idg. Verbums.. Indo-Germanasche Forschungen* Vol. VI, 1896, p. 158. Vide also Hanns Oertel, *Lectures on the study of Language*, 1913, p. 176.

36. Louis H. Gray, *On Indo-European noun declension, especially of -o- and -ā- stems*, *Language* Vol. VIII, 1932, p. 184.

37. See my paper, *The New Indian Antiquary*, Vol. I, p. 636.

Indoeuropäischen sprachen, 1938. p. 96.]; *istamašk-*, *mauśś-*, 'fall'; *maušk-*, *pa-*, *pi-*, 'give'; *peśšiya*, 'give, throw'; *pippeśšar*, 'gift' [H. Pedersen, *ibid.*, p. 117]; *pešk-*, *parh-*, 'drive hard, speed'; *parheśšar*, 'haste'; *parhešk-*, *punuś(ś)-*, 'ask'; *punušk-*, *uppa-*, *uppi-*, 'send'; *uppeśšar*, 'zusendung'; *uppišk-*". E. H. Sturtevant, *Hittite h initial = Indo-European bh.* Language Vol. III, 1927, p. 113. [H. Pedersen, *ibid.*, pp. 131-3.]. The loss of aspiration is a far-reaching and unambiguous innovation which is common to both Hittite and Tocharian. cf. Walter Petersen, *Hittite and Tocharian*, Language Vol. IX, p. 15, 1933. It is significant that the use of the IE. present suffix *-sk₁o*, found in **g₂msk₁ó*, Skt. *gácchati*, Greek *báskō* 'go' or Latin. *Crē-sco* 'grow' has been developed by Hittite and Tocharian beyond other languages. Hittite *akkuski-mi* 'drink copiously', *eku-zi* 'he drinks', *daski-mi* 'I take' *da(i)*—, [vide Delaporte, *Éléments de la Grammaire Hittite*. Paris 1929. 51f.]. *Sk₁* side by side with *sk* seems to appear in the B dialect of Tocharian [Sieg, Siegling and Schulze, *Tocharische Grammatik*, 358ff], *pā-sa-ntār* 'they guard' [Latin. *pā-scu-ntur*], *kām-se-ñc*, causative of *kān* 'come into being', which is the Skt. *jan-*, Gr. *-gen-*, Lat. *jen-* < IE. **g₂en*. In Tocharian *praksam* corresponding to Sanskrit *prcchā-ti*, *-sa-* is IE *skh₁o* [*ska-* in the B dialect. cf. Walter Petersen, Language Volume IX. p. 15, f.n. 13 and p. 27. 1933.]. "If the spread of this formative goes back to the period of Hittite-Tocharian unity we must of course assume that the tendency of Hittite to use it in an iterative-durative sense over against the prevalent causative use in Tocharian was due to a secondary divergence."

Original *a* (IE *o*) is perhaps substituted by *i* on account of vowel assimilation in Hitt. *daski-mi* which contrasts its *-mi* with the *-o* of Lat. *crē-sco*. This first *i* in *daski-mi* might have been due to analogy with the 3. sing., where the *i* represents the *e*-grade of the thematic vowel [cf. Walter Petersen. Lang. IX. p. 28 and f.n. 94, 1933.].

In Hittite *śi-eś-kān-zi* [*Die Boghazköi-Texte in Umschrift* by E. Forrer. Leipzig 2. 12A and *Keilschripte aus Boghazköi*. Leipzig. 3. 34. 2.] accepting E. H. Sturtevant's interpretation, we can seek a remnant of the original durative force of the stem *seske/a-*. That the stem does not contain the *-ske/a-* suffix and that it never had durative force was however the view held by Götze [*Kleinasia-tische Forschungen* I. Weimar. 1930. I. 233.] and Bechtel [*Hittite verbs in -sk-* 15. Ann. Arbor. Michigan. 1936. cf. also E. H. Sturtevant, *The values of the be- sign in Hittite*, Language Vol. XIII. 1937. pp. 287-8 and f.n. 12 of p. 288.].

The rule perhaps does not also operate in the non-Indo-European languages, for instance, see Blackfoot *kaískstakisini* (compare C. C. Uhlenbeck, *International Journal of American Linguistics*, Vol. 9, p. 76) so that we cannot give universal validity to it; it could have operated only in pre-historic Greek. This fact shows that "that which applies to one language or group of languages need not always be valid for another". C. C. Uhlenbeck, *American Anthropologist*, Vol. 39. 1937. p. 388.

THE RELIGION OF THE GĪTĀ.

By

P. NAGARAJA RAO.

The Gītā is the most popular Hindu Scripture, at once claimed to be the inspiration of the reactionary and of the renaissance Hindu. It is one of the three authoritative texts of the Theistic as well as the Absolutist Schools of Vedānta. Adapting the language of the ex-Dean of St. Paul's, Inge, the Gītā view of life can be defined as a revolutionary type of idealism which estranges the revolutionary by its idealism, and the conservative by a drastic revaluation of earthly goods. The Gītā gives expression to two seemingly different ideas of God, but fundamentally the Gītā view of God is that of a *personal deity* whose grace is essential to salvation.

Although some of the verses in the Gītā have been interpreted so as to sustain the Absolutism of Śaṅkara, it is clear that the stress of the Gītā is on a supreme *Person* (*Puruṣottama*) to whom loving worship and humble devotion are due. The Lord of the Gītā says "whatsoever thou doest, do it as an offering unto me". This and several similar verses show that the God of the Gītā is a God whose Law is the Law of Love, purified from all temporal and base attachments and desires. It has been said that this conception of God owes something to the influence of the Christian doctrine about the nature of God. It is hardly necessary to invent this explanation for the Gītā's stress on a Personal God, for some of the earliest Upaniṣads, undoubtedly, pre-Christian, are themselves theistic in character. The Gītā is fundamentally a scripture for life rather than a text for metaphysical speculation. It embodies a scheme of morality which is essentially scientific. It succeeds in reconciling absolute moral values with individual moral possibilities. It takes due account of the *svabhāva* (Nature) of the individual in prescribing his *svadharma*. This makes for individual perfection and simultaneously subserves the end of general social harmony.

We shall examine the relation of this doctrine to the scheme of the castes in India. The Gītā conceives of the caste in a manner radically different from the conceptions cherished by the reactionary orthodoxy of to-day.¹ Caste according to Gītā is

1. The identification of *svadharma* with *svabhāva* was first suggested

based on *svabhāva*, i.e., the individual qualities and propensities that go to make up the nature of the man. In the last analysis the caste of an individual is an achievement resulting from the strenuous pursuit of the good life. It is not a gift mechanically bestowed by an external agency. It certainly does not depend upon the accident or the circumstances of an individual's birth. The contemporary criticism of caste, valid as it undoubtedly is, against the mechanical caste system (*jāti*) actually obtaining in India to-day, is irrelevant in relation to caste (*varṇa*) as conceived in the *Gītā* and by the originators of the caste system.

The *Gītā* idea of Dharma is one of moral altruism. It rejects the mere efficient performance of rituals, quite as much as it rejects a vague and undisciplined allegiance to God, as both inadequate in themselves. It bridges the gulf between ritualism and humanitarianism. The *Gītā* lays equal stress on faith and good work. Faith without an active moral life is as vacuous and inadequate as a lofty moral idealism without a faith in God. Faith in God should be the informing principle of all moral activity. The *Gītā* is not therefore a mere compendium of ethical precepts, but primarily a religious scripture, the central emphasis of which is on a loving Father of Mankind who is the goal of human aspiration. The morality of the *Gītā* is ultimately and intimately rooted in Spirituality.

The moral teaching of the *Gītā* is not a static compound of prescriptions ready made for defined eventualities. It is a dynamic and living call to the individual man to live always in the fear of the Lord and to order his life in accordance with the teaching of the Lord concerning his duty to himself and his duty to society. It is rigid neither in regard to time, nor in regard to circumstances. The Kingdom of Heaven is not conceived by the *Gītā* as a realm of pure mystical experience unconnected with concrete human relationships. It is not an unearthly conceptual realm but a just and happy social order.

The *sanyāsa* of the *Gītā* does not imply the mechanical renunciation of worldly attachments. It is rather the taking upon oneself the duty of transforming by love and service, by example and

vaguely by Sri Aurobindo. Prof. D. S. Sarma has a splendid chapter on this subject in his book, *Lectures on the Gītā*. (p. 54-67).

Dr. Mees, the Dutch scholar, has maintained a very interesting thesis on *jāti* and *varṇa* in his book on *Dharma and Society*, p. 94; cf. *Young India*. M. K. Gandhi. (pp. 479-483).

precept, the existing fabric into a shining thing—a worthy offering at the feet of God. The consummation wished for by the ideal *yogin* of the Gītā is that through love and service he may attain ultimate fellowship with God Himself. It is far from being an unattainable and merely abstract idea. It is no impossible austere morality, but its adoption will turn the Earth into a Paradise. It does not preach a needless inhuman austerity or self-mortification and penances, but insists on the service of fellow human beings. The most inspiring and living embodiment of the ideal of the Gītā is Mahātmā Gandhi, the great political *sanyāsin* of India. He has interpreted our ancient Dharma in terms of modern life and taken up the message of Love and *Ahimsā* where Buddha left it. He restored the purity of Hinduism and purged it of its extravagance. He openly revolted against the rigid lifeless interpretation of the scriptures. He took his stand on the Bhagavad Gītā. To the utter surprise of the literalist section of the Hindu thinkers, the Gītā proved to be a revolutionary document in his hands.

HISTORY AND DEVELOPMENT OF THE MUSICAL COMPOSITIONS OF SOUTH INDIA-

By

M. A. SARADAMBAL.

*(Part of the Thesis submitted in February 1936, revised by
Mr. P. Sambamurti and published by Order of the Syndicate.)*

Introductory

The great composers, in the flights of their imagination, stirred by emotion in the service of the Muse, create out of the elements of the art certain musical forms. These forms we call musical compositions. The purpose of these compositions is to have at hand always some finished pieces of music for use even during the uninspired moments. These forms in their turn serve as models for the ordinary artists and artisans and for the laymen to have an easy access to the world of music. Rāga is the basis of Indian Music. These compositions are crystallised melodies set in a particular tune and measure or tāla.

Classification of Compositions

Creators of these musical forms, according to the method of perceiving the art, and from the characteristics of their compositions, can be divided into classes. The men of letters with a good knowledge of music who wish to devote all their talents for giving expression to their fervent feelings form one class. The other class consists of masters of the art who follow art for its own sake, and wish to illustrate the beauties of the art by artistic creations. Consequently, the compositions of these two classes of composers are of two different types and these two varieties have earned their names as melodic and technical.

Melodic compositions are most often pieces of poetry clothed in fine music. The music is intended to be a vehicle for the profound subject matter contained in them. Hence in such pieces the sāhityam (*mātu*) plays an important part. Because of their literary value some compositions belonging to this variety are learnt by students of literature as well, e.g., Jayadeva's Aṣṭapadī, the Tēvāra hymns, etc. Melodic compositions appeal to our hearts. Some other examples of this type are the kīrtana, pada, etc.

In the compositions of the technical group the saṅgīta or dhātu, i.e., the musical aspect is more pronounced than the sāhitya. These compositions are intellectual while the melodic compositions are emotional. In this group compositions like jatisvara have no sāhitya at all. Where sāhitya is met with in these type of compositions, it is only intended to serve as a mnemonic aid to remember the music. In the technical compositions the purpose of the composer is to show the varied beauties of the art in its manifold forms and so the author thinks more of the musical aspect than the idea contained in the song. Composers sometimes utilise the sāhitya portion to supplement the musical illustration. For example we have the "lakṣaṇa gītas."

The Hindu conception that a gifted talent should not be expended on a work which has no devotional or spiritual significance has prompted the composers to attach a few words of invocation to God to the purely scientific pieces. A distinct feature of the technical compositions as compared with the melodic is the fixity of the music (sāhitya). In a kīrtāna for example saṅgatis are added, and ciṭṭasvaras are appended. In a technical form like a varṇa or svarajati such attempts are not made. These are finished pieces and there is no free scope to introduce the originalities of the singer. Now-a-days we may find manodharma svaras being sung to the parts of a varṇa, and saṅgatis introduced. Usually in the pada varṇas elaborations are introduced for manifold exposition of the same theme through dance. The technical compositions make the students of music familiar with the intricacies and subtleties of musical execution, initiate them in the critical appreciation of the art and serve as a guide to the correct rendering of the rāgas and tālas of our system.

With regard to the exactness of the classification of musical compositions under the above two groups, a few words may be added. Besides the purely technical and properly melodic compositions, pieces there are which share the characteristics of both types. The simple 'gītas' of Purandara Das are grouped as technical compositions and learnt with the same motive. Still they savour greatly of melodic compositions. Again, kīrtanas are deemed as melodic compositions. But the immortal creations of the Musical Trinity and other great composers are the main references in defining the lakṣaṇa of a rāga and thus serve a great scientific purpose. Further, the saṅgatis, ciṭṭasvaras, madhyma kāla sāhityas, etc., are nothing but technical, non-essential, and beautifying appendages. A 'Rāgamālikā' again is quoted as a technical type. The Mēlakartā rāgamālikā of Mahāvaidyānātha

Śivan, the 72 Rāgāṅga rāgamālikā of Subbarama Dikshitar and the Rāgatālamālikā of Ramasvami Dikṣitar, are indeed technical pieces. But pieces like 'Jayajayagokulapāla,' and 'Pannagendraśayana' are as melodic as technical. Will it not be better to call such pieces as technico-melodic compositions ?

Musical compositions have also been classified as art forms, devotional forms, dance forms and opera forms as well as sacred and secular forms.

Outside the pale of compositions which have been treated above, lie the hundreds of our most ancient as well as the most natural and endearing compositions—the folk songs.

Principal Music Forms

The principal musical forms of South India, at present, comprise a great variety of compositions. But the greatest difficulty in providing clear definitions with regard to these compositions is that the majority of the composers, impelled by their originality, introduce their own modes and styles with which they transform and modify the structure of their pieces, so that there is no fixed definition or standard for any composition.

Alaṅkāra

Passing over the Sarali variśai, Jaṇṭa variśai, Dhātu variśai and Svara pallavi (the name itself explains the nature of the piece), the simplest form of composition, to which we attach much significance, is the *Alaṅkāra*. The alaṅkāras that we now learn were composed in the Māyāmālavagauḷa rāga and in the seven principal tālas and their varieties, by Purandara Das. The alaṅkāras have three aṅgas—Rāga, svara and tāla. The svaras are grouped in their vādi samvādi relationship with a few conjunct svaras to have continuity. Though learnt as a separate item, as the name denotes, the form of grouping svaras is adapted to embellish musical forms. Alaṅkāras, prior to the time of Purandara Das, meant quite a different thing. These alaṅkāras were only mere artistic grouping of svaras (विशिष्टवर्णसन्दर्भः अलङ्कारः) according to ārohi, avarohi, sthāyi and saṁcāri varṇas. (Ārohi and avarohi varṇas are the arrangements of svaras in their serial order of progression ; sthāyi is the lingering of the same note by repetitions like sa sa sa sa, ri ri ri ri ; saṁcāri is a mixture of all these forms. Thus the alaṅkaras are innumerable. The purpose of these alaṅkāras is : “ रक्तिलासः स्वरज्ञानं वर्णाङ्गानां विचित्रता ”।

Gīta.

Gīta, a generic term meaning 'song' is also applied in a specific sense to a form of composition, learnt by all students of music

soon after the preliminary svāra exercises, including alaṅkāras. A Gīta has four aṅgas—Rāga, tāla, svāra and pada. The last mentioned is the point to note. The student for the first time is introduced to the 'Sāhitya' or 'mātu' of a composition. Now onwards the mātu also assumes the significance and dhātu becomes the framework. The Sāhitya is usually the praise of God in the ordinary Gītas. The music is very simple, moving in an even tempo. Syllables like अइय तिइय etc., are interspersed in the sāhitya. This lakṣaṇa pertains to the Gītas of Purandara Das and Veyyi (1000) Gīta Paiḍāla Gurumurti Sāstri. These are the two prominent composers of ordinary gītas.

The Gītas are also made to serve technical purposes by certain authors —Venkaṭamakhi and Rāmāmātya. The Gītas of these are called 'Lakṣaṇa Gītas'. These Gītas are so called because they are written mainly with the purpose of illustrating the rāga and not only that, the Sāhitya itself gives a detailed account of the rāgas in which they are composed. Venkaṭamakhi has also composed a lakṣaṇa gīta for each rāgāṅga rāga similar to the Melakartā rāga-mālīka of Maha Vaidyanatha Śivan. He divides the body of the Gīta into three sections—Jāvaḍa, antarī and a concluding portion.

Sūlādis

Sūlādis are similar to Gītas to some extent in as far as the structure is concerned, but differ greatly in character. Sūlādis are to put it briefly, tālamālikas, composed as illustrations of the Sūdādi tālas. Sūla is a corrupted form of the word Sūda. In one piece it employs all the seven principal tālas and sometimes their varieties. Sūlādis are of a much higher standard than the Gītas and require great scholarship to handle them. Not only is a Sūlādi set in different tālas, but also in different kālas (speed). In the Sūlādis, akṣaras are fewer than in the Gītas and there are vowel extensions in plenty.

Ṭhāya—Ṭṭṭṭṭ.

Ṭhāyam is like a Gīta in structure, but the distinguishing feature of ṭhāyam is that it includes a portion of pāṭa or Ṣolkaṭṭu. Sūlādis and Ṭhāyams have now practically fallen into disuse. Except to scholars and others who hunt for curios, these compositions are not familiar to students of music. Ṭhāyam is specially important to Viṇā students, to practise iraṭṭai or double meṭṭu. For in the solkaṭṭu portion two syllables are allotted to one note. E.g.,

$\frac{ma \quad ma \quad ma \quad ma}{di \, gu \, di \, gu \, di \, gu \, di \, gu}$

etc. Whereas Gītas have only four

aṅgas, ṭhayam has another additional aṅga, pāṭa. Venkaṭamakhi is the only composer known to have composed Ṭhāyams.

Prabandha

Venkaṭamakhi and Rāmaswāmi Dīkshitar have composed prabandhas. Their lakṣaṇas will be dealt with in the later pages.

Svarajati—स्वरजति

The svarajatis serve as a stepping stone to the most scholarly of compositions—the varṇas. With the svarajatis a student first comes into contact with a set of compositions whose musical body is divided into different sections. The dhātu is divided into pallavi, anupallavi and caraṇa. Mātu or Sāhitya generally is an invocation. Sometimes the sāhitya deals with the valourous deeds of a renowned hero. In the mātu, svaras and pāṭa also will be introduced besides words. The svarajatis have a great rhythmical importance (jati) and thus have gained the name svarajati. The famous svarajati composers are Syama Sastry, Svati Tirunāl Maharaja, Chinni Krishnadāsa, Ādiyappiah, and Ponniah and Vadivelu (two brothers).

Jātisvara—जतिस्वर

As a counter part to svarajatis are the Jatisvaras. The chief difference between these two types is the absence of sāhitya in the latter. Jatisvaras are mainly intended for dance. In all other aspects jatisvara resembles a svarajati. The Ponniah brothers have composed many jatisvaras of which some are in the form of miniature rāgamālikās. These Rāgamālikā Jatisvaras are very popular in Travancore and hence it is said that these are the work of H. H. Svāti Tirunāl. In the svarajatis and jatisvaras, the tempo is not always uniform. They are intermingled with cauka and madhyama kālas.

Varṇa—वर्ण

Varṇa as it exists to-day has undergone great change from its original form. At present, a Varṇa is divided into three main sections :—

(1) Pallavi—This portion generally consists of two parts of two pādas.

(2) Anupallavi—is made up of a sāhityā portion at the beginning, followed by a svara passage. This Svara portion is called Mukṭāyi Svara.

(3) Ettukaḍai—(एतुकडै) or caraṇa. This portion consists of first a sāhityā portion, followed by a series of svaras. This sāhitya forms a sort of pallavi which is sung after each of the svaras. This pallavi is called Ettukaḍai pallavi and the svaras, ettukaḍai svaras. Now we round off the varṇa with the ettukaḍai pallavi itself and this is the only example of a composition wherein the original pallavi is completely neglected after the middle of the piece.

Originally, the varṇas had another portion after the Ettukaḍai, called 'anubandham'. Anubandham consists of a sāhitya and then a svara portion. The sāhitya passage completes the idea contained in the earlier portion of the varṇa. Only with the Sāhitya of the anubandham, the idea will be completely expressed and the bhāva fully represented. This is absolutely essential when used in dance. For the svara portion, either there will be a fresh ciṭṭasvara, or the muktāyi svara will be repeated. At the end the original pallavi of the varṇa will be repeated. As the main purpose of the anubandham was to give a connected and explanatory meaning to the Sāhitya, so that the whole bhāva might be well expressed, it was of importance in nāṭya. But the later composers cut short this anubandham portion as it is not of much value to the ordinary singer. Adiyappaiah and members of the Dikshitar family have provided anubandhams for their varṇas. But Patnam Doraswami Aiyer never cared for this.

Varṇas are classified as Tāna varṇas, Cauka varṇas, and Pada varṇas. Tāna and cauka varṇas are devotional or erotic in sentiment. But pada varṇas are always erotic in sentiment. While Tāna varṇas are in madhyama kāla, cauka varṇas, true to the name, are in vilamba kāla. Most often cauka varṇas have sāhitya for the svara portions also.

There is a mistaken idea that cauka varṇas and pada varṇas are the same. Both have svara sāhitya. All pada varṇas have svara sāhitya, but it is not necessary for a cauka varṇa to have svara sāhitya. Whereas all pada varṇas are cauka varṇas, all cauka varṇas need not be pada varṇas.

Pada varṇas are Śṛṅgāra varṇas composed for nāṭya and set in slow time measure. The name itself might have been derived from its resemblance to pada in sentiment and speed. Padas are more rhythmic. In combinations and permutation of svaras, special attention is paid to group them according to the various jatis, and also in the svara-sāhitya, śolkattu is introduced. Balaswami Dikshitar has composed a padavarṇa in which the ettukaḍai pallavi

changes for every ettukaḍai svara. Ramaswami Dikshitar has composed a svarasthāna varṇa (svara and sāhitya syllables become the same letters). There are also rāgamālikā varṇas. Pada varṇas are also known as jati varṇas and pada-jati varṇas. The varṇa is a typical technical composition where the purpose of the author is to bring forward the varied shades and beauties of the rāga. Amongst technical compositions the varṇa ranks supreme.

Rāgamālikā

This is a composition in a cluster of rāgas. Thus there are rāgamālikā gītas, svarajatis, varṇas, kirtanas and padas. Some rāgamālikās are different in structure from any of these types. There are rāgamālikās, as a continuous piece consisting of sāhityas in various rāgas. Sometimes each sāhitya portion is supplemented by a svara-passage and then the original pallavi is repeated or (if a very long piece) passed on to the next rāga. When there are svara passages (intervening) at the conclusion of each rāga, the last few svaras of the first rāga is added to facilitate the return to the pallavi. At the conclusion of the whole piece there will be a Ciṭṭa-svara in the vilomakrama of all the rāgas figuring in the composition. Dikshitar and others provide this portion with Sāhitya also. Ramaswami Dikshitar, Muthuswami Dikshitar, Subbarama Dikshitar, H. H. Svāti Tirunal are the prolific composers of rāgamālikā and Mahavaidyānatha Sivan's 72 Melarāgamālikā is quite well known. The rāgamālikās in Tamil are not embellished with ciṭṭasvarams.

Kīrtana

The most popular of the musical compositions of the present day is the Kīrtana—derived from the term 'Sankīrtanam'. The Kīrtana type of compositions was born in the 15th century and obtained its full form in the 18th century as is evidenced by the compositions of the Tālapākam poets, Nārāyaṇa Tīrtha and the Trinity. The body of a Kīrtana is divided into three main sections—pallavi, anupallavi, and caraṇa. These are the essential āṅgas. In the early days the Kīrtana had only a pallavi and caraṇa. Later on, Nārāyaṇa Tīrtha introduced the anupallavi from the latter part of the caraṇa. In the hands of Muthuswami Dikshitar the anupallavi becomes a separate entity. But for all others, the anupallavi and the latter half of the caraṇa have the same music.

Though the given account presents a kīrtana in its pristine form, in the long run, this type has undergone immense change. By the 18th century the great composers beautified and modified

the kīrtana according to their artistic conception. Several non-essential but beautifying appendages were added like sangatis, ciṭṭa svaras, svara sāhityas and madhyamakāla sāhityam. These added to the beauty of the kīrtana. In the kīrtanas in honour of Nataraja, Śolkattu is also introduced—a feature borrowed from darus.

In recent years, the ordinary plain kīrtana, and those with those appendages are classified as two different types. The former is called kīrtana, the latter kṛti. The chief distinctions given between the two are that (1) a kṛti is more musical than a kīrtana. (2) kīrtanas have more than one caraṇa. Such distinctions do not go to separate them into two types. Many compositions which have all other lakṣaṇas of a kṛti have three caraṇas, while a simple kīrtana sometimes has only one caraṇa. In such cases how are we to judge a piece to be a kṛti or a kīrtana. The same author has composed in different varieties, but of the same type. To what type do Mutuswami Dikshitar's compositions belong?—kīrtanas or kṛtis? What are Appa Rama bhakti (kā mavardhanī), Ela nī daya rādu (aṭāna), and Koluva iyunnaḍe (bhairavi) or, Elavatāra (mukhāri)? I think it is unnecessary to create two different types under such names. The term 'Kṛti' does not mean a separate type of composition. Kṛti means a composition—derived from the root कृ to do. Hence any workmanship is a Kṛti. What is composed, is a composition. Thus a gīta, varṇa and a kīrtana can be kṛtis. That which is composed by Tyāgarāja is Tyāgarāja Kṛti. 'Kṛti' is the generic term of which 'kīrtana' is the species. There is indeed a great difference between some of the simple Kīrtanas with abundance of words and of little musical importance and some of the master-pieces of Tyāgarāja and others. If there should be a separate name under which compositions of the latter type should be grouped, then 'Kṛti' will not be a suitable term. If a Kṛti also means a composition on any other subject other than Sankirtana, then such pieces can be better called 'darus'.

Daru

The Daru is like a Kīrtana in structure but it has rāga, svara, tāla, pada and pāṭa. Daru can be composed on any subject matter.¹

1. See section on Narayana Thirtha for more information.

Pada²

One of the earliest types of composition, of the modern age, is the Pada. While kīrtana seeks to attain God by praise, pada claims to attain the goal through love. The origin of the pada can be traced to Jayadeva. The type of composition continued to be in existence though not in form, but in spirit, till in the hands of the renowned Kṣetrajña it gained its definite form. The dhātu of a pada is divided into pallavi, anupallavi and caraṇas. Except in rare cases the caraṇa is made up of the music of pallavi and anupallavi. The music is very slow, giving ample scope for the expression of bhāva. The mātu is based on Śṛṅgāra rasa and nāyaka-nāyikā-bhāva and depicts Vipralambha Śṛṅgāra. Underlying is the deep philosophical meaning of the craving of the soul to join the Lord.

Tillāna

Tillāna is a north Indian composition Tiritillāna imported into South India. It resembles a Kīrtana in structure but the mātu is largely composed of pāṭa, svara and a few words. The music is brisk and lively. Padas and Tillānas are greatly used for dance. H. H. Svāti Tirunāl, Pallavi Seshaiyer, Mysore Sadasiva Rao and Ramnad Srinivasa Aiyangar are the prominent Tillāna composers.

Jāvali

Jāvali is a composition of a lighter nature with a lively and attractive tune. It is a purely love song. This also has pallavi, anupallavi and caraṇas. *Jāvali* also is an adaptation of the North Indian Tumri.

With the introduction of the Kathā Kālakṣepam from the north, certain musical forms also came down to us. These are the Ovis, Abhaṅgas and Doharas. Todayam, Mangalam, Hechcharika, Śobhanam, Nāmāvalis and Divya nāma kīrtanas pertain to the 'bhajana' and are well adapted to mass singing.

Periods of Development of Musical Compositions.

The stages of development of South Indian Music fall into the :—

2. See 'Kṣetrajña'.

Ancient period—up to 13th century.

Mediaeval period—13th to 17th century.

Modern period—17th century onwards.

But as regards the musical compositions, the periods of their development fall differently. The different stages can be best demarcated with reference to the personages who mark the epochs.

I period, up to 12th century (from the Vedas up to Jayadeva).

II period, 12th to 15th centuries (from Jayadeva to the Tālapākam poets).

III period, 15th to 18th centuries (from Tālapākam poets to the Trinity).

IV period, 18th onwards (from the period of the Trinity onwards).

The first period is the ancient period. The second forms the mediaeval age. The third period forms the early modern and the fourth, later modern age.

The Ancient Period—Up to the 12th century

The earliest glimpses of Saṅgīta, we have in our sacred lore—the Vedas. By the time of the Yajur Veda professional musicians seem to have come into existence. The strict rules for Sāmagāna with the accompaniment of Viṇā are a sure proof that vocal music had developed beyond the primitive stage. The very term 'Sāmagāna' tells that it was not chanted like the other Vedas, but sung. The Sāman hymns are sung concertedly, various priests singing separate portions, and at certain portions joining together in a chorus. A variety of musical instruments are mentioned in the Vedas. The reference to Viṇā is sufficient evidence of the advanced stage of the development of music. Most probably there may have been other varieties of compositions as well, besides the hymns of the Vedas.

“सामवेदादिदं गीतम्” Music originated from Sāma Veda—is a well-known statement. Still, even prior to the period of the Sāma Veda we find the germ of the musical notes and modes. In the Ṛgveda we have the earliest living example of words uttered in a musical pitch (the pitch accent). The Ṛgveda is chanted in three pitch accents called Udātta, Anudātta and Svarita. Udātta is the highest pitch, Anudātta, the lowest, and Svarita comes between the two when gliding down from Udātta to Anudātta.

उदात्तश्चानुदात्तश्च स्वरितश्च सारास्त्रयः ।

उच्चैरुदात्तो नीचैरनुदात्तः समाहारस्वरितः ॥

In keeping with the three svaras there are three modes known as Ārcika, Gāthika and Sāmika. If the direction is given as Ārcino gāyanti—sung in Ārcika—then that stanza should be chanted in the same one pitch. If it is Gāthino gāyanti—sung in Gāthika—then two notes. Sāmino gāyanti means sung in three notes in all the pitches. (It is a point to note that the scale or the pitch is taken in the avarohaṇa krama, i.e., from Udātta to Anudātta.). The three pitches used in the chanting of the Ṛgveda can be identified as the three notes *ga*, *ri*, *sa* (Sādhāraṇa gāndhāra, Catuśruti ṛṣabha, and Ṣaḍja). Out of these three accents developed two more notes—(1) when the voice rose a little higher than the Udātta ; (2) When the voice descended to a lower Sannatara or Anudāttatara—lower than Anudātta. A few of the last Ṛgvedic hymns, the whole of the Yajurveda, and the early Sāman hymns are based on these five notes. During the period of the Sāma Veda the full scale of seven notes came into existence.

In this connection, it is worthy to note how Pāṇini explains the evolution of the scale. He says :—

उदात्ते निषादगान्धारी । अनुदात्ते रिषमधैवतौ ॥

स्वरिते प्रमवाद्येते । षड्ज मध्यम पञ्चमाः ॥

Udātta—niṣāda and gāndhāra ; Anudātta—riṣabha and Dhaivata ; Svarita—Ṣaḍja, Madhyama, and Pañcama. This fact corresponds to the idea of Vādi-Samvādi relationship, and thus we are informed how the scale has developed from the harmonic notes (स्वयम्भु ध्वनि) of the primal Sāmika mode. This same śloka is repeated by Nārada.

Coming to the Sāma Veda, the hymns get the distinguished title of Sāmagāna. The musical aspect is pronounced in these hymns. In the full scale used in the later (उत्तरार्चिक) hymns, the notes used are Catuśruti ṛṣabha, Sādhāraṇa gāndhāra, Śuddha madhyama, Pañcama, Catuśruti Dhaivata and Kaiśiki niṣāda, besides Ṣaḍja. This scale means our Kharaharapriyā rāga. Our Catuśruti ṛṣabha was made the graha or ṣaḍja and thus they obtained the scale. In the ancient scheme of rāgas this scale was known as the Saindhavi rāga. During the Sāman period, as the term rāga had not developed, the scale was known as Sāma Saptaka.

The following is a Sāma ṛk where only four notes— ga_2 , ri_2 , sa , ni_2 —are used prominently, slightly touching dha_2 :—

sa sa rii sa — nii sa rii sa sa — ri gaa ga rii saa
हु वे वा च वा च वा - च हु वे

sa sa saa sa — sa rii sa rii gaa — rii saa
वाक् श्रु णो तु श्रु णो — तु वा — तु

saa sa saa sa — sa rii sa — ri gaa rii gaa
वाक् स मै तु स मै — तु वा — क्

ni sa ri ga ga ri saa — ri ga rii sa
वा - म प्र तां र म ता म्

ri gaa ga rii saa. nii saa saa
र मा हम् तु वा

ni dha nii ri sa ; ni dha ni saa
हा औ हो व ... इ ह

nii sa saa gaa rii saa ||
इ ह इ ह

In the following example dhaivata is used more than in the previous one :—

dha nii saa — sa nii dhaa
इ म स्तो ओ ... म
अ ह ते ए जा

gaa ri ga rii ri sa — ga ri saa saa
त वे द ... से

ni gaa ga rii — dha nii saa sa ni dha
होयु र थ मि व

dha ni saa ni saa ni ni dhaa — gaa ; ga rii ri sa
सं म हे मा म नी

ga ri saa saa — gaa ; ga ri dha
ष ... य अ होयु

nii saa saa sa nii nii ni dha nii saa saa
म दा हि न ... : प्र म ति

ni sa ni dhaa gaa ga rii sa — ga ri saa sa ri sa
 र स्थ सं स — थ

gaa ga ri — nii saa saa sa ni sa nii dha
 होय् अ ग्नाच् स ... व्या ... यू

saa saa saa sa nii ni dhaa
 मा रा षा अ ... म

gaa, ga ri sa ga rii saa saa.
 व य न्त व

gaa ga ri ri sa — ni sa ni ni dha saa
 होय् ... ह ... द ... अ

The next gīta comprises the whole octave :—

Saa sa saa sa rii saa
 हावु ... हा वु हा व

ri sa rii sa — ri sa rii sa — ni sa rii sa
 गा वो हा वु गा वो हा वु गा वो हा वु

ri ri ri rii saa rii, saa ; — ri ri ri rii saa rii ; sa ;
 वृ ष म प त्नी हा वु वृ ष म प त्नी हा वु

ni ni ni nii saa rii, saa ; —
 वृ ष म प त्नी हा वु

saa rii sa saa saa saa, sa — sa rii sa saa saa saa, sa
 वै रा ज प त्नी हा वु वै रा ज प त्नी हा वु

nii nii ni nii saa rii, saa ;
 वै रा ज प त्नी हा वु

In the same svaras as the previous two lines, are sung the following two विशरूपहावु and अस्मासु रमध्वनहावु

gaa gaa ga gaa ga ga ri gaa rii ri sa
 ते म न्व त प्र थ मन् ना म

ma gaa rii, saa, — gaa, rii,
 गो ... ना म्

ri rii ri ri ri rii rii ri gaa rii saa gaa rii
 त्रि स स प र मन् ना म जा ... ना न्

rii rii ri rii rii ri sa sa — gaa rii sa—
ता जा न ती र म्य तु ष त क्षा :

rii saa gaa ri ri ri sa rii—ri sa ri ga rii saa gaa rii
अ ... व्य भु तन् अ रु णी र्य श स गा ... वो

ni ni saa sa rii saa — ri sa rii saa
गा बु हा बु हा बु गा वो हा बु

(Repeat till तेमन्वत प्रथमम्)

rii saa gaa rii gaa ri
गा वो गा ... वो ...

ri ri ri rii sa — nii saa ri gaa rii sa
वृ ष म प त्नी वै रा ज प त्नी ...

saa ri gaa rii sa — rii gaa rii sa saa sa ri
वि श्व रू पा अ स्मा सु र म ध्व न् ...

Repeat from the beginning up to अस्मासु रमध्वन् . The piece is then concluded by singing :—

ri gaa ri sa ni dha paa nii sa dhaa nii sa
अ स्मा सु र म ध्वन् . हा ... बु

The remarkable feature of this gīta is that it touches the whole octave. Again this and the previous examples are illustrations of the privilege taken by the singer with the text of the piece. Words are permitted to be detached and grouped to suit the music. Syllables which are not in the text, e.g., 'Hoy' are added. Variations are introduced when the mātu is to be repeated. The method of singing each phrase thrice is called 'stoma'. If sung once it is known as 'stotra'. Fox-Strangways describes Sāmagāna thus :—"Sāman is, properly speaking, not music and words, nor words for music. Sāman is a melody for which words are found in the Ṛgveda."

One full section or Bhakti of Sāma Veda consists of five parts sung by three priests one after the other at first but joining together in the last portion. The five parts are called Prastāva, Udgīta, Pratihāra, Upadrava and Nidhāna.

Passing from the Vedas, we come to the Purāṇic age. But the Upaniṣads and the Brāhmaṇas also deal with music, though in a vague form. In some of the Purāṇas we get important information regarding music. The *Mārkaṇḍeya Purāṇa* makes an incidental

reference to music telling the story of the boon given by Goddess Sarasvatī to Kambala and Aśvatara, in the following lines :—

सप्त स्वराः ग्रामरागाः सप्त पञ्चगसत्त्वमौ ।
 गीतकानि च सप्तैव तावत्यश्चापि मूर्च्छनाः ॥
 तानाश्चैकोनपञ्चाशत् तथा ग्रामत्रयं च यत् ।
 एतत्सर्वं भवान् वेत्ता कम्बलश्चैव तेऽनघ ॥
 चतुर्विधं परं तालं त्रिप्रकारं लयत्रयम् ।
 गीतत्रयं तथा कालं मया दत्तं चतुर्विधम् ॥

Vāyupurāṇa deals with the seven svaras, three grāmas, mūrchanās, rāgas and gītālāṅkāras.

Viṣṇu Dharmottara gives information about the Saṅgīta of the time in a series of sūtras. Two chapters are devoted to music proper, one called Gīta lakṣaṇa, and another to instruments. The most noteworthy feature in this purāṇa is the mention of seven gītas अपरान्तक, उद्धोप्य, मन्द्रक, मकरि, औवेणक, सरोबिन्दु, ऋगाथा, पाणिका, दक्षविहिता and ब्रह्मगीतिका. Of these the first five, seventh and eighth are mentioned by Bharata as sapta tāla gītas.

In the epics for the first time we come across music proper. The Rāmāyaṇa was composed to be sung. The lucidity of the style may be due to its musical setting. Vālmiki mentions the seven jātis. The poem constructed in stanza form was sung in the mārṅa style based on the grāma rāgas. In the Mahābhārata also there are portions to be sung. Another noteworthy feature in the epic period is that music ceases to be purely devotional. Human element is introduced. Sentiments of pathos, heroism, etc., are dealt with. The secular element creeps into the musical field through the songs of eulogy about the heroes who won famous victories and saved the country.

The Historical Period

The historical period of Indian music commences with Bharata, the author of Nāṭyaśāstra. Bharata is the earliest author of acknowledged authority on Indian music, and his work for the first time gives us substantial information regarding the theory and practice of music during the early centuries of the Christian era. 'Nāṭyaśāstra', as suggested by the name, is a work on theatrics. But chapters from 28 to 35 are devoted to music proper. Further, in the fourth chapter he mentions a number of compositions used for dance. Bharata gives the definition of Saṅgīta as “गीतं वाद्यं च वृत्तं च त्रयं संगीतमुच्यते.” Saṅgīta is not only vocal and instrumental

music but also includes dance. During Bharata's time the rhythmic aspect, and with that, dance assumes prominence equal to music. This was necessarily followed by a development in the technique of music and a variety of compositions came into existence. Dhruvās and gītas are the two main types of compositions during this time.

Among the various compositions described by Bharata, the simplest is the *gīti*. Bharata defines it as “वर्णालङ्कार छन्दोक्षर समन्वितं”. Matanga gives only छन्दोक्षर समन्विता Nānyadeva (author of *Sarasvatī hrdayālankāra*) says : वर्ण एव गीतिः (varṇas here mean only *svara prastāras*). Śārṅgadeva (author of *Saṅgīta Ratnākara*) of 13th century gives the best definition in keeping with the examples given by him—“वर्णयलङ्कृता गानक्रिया पदलयान्विता”—Gītis are short songs made up of *Varṇālankāras* to which a *Sāhitya* of few words is added, and are sung in different ‘*layas*’. They can be called *alankāras* only if the *dhātu* is considered. But much importance is laid in the method of singing the *mātu* as well. The *gītis* are four in number—*Māgadhī*, *Ardhamāgadhī*, *Sambhāvitā* and *Pr̥thulā*. Vemabhūpāla is the earliest scientific writer to quote examples for these *gītis*. The *gītis* consist of a few words invoking God and the pieces are lengthened out by repetition. While repeating, the speed is also accelerated. These *gītis* are used in the *Pūrvāṅga* (Prelude) of a dramatic presentation. The *Pūrvāṅga* is of three kinds—*Śuddha*, *Citra* and *Mīśra*. *Pr̥thulā* is used in *Śuddha*, *Māgadhī* and *Ardhamāgadhī* in *Citra*, and *Sambhāvitā* in *Mīśra*. The *gītis* are divided into two groups—*Nivṛttapradhāna* and *Mātrāpradhāna*. The first two *gītis* belong to the first group. As the name suggests, the importance here is in repeating the *gīti*. For the other two, their distinguishing feature is their metre. *Sambhāvitā* is replete with *guru akṣaras*, *Pr̥thulā* with *laghu akṣaras*. All the later writers have dealt with *gītis*. Matanga gives a clear definition in a brief manner :—

द्विगुरु द्विनिवृत्ता च चित्रा गीतिस्तुमागधी । लघुप्लुत कृता चैव तदर्धे चार्धमागधी
समाविता गुरुवृत्तौ पृथुला दक्षिणे लघुः ॥

Raghunātha closely following Śārṅgadeva gives the most detailed account of the *gītis* with the method of singing them also.

त्रिलम्बितेनैव पदेन युक्तं गायेत् कलायां पदमादिमायाम् । पदान्तरेणापि युतं तदेव
गायेत् पदं मध्यलयेन युक्तम् ॥ कलां द्वितीयामधिकृत्य सम्यक् कलां तृतीयामधिकृत्य पश्चात् ।
ते द्वे कृतीस्त्वेन पदेन युक्तं गायेत् द्रुतेनैव लयेन सार्धः ॥ इति त्रिरावृत्तपदां वदन्ति तां
मागधीं मागधराजह्वयाम् ॥

(The piece is called Māgadhi being liked by Magadharāja.)

Example—

gaa	maa	dhaa	—	dha	ni	dha	ni	sa	ni	saa
व	न्दे	...		दे	वं	रु	द्रं	०	रु	द्रं.
ri	ga	ri	ga	maa	gaa	rii	saa			
दे	व	०	रु	द्रं	०	व	न्दे	॥		

Ardhamāgadhi—

अथार्धमागध्यपि लक्ष्यतेऽत्र विलम्बितेनैव पदेन युक्तम् । गायेत् कलायां पदमादिमायां पदान्तरेणाथ युतं तदर्धम् ॥ गायेत् पुनः मध्यलयेन युक्तं कलां द्वितीयामधिकृत्य सम्यक् । कलां तृतीयामधिकृत्य पश्चादथ द्वितीयस्य पदस्य गायेत् । पदान्तरं च द्रुतमानयुक्तं सैवार्धमागध्यमि-
धावती स्यात् ॥

Example—

maa	rii	gaa	saa	—	saa	saa	dhaa	nii
दे	वं	...			वं	रु	द्रं	
paa	dhaa	paa	maa					
द्रं	व	न्दे	—					

Sambhāvitā—

संक्षेपितैश्चात्र पदैश्चतुर्भिः, गुर्वक्षरैर्भूरिभिरन्विता च । कलादिमः स्यात् सबिलम्बिता च तथैव मध्यस्थ पदद्वयस्य ॥ प्रत्येकमुच्चारणतो द्विवारम्

आद्यान्तिमे चापि पदे विहाय परा कला मध्यलयान्विता स्यात् । पदैः श्रुतिभिः सहितां द्रुतेन लयेन युक्ता तु कला तृतीया, पदत्रयं यत्र चकास्ति चैषा संभाविता गायकसम्मता स्यात् ।

Example is not given for this gīti.

Prthulā—

लक्ष्मोच्यतेऽथो पृथुलाख्यगीते संभावितावत् सकला च वेद्या । लघ्वक्षराणां बहुलः प्रयोगो अपरो भवेदेष तयोर्विशेषैः ॥

Example—

maa	gaa	rii	gaa		maa	dha	ni	dhaa	dhaa	
सु	र	न	त		ह	र	प	द	—	
saa	saa	dhaa	nii		paa	ni	dha	pa	maa	maa
—	यु	ग	लं		प्र	ण	म	त	—	—

Being used in the Pūrvaraṅga, the mātu is in the form of worshipping Śiva. Vemabhūpāla (in his Saṅgīta Cintāmaṇi) calls these gītis as “mārga dhruvās” (मार्गध्रुवा) and says they are sung in the caccatpuṭa (caturaśra laghu) tāla and its varieties.

Another set of compositions used in the Pūrvaraṅga and mentioned by authors from Bharata onwards, is the Pañca Dhruvās (पञ्चध्रुवाः)

They are : (1) Utthāpinī	—(उत्थापिनी)
(2) Parivartanī	—(परिवर्तनी)
(3) Avakṛṣṭā	—(अवकृष्टा)
(4) Aḍḍitā	—(अड्डिता)
(5) Vikṣiptā	—(विक्षिप्ता)

The peculiarity of these compositions is the division of the piece into four sections :—Upohana, Pratyupohana, Dhruva, and Śīrṣaka. Herein we meet with the earliest instance of dividing the body of a composition into different sections. Upohana stands for the pallavi, Pratyupohana for anupallavi, Dhruva for carana, and Śīrṣaka is the concluding portion. The upohana is made of ‘Śuṣkākṣara’s’ without meaning like दिग्ले दिग्ले झण्डु झण्डु जम्बुक वलितक तेज etc. (di-gle di-gle jhandu, jhandu, jambuka, valitaka, teja, etc.).

उपोहन्ते स्वरा येन यस्मात् गीतं प्रवर्तते ।
तस्मादुपोहनं प्रोक्तं शुष्काक्षरसमन्वितम् ॥

One ‘digle’ or ‘jhandu’ is known as one ‘kala (कल)’. So the upohanas of different dhruvas have the different number of kalas. In Utthāpanī upohana consists of 8 kalas, Parivartanī 6 kalas, avakṛṣṭā—5 kalas; aḍḍitā, 4 kalas; and Vikṣiptā—3 kalas. All the dhruvas are in praise of Śiva.

Utthāpanī

देवं त्रिभुं त्रिभुवनाधिपतिं, केलासपर्वतं शुभाभरितम्, शैलेन्द्रराजतनयादयितं, मूर्ध्ना नतोस्मि पुरनाशकरम् ॥

Parivartanī

चन्द्रार्धभूषणजटं वरं वृषभकेतुम् —upo.
कैलासपर्वतनिवासिनं सुरवरिष्ठम् —P. upo.
शैलाधिराजतनयाप्रियं प्रमथनाथम् —Dhruva.
मूर्ध्ना नतोस्मि त्रिपुरान्तकं परमयोगिम् ॥—Śīrṣaka

Avakṛṣṭa.

वरदं सगणं त्रिपुरान्तं वृषभकेतुम्
 गजचर्मपटं विषमेक्षणं भुवननाथम्
 भुजगाभरणं जगतां हितं भुवनयोनिं
 प्रणतोस्मि भवन्तमुमापतित्वसितकण्ठम्

Additā.

प्रवरं वरदं प्रणमत सततम्—गजचर्मपटं मुनिजनसहितम्
 उमयासहितं भुजगबलयिनम्—प्रणतोस्मि शिवं त्रिभुवनमहितम् ।

Vikṣipta.

त्रिपुरान्तकरं बहुलीलं उमया सहितम् बहुरूपं
 भुजगाभरणं त्रिपुरान्तं प्रणमामि सदापरमीशम् ॥

Before each of these portions the upohana in the given number of kalas should be added.

Vastunibaddha (वस्तुनिबद्ध) gītas and Aṅganibaddha (अङ्गनिबद्ध) gītas are other compositions mentioned by Bharata. The first group consists of the gītas called Madraka, Aparāntaka, and Prakarī (मद्रकं, अपरान्तकं, प्रकरी). Anganibaddhas are Ullopyaka, Rovindaka, Ovenaka and Uttara (उल्लोप्यकं, रोविन्दकं, ओवेणकं, उत्तरम्). In the Vastunibaddhagītas the body of the piece is divided into four musical sections like that of Pañcadhruvās. In the Aṅganibaddhas there is no such division but the parts are differentiated by dance movement like Mukham, Pratimukam, etc. Other writers like Viranārāyaṇa, Vemabhūpāla, Haripālabhūpa, Nānyadeva, Śārṅgadeva and those who follow him do not group these gītas as such. They call these, *Saptātāla gītas*, illustrative of the seven principal tālas of the time. Chandaka, Āsārīta, Vardhamāna, Pāṇikā, Rk, Gāthā and Sāman are other gītas exemplifying the Mārga tālas. Rk, Gāthā and Sāman are drawn from the Vedas. Bharata, Nānyadeva, Vemabhūpāla, Haripāla bhūpa (author of Saṅgīta Sudhākara) and Śārṅgadeva who have dealt with these gītas give examples only for the tāla aspect—how the time measure is manipulated to be exhibited in dance in various ways. Vemabhūpāla mentions a few songs to be used in the 'Lāsyāṅga'—songs of love, songs of question and answer and dialogue songs. Besides these songs came the several ślokas—the Nāndi Śloka to be sung by the Sūtradhāra, another in the Prastāva, etc. Vemabhūpāla says that the Prastāva song is in the Maṅgalakaiśikī rāga and Caccatpuṭa tāla.

Songs used in drama gained a great impetus during the time of the Sanskrit dramatists.

The earliest writer to devote a full chapter to musical compositions is Maṭaṅga. Under the title Deśi Prabandhas Maṭaṅga mentions forty-nine compositions with brief accounts of them. Pārśvadeva and Dattila among the early writers mention these Prabandhas. But as Śārṅgadeva gives a great number more, and also supplies us with a detailed description of them, the Prabandhas will be dealt with in the section on Śārṅgadeva (author of Saṅgīta Rātnākara).

Mediaeval Period—12th to 15th Century

Musical compositions commenced with the setting of the hymns of the Ṛgveda to musical notes. It was the period of poetry coupled with music. Saṅgīta is mainly used as a part of the worship of God. But during the Puranic and Epic times music overstepped the strict limits of religion. Ballads, warsongs, songs in honour of the great heroes came into existence. Still later it was thought that music should not only be sung and played on instruments but the meaning and bhāva contained in the pieces should be exhibited through nāṭya. Hence arose several dance forms based on various sentiments.

During the mediaeval period music drifted more and more from its component part, dance. With the progress in technique of the art and scientific study, scholarly compositions unconnected with drama and dance came into existence. Saṅgīta and Nāṭya grew up as two separated but related arts. To place the newly developing scientific music on a firm individual footing, songs were composed to serve the cause of music and to illustrate its beauties in its varied aspects. As early as the 7th Century rāgas had developed. The result of these changes was the numerous gītas and prabandhas in different rāgas and tālas. The loss of the position of dance as an indispensable part of Saṅgīta can be seen from the works of the later music writers who devoted only one of the five chapters of a book to Nṛtta. Every author devoted one full chapter to Prabandhas alone.

Jayadeva

Though this period abounds in technical compositions, still the Mediaeval Age opens with one of the most important and cherished composers of Indian music. It is none else than the renowned *Jayadeva*—the author of the Gīta Govinda. To the devotee and to

the student of literature, to the singer and to the scholar, Jayadeva is equally important. Jayadeva marks an epoch in the development of musical compositions. *Gīta Govinda* is the earliest lakṣya grantha that holds its sway even to this day. Here for the first time we come across compositions composed in a particular rāga and tāla. It is a matter of great regret that the original melodies of these songs have been lost. The rāgas and tālas given by Jayadeva are only found in the list given by Śārṅgadeva under the name of prākprasiddharāgas and Mārga tālas. This means that within a century, the melodies and the time measures of the songs of the *Gīta Govinda* ceased to be in vogue. The *Gīta Govinda* is also known as the Aṣṭapadi because in general each song consists of eight caranās. Of course there are examples where we can find more and less than eight stanzas. The whole work is divided into twelve sargas.

The *Gīta Govinda* is a pure lyric in as much as it is a dissertation on the predominant sentiment of love. In lucid style and choice phraseology Jayadeva describes the love relationship between Rādhā and Kṛṣṇa. But as an undercurrent runs the high philosophical sense of the 'Jīva brahma aikya vedānta rahasya'. Rādhā stands for the individual soul and Kṛṣṇa, for the Universal soul. The longing of the human soul to attain its goal is represented in this kāvya in the form of Nāyaka-nāyikā relationship or the Madhurabhāva of Bhakti. *Gīta Govinda* is the earliest Indian opera; for we have here three personages—the nāyaka, nāyikā and Sakhi; and the theme is spread out in the form of dialogues. *Gīta Govinda* is the starting point of our *padas*. The term *pada*, as well as the nature, i.e., the nāyaka-nāyikā bhāva have been derived from the Aṣṭapadīs. Again the author introduced something like a pallavi in these compositions converting the last line of the first stanza into the burden of the song.

Śārṅgadeva

The one well-known scientific writer during the mediaeval period of Indian music is Śārṅgadeva, who lived in the 13th century. In the work called the *Saṅgīta Ratnākara*, Śārṅgadeva makes a comprehensive study of the problems of musicians and gives a detailed account of the lakṣya and lakṣaṇa of the Saṅgīta current during his time as well as those that have ceased to be in vogue. (On this basis he divided the whole musical system into Mārga and Dēśī. Mārga is bygone and Dēśī popular). He gives an account of the four gītas and the saptatāla gītas. But above all these he deals

with many new compositions not mentioned by the previous writers.

First among these new sets of compositions are *fourteen gītas* to illustrate the fourteen jātis. These, like other gītas are continuous pieces consisting of a dhātu and mātu. The time measure is determined by the number of akṣaras present. But the whole piece is divided into a number of kalas (कल) which can be compared to our tāla āvartas. Śārṅgadeva and Haripāla Bhūpa have given examples of these gītas.

There is another set of *five gītas* given as examples of *grāma rāgas*. The gītas are named Śuddha (शुद्ध), Bhinna (भिन्न) Gouḍī (गौड़ि) Vesara (वेसर) and Sādhāraṇa (साधारण). The five grāma rāgas in which these gītas are composed are also known as Śuddha rāgas. The peculiarity of these gītas lies in the method of grouping the svaras of the dhātu and in handling the tempo of the piece. The distinction between the gītas and these gītas is that while in the former importance is attached to words and tāla, in the latter the significance is laid on the notes of the dhātu.

Ākṣiptikas (आक्षिप्तिक) are another set of compositions. Śārṅgadeva accounts for the title as पदतालाधाक्षिप्तत्वात् आक्षिप्तिक । The ākṣiptikas are composed in the grāma rāgas. These have three aṅgas, svāra, pada, and tāla. The distinguishing feature of these compositions is that they are composed in fixed tālas like Caccāputa (tāla of four units), Cācapuṭa (3 units) Ṣaṭpitāputraka (6 units) etc. All ākṣiptikas consist of eight kalas and each kala is made up of eight dīrgha svaras. Thirty examples are quoted by Śārṅgadeva in his Ratnākara. The same examples are found in Raghunātha's and Haripāla Bhūpa's works. All the pieces are confined to the mandra and madhya sthāyī. Generally one akṣara is allotted to one svāra but in some cases there are long vowel extensions. The theme of the Sāhitya of these pieces is praise of Śiva, Viṣṇu or Sūrya.

Other technical compositions mentioned by Śārṅgadeva are the *Kapālas*, *Kambalas*, and a vast number of *Prabandhas*. *Kapālas* are composed for the exposition of the Janaka jātis. (The legendary story goes to say that Śiva during his "bhikṣāṭāna" sang a few tunes which melted the crescent moon on Śiva's head into ambrosia. The amṛta falling on the kapāla-(skull)garland around his neck rejuvenated them and they began to accompany Him in singing. These songs being sung by the kapālas derived the name from them). There are seven kapālas in the seven śuddha

jātis. The kapālas are named Śāḍjī Kapāla, Āṛṣabhī Kapāla, Gāndhārī Kāpāla, etc., after the name of the jātis. Śārṅgadeva gives the graha, amśa and nyāsa svaras of the piece, the alpatva and bahutva of particular notes, the range of the pieces and the number of kalas each should comprise. Śārṅgadeva concludes his description of the kapālas with a “phala Śruti”.

इति सप्तकपालानि गायन्ब्रह्मोदितैः पदैः ।

स्वरैश्च पार्वतीकान्तस्तुतौ कल्याणभाग्भवेत् ॥

Kapālas are sung by Brahma and others with words and svaras in praise of Śiva. In the Sāhitya words are few and are interpolated by many bijākṣaras (बीजाक्षर) like अं, हौं, त्रैं, हां, ऐं, हैं, हं, क, ह etc. Because of their nature the kapālas are considered to be very auspicious compositions. Kambalas got the name by being sung by Kambala (the serpent ear-ring of Śiva). Kambalas are composed in the Pañcamī jāti.

प्रीतिकम्बलदानेन कम्बलाय वरं ददौ ।

पुरा पुरारिरघ्यापि प्रीयते तैरतः शिवः ॥

Śārṅgadeva devotes one full chapter in giving detailed lakṣaṇas of what are called Prabandhas. Prabandha being a generic term meaning a composition including a literary work, these prabandhas are called *Gīta Prabandhas*, to distinguish them from *Kāvya* and *Nāṭaka* prabandhas.

A prabandha has six aṅgas (component parts).

“आद्यस्वरस्यात् बिरुदं द्वितीयं पदन्तृतीयं किल तेजकंच । स्यात् पञ्चमः पाट इति प्रतीत-
स्तालाभिधानं निगदन्ति षष्ठम् ” ॥

(Svara, Biruda, Pada, Tennaka, Pāṭa, Tāla).

Biruda means exclamations and words of praise.

Pāṭa means solkaṭṭu.

Tennaka—usage of the syllables तेन तेन as तेन is a form of the word तत् it is considered to be auspicious to use it in a composition.

A prabandha is described as a man and the six aṅgas are his six limbs. The purposes of these aṅgas are described as follows :—

“पदस्य चार्थप्रतिबोधकत्वात् तेजस्य कल्याणविबोधकत्वात् ।

पदञ्च तेजञ्च विलोचने द्वे प्रबन्धसंज्ञस्य च पुरुषस्य ॥

मृदङ्गवीणासुरजादि जङ्गाकारादिपोत प्रभवस्तु पाटः ।

प्रत्यर्थसेना प्रविदारणादिर्यतस्तुहस्ताभिनयैकसाध्य ॥

तच्चौ दशौ सौ विरुदधताचौ प्रबन्धनामपुरुषस्य पाणी ।
तालास्वरा सञ्चरणेकहेतुः प्रबन्धनामपुरुषस्य पादौ ॥

The *mātu* of a *prabandha* consists of *pada*, *biruda*, *pāṭa* and *svara*. It is the *dhātu* that sustains the piece. The *dhātu* is divided into four sections :—

(1) <i>Udgrāha</i> (उद्ग्राह)	(3) <i>Dhruva</i> (ध्रुव)
(2) <i>Melāpa</i> (मेलाप)	(4) <i>Ābhoga</i> (अभोग)

(1) उद्ग्राह्यते येन सोयं उद्ग्राह :—the portion with which the *prabandha* commences is *udgrāha*.

(2) उद्ग्राहध्रुवमेलनात् मेलापः—that which connects *udgrāha* and *dhruva* is *melāpa*.

(3) ध्रुक्त्वात् ध्रुवः—the portion that is necessarily present is *Dhruva*.

(4) परिपूर्णत्वेन अभोगः—Because this portion concludes the piece it is called *ābhoga*.

In certain *prabandhas* a section called 'antara' is also introduced. (the term and this section of the piece is even now present in North Indian Music). Śārngadeva describes the *dhātu* as

वातपित्तकफा देह धारणात् धातवो यथा ।
एवमेव प्रबन्धस्य धातवो देहधारणात् ॥

The four sections of the *dhātu* of the whole piece are also referred to as 'chatur dhātus' i.e., four *dhātus*. It is not necessary that all the four *dhātus* should be present. *Melāpa* or *ābhoga* or both can be omitted. But no *prabandha* will be complete without two *dhātus*. *Udgrāha* and *Dhruva* are the essential portions. *Udgrāha*, *melāpa*, *dhruva* and *ābhoga* correspond to the *upohana*, *pratyupohana*, *dhruva* and *Śīrṣaka* of the early compositions, and the *pallavi*, *anupallavi*, *carāṇa* and the *Muktāyi Svāra* or *Madhyamakāla Sāhitya* of *Kīrtana* of the present day. As the *pallavi* and *carāṇa*, so are the *udgrāha* and *dhruva*, and as *anupallavi* and the concluding passage, the *melāpa* and *ābhoga*.

In the case of the *aṅgas*, *pada*, *pāṭa* etc., also it is not necessary that all these should be present. According to the number of *aṅgas* present the *prabandhas* are classified into *medinī* (मेदिनी), *nandinī* (नन्दिनी), *Dīpinī* (दीपिनी), *Bhāvinī* (भाविनी), and *tārāvalī* (तारावली) *jātis* having six, five, four, three and two *aṅgas* respectively. A few *prabandhas* have no fixed number of *aṅgas*.

Rules are laid down that certain prabandhas should be composed only in a certain rāga or tāla, or metre. Such prabandhas are called Niriyukta (निर्युक्त). The others are known as अनिर्युक्त (Aniriyukta). Matanga (author of Brhaddeśi); Bhūlokamalla or Jagadekamalla (author of Ābhilaṣitārtha-cintāmaṇi); Pārśvadeva (author of Saṅgītasamayāsāra); Haripālabhūpa (author of Saṅgītasudhākara); Śārṅgadeva, King Gajapativīra; Śrī Nārāyaṇa Deva (author of Saṅgīta Nārāyaṇa), Raghunātha (author of Saṅgīta Sudhā, and Tulajāji (author of Saṅgīta Sārāmṛtam)—are the chief authors who have dealt with the prabandhas. In classifying these prabandhas into different groups there is much difference of opinion among them. Matanga groups them together under the one heading of Deśi gītas. Bhūlokamalla closely follows his predecessors. But all the others divide these prabandhas into three groups—

(1) Sūḍa (सूड) prabandhas	(1) Śuddha Sūḍas.
	(2) Sālaga Sūḍas.
(2) Alikrama (अलिक्रम) prabandhas.	
(3) Viprakīrṇa (विप्रकीर्ण) prabandhas.	

Bhūlokamalla and King Nārāyaṇa give examples of some of the prabandhas. But the examples do not corroborate fully the definitions given by Śārṅgadeva. Besides the svara, pāṭa, and tennaka portions are not given always. Whether these portions are lost, or are intended to be sung extempore is a point in question. Certain hints point out these portions of the compositions are improvised by the singers.

Śuddha Sūḍa Prabandhas are eight in number (but Pārśvadeva gives eleven). These are niryuktas and composed in Sanskrit. Some of these have many varieties. The prabandhas are named as Elā (एला), Karaṇa (करण), Denkkī (डेङ्की), Vartanī (वर्तनी), Jhompaḍa (झोपड), Lambha (लम्भ), Rāsa (रास), and Ekatālī (एकताली).

Elā (एला) is a very auspicious prabandha as the name is formed by the three letters अ, इ, and ल, the letters of Viṣṇu, Manmatha and Lakṣmī. In this composition much importance is attached to the literary aspect and the several varieties are distinguished by the Sāhitya portions, the metre, the language, etc. The subject matter should be in praise of a deity or a rājā. If it is a rājā the hero should be of sterling quality and the prabandha should speak of his admirable qualities.

कुलशीलवयोविद्यात्यागक्षौर्यादिभिर्गुणैः ।
वर्ण्यते नायको यत्र तामेलां कवयो विदुः ॥

King Gajapati Vira Śrī Nārāyaṇadeva gives the following example :—

Mallāra raga—Ādi tāla :

जयरोदिनिसुत सुरमण्डलनुत दुर्जन तर्जन पर्णतरे
आखण्डल खण्डपरशु कृतोदण्डावनिपतदमधर धुनिरुचिमर्णतरे
आखण्डलमणिखण्ड समप्ररसिचयुगलतनु भूषिता आ
अम्बदतुम्ब नितम्ब महेश्वर गिरिनि भविगलित व्यपण आ
क्षे क्षे क्षे क्रीण थोदूट खट मट रट द्रो द्रमि झकिट धां कु धां झांतरि झान्तारिता तादु
गता ॥

स नि धनि स ध तासं सम सनि ग मं ध सं मनि मस ग निगसा सा सा ।
तेना तेना तेना तेना तेता तेना तेना तेना ईषा ॥

(The portion marked आ... is known as prayoga (प्रयोग) and is defined as “आलापो गमकालसिरक्षरैर्वर्जिता मता”)

i.e., prayoga is mere ālāpa without akṣara. This corresponds to the present day short rāga sañcāra introduced in the middle of a song sung by singers). This example gives all the six āngas of a prabandha.

The chief varieties of the Elā prabandha are mātṛa elās, the varṇa or gaṇa elās and the deśākhyā elās.

Gaṇa and Mātṛā elās are only marked by the metre—varṇa vṛtta or mātṛā vṛtta. There are two kinds of varṇa elās and are known as Bhogavatī and Kusumavatī. Bhūlokamalla gives the following definitions and examples of these :

Bhogavatī.

गीतं सुधारसस्यन्दि वर्णमात्रेण भूषितम् ।
मोगवत्यां तु गातव्यं गमकैश्च विराजितम् ॥

Example :—

गोवर्धनं भूषणं देवं अमिनवजलधरभरसदृशवपुषम्
परमसरपतिमपगतर्षं सततमहं ध्यायामि विष्णुम्
उपदेशानुगृहीत जिष्णुं शंखचक्रगदाधरं परमात्मानम्

Kusumavatī.

त्रयं पादा दश षड्भिस्सर्वैस्सप्तदशाक्षरैः ।
एलायो कुसुमावत्यां स्युरुदराहतिरुच्यते ॥

Example :—

क्षितिपवन गगन हुतवह जल भवन प्रणतसुर मुनिजनावनं
मनुजा प्रवेद वेदागपारग लोकावासविभो श्रीपते
कुसुमशर विवश युवतीशतरतिदक्ष शरभरपतन हत
सुरपतिरिपु पक्ष प्रतिसनिरुच प्ररोधसंवेदन मूर्ते विमलकीर्ते
सतन गमन विधिविरचित परविहङ्ग जयजयविदित जननमरणभयभङ्ग मे
(Incomplete).

In this prabandha also there should be prayoga, biruda and tennaka after the 1st line.

Deśākhyā Elās are those composed in the various local dialects like lāṭa, karnāṭa, gouda, āndhra, and drāviḍa.

Bhūlokamalla adds another variety called Lalita (ललित) Elā. It is so called because of the simple style of music, and lucid style of the sāhitya.

Example :—

शिशिरकर करनिकर सहस्र शंखस्वकर
गतकमलरणदलिकुलमुखम् ।
मुनिजन वन्दितं चराचरपतिं शुचिमणिरचित
विकटमकुटं बहुदिति दनु तनय समर सुभटं
अनुगृहीत पार्थ वसुदेव नन्दनं
अजमजरममरपतिसखं भजतामतिशयितसकलमुखं
अनुगतेन्दिरं वेदवेदाङ्ग मन्दिरं कैटभरिपुं
पद्मनाभं तामहजमकम् ।

Karāṇa Prabandha (करण प्रबन्ध)

This is of eight varieties.

(1) *Svara Karāṇa*.—Here the udgrāha and dhruva are composed of closely knit svaras and the ābhoga gives the name of the nāyaka of the piece and the signature of the composer. In all the varieties melāpa is omitted. The piece should end in the amśa svaras of the rāga in which it is composed. It should be in Rāsa tāla and Druta Laya. This is mentioned as Dhātukarāṇa by Bhūlokamalla.

(2) *Pāṭa Karāṇa*.—Composed of svaras and hastapāṭas (syllables denoting the sound of paṭaha).

(3) *Bandhakarāṇa*.—Composed of svaras and the sound of the muraja (murajapāṭa).

- (4) *Padakarāṇa* is made up of svaras and pada.
- (5) *Biruda Karāṇa*
- (6) *Thēna Karāṇa*

are also similar.

(7) *Citra Karāṇa* is that composed of svaras, hasta or kara-pāṭas, murajākṣaras and words. Svaras and hastapāṭa form the udgrāha and murajākṣaras and dhruva form the udgrāha. This prabandha is supposed to be pleasing to Śiva.

(8) *Miśra Karāṇa*.—In this variety the different sections are composed of svaras, pāṭa and tennaka.

This prabandha is sung in three ways. In one way Udgrāha is sung first, then the dhruva and ābhoga are sung twice and then the udgrāha is repeated to culminate the piece. The method of singing is called Mangalārambha. In another called ānandavardhana, Udgrāha and Dhruva are sung twice. Then after the ābhoga the latter half of Dhruva is repeated before concluding the piece with udgrāha. In the variety called Kīrtilaharī first udgrāha is sung twice and then the Dhruva once. Afterwards the latter half of the udgrāha is repeated, followed by ābhoga and again the whole of dhruva is sung. Such methods of singing we do not meet with in these days nor do we attach importance to the repetitions of certain sections.

Śrī Nārāyaṇadeva gives the following example for the Pada Karāṇa prabandha. The udgrāha portion is missing.

Dhanāsi rāga—Abhra tāla

सीरधर धरणिरपि तव शिरसि शोभते
 ब्रजयोषिदधर रसपानकृत लोभेन ।
 वदन तल वदनतल सकल कबली कृतौ
 यस्त्वमपि विभुरस्तु कोस्यमहिमस्तुतौ ॥

Vartanī (वर्तनी) Prabandha—Śārṅgadeva says that this is like Svara Karāṇa, but is composed only in Kankala, Pratitāla, Kudukka or druta Maṭṭa tāla and in the singing of this the piece is rounded off by repeating the dhruva after ābhoga. But Śrī Nārāyaṇa Deva gives the following example and it is not in keeping with the above definition.

Gurjārī rāga—Yati tāla

बलवीकर पल्लवोदर मल्लिताडन धातदरे
 मुष्टिकामिध मल्लतल्लज कायपोषता पट्टरे ।

द्विर्वदवारज कुम्भदारणकमिकेसरि नायके

लङ्गलायुध मम मनस्त्वयि सङ्गते शुभ दायके

Denkī (डेङ्कि)—Here udgrāha consists of two sections and melāpa is in the form of prayoga. According to one opinion both udgrāha and melāpa are without tāla, while others hold udgrāha is in denkī or Kaṅkala tāla. Dhruva and ābhoga are in a different tāla and laya from the udgrāha. The piece is rounded off by singing the dhruva with the last portion in the tāra sthāyi. This also has four varieties according to the metre of the Sāhitya.

Dakṣa Śrī rāga—Maṇṭa tāla

कामपावकुल माल भारहारिणि रसिजे

तरवतगिरितनया परिदम्भ पृथुभुजे

धुताटोपरिचित कोपकपट गोपशासने

बलविलसतुहृदयं त्वयि निखिल कलुषनाशने

द्रां द्रा कितये नाकिट तान्ता दिधिभिकिथोच्चीना ॥

सा सा निगम पते भातेनातेनातेनातेना ॥

Jhompada (झोम्पड)—Consists of all the four dhātus but melāpa consists of prayoga with few prose syllables. The presence of this part is optional. When it is tridhātuka the piece is much simplified but with the melāpa, the profusions of gamakas make the singing of this prabandha very difficult, says Pārśvadeva. In this prabandha there is prayoga (ālāpana) in the udgrāha and dhruva as well. Jhompada is called Gadyaja, Padyaja or Gadyapadyaja as the Sāhitya is of prose, poetry or a mixture of both. This prabandha has only two aṅgas—pada and tāla. There are several kinds of varieties of this with their particular names.

Nārāyaṇa Deva in his example introduces pāṭa and svaras also.

Nāṭṭa rāga—Jhampa tāla

आकृष्ट दिवसकर तनयनयबद्धे

बलितीर्थगमनपद कृतसकल शुद्धे

रक्ष मामक्षधुति पद दन्ति वक्ते

धरणि भुजि धुतरोष इत हतनि चक्र

थोङ्कित झेङ्किणातायाविकि द्रां द्रां निगमसरिधपधिकट द्रमक द्रमितान्ता ॥

Lambha (लम्भ) This is a very interesting prabandha and its many varieties are noteworthy. The presence of ābhoga is uncertain in this prabandha and the method of singing is like Jhompada. Lambha is of seven kinds:

(1) When the udgrāha is sung without tāla in the form of ālāpa the prabandha is *ālāpa lambha*.

(2) When after the udgrāha, in the place of dhruva the words of udgrāha are repeated but in a different dhātu, there the Gīta is called *Pralambha*.

(3) After the first part of udgrāha, the second part of dhruva is sung. Then it is called *Bhāga lambha*.

(4) If the dhruva is repeated several times and if a new udgrāha is introduced for each repetition, then the prabandha gets the name of *Lambhapada*.

(5) If the process is reversed, i.e. if the dhātu of dhruva is changed each time with the same udgrāha then the piece is called *Anulambha*.

(6) When both the sections change the dhātu it is called *Upalambha*. (In the three last varieties ābhoga is omitted).

(7) When in the udgrāha the Sāhitya portion alone is changed and not the dhātu and if the prabandha has dhruva and ābhoga the prabandha is called *Vilambha*.

In Pārśvadeva's time this prabandha had only two varieties : *Vilambha*—If the udgrāha is without tāla and the other portions are with tāla. *Upalambha*—Where there is no ābhoga and the sāhitya of the Udgrāha and Dhruva is changed (without changing the dhātu) while repeating them.

Example given by Śrī Nārāyaṇa Deva—

आसवपानमधुरमरुणधुतिचञ्चलमेचकतारम् लज्जितमध्यविलोलितमधुव्रत शोणित कमल-
मुदारम् हलधर ते वदनं कमनीयं मनसि ममास्तु सतामवनीयम् ।

Rāsa (रास) This prabandha is composed in the Rāsa tāla and is like Jhompada in its lakṣaṇas. Based on the metre, the prabandha is described in eighty-two kinds. Though Śārṅgadeva says that this prabandha has only two āṅgas, pada and tāla, in the example we have all āṅgas and the tāla is different. (As Rāsa is ādi tāla there is not much difference).

Vasanta Rāga—Tripuṭa tāla

शिखर मण्डल मण्डितोत्तम कुण्डलैकविराजितम्
चण्डकर सुत दण्डस्वण्डन पण्डितं त्रिदशार्चितम् ।
यादवान्वय दुग्धवारिधि कुमुदबान्धवमीश्वरम्
मावयामि भवन्तमनिशं ब्रह्मरूपमनीश्वरम् ॥

ताता धारि कु कुद्र मिद्राङ्किटन्धोङ्कटनाङ्कना
स रि रिग मय धनि सा सा तेनां तेनां तेना तेना ॥

—Śrī Narayaṇdeva.

Ēkatāli (एकताली)

According to Śārṅgadeva, the udgrāha of this prabandha should be made of prose passage while some others hold that the udgrāha is mere ālāpa. Śārṅgadeva says that this is a Tridhātu prabandha of two āngas. But the example is entirely different from this.

Bhairavī rāga—Rūpaka tāla

अरुणायितनयनकोशविमदीकृतरक्षसम्
करुणाकरविपुलबाहुमुद्धवक्षसम्
चरणानत भव भवन्त माश्रयामि च ते
शरणावन मयि निधेहि कलितविविधशोचने

(Here comes some ālāpa).

श्री नील चलकन्धर फणिगतातनुवर्जितहिमभूधररे
मवसागर परिपतनममुं जनमवशमहर्निशमुद्धर रे
आदिर्भेदिमिकिञ्च थोङ्किट नाङ्किट झेंकुकुञ्जे किण क्षांतरिरे.
मम निध मम निसर्धानि धनिमम धनधतेनां
तेनां तेनां तेनां तेना तेन तेनो जय रोहिणिस्तुत सुरमण्डलनुत ॥

Chāyālaḡa or *Sālaḡa sūda Prabandhas* : These prabandhas are so called because these have only a resemblance of Śuddha sūḡa prabandhas but are not fully like the previous ones. Sālaḡa sūḡa prabandhas are compositions in the seven fundamental tālas and their branches. In all these, melāpa is absent but except in the first antara is introduced. These compositions have only two āngas—pada and tāla. The Prabandhas are named after the sapta tālas.

1. *Dhruva* ध्रुव : In this prabandha udgrāha consists of two sections, dhruva three sections and ābhoga two sections. Dhruva and ābhoga are sung in a higher sthāyi than the udgrāha. For each branch of dhruva tāla there is one prabandha and the different compositions have separate rasas according to the tāla.

(1) The composition in Āḡi tāla is based on Śṛṅgāra rasa and promotes long life and prosperity for the composer. This is called Jayanta. It consists of eleven feet divided into four sections.

(2) Composed in Nīssāru tāla with vīra rasa, it is named Śikhara. It gives all prosperity.

(3) *Utsāha* is composed in Prati tāla in hāsyā rasa. This brings advancement to the family.

(4) Composed in Karuṇa rasa and Hayalīla tāla is Madhura. This fetches all desired pleasures.

(5) The composition called Nirmala is framed in Kṛīḍā tāla and Śṛṅgāra rasa.

(6) Kuntala is composed with adbhuta rasa and Laghu-śekhara tāla.

(7) Komala is in Jhampa tāla with the sentiment of Vipralambha.

(8) Cāra promotes joy and enthusiasm. The piece breathes vīra rasa set in Nissāru tāla.¹

(9 & 10) In Ekatāla and in Vīra or Śṛṅgāra rasa is composed *Nandana* and this brings satisfaction of all desires. *Tilaka* is another prabandha in the same tāla with the same rasas, but this infuses enthusiasm and gives success.

(11) Candraśekhara is composed in Vīra or Hāsyā or Śṛṅgāra rasa in Pratimaṭṭa tāla.

(12 & 13) That in Śṛṅgāra rasa and Pratimaṭṭa tāla is called Kāmōda. Lalita is also composed in the same tāla and rasa.

(14) The prabandha composed in Dvitiya tāla in hāsyā rasa is called vijaya. This promotes longevity of life.

(15) Kandarpa prabandha composed in Hāsyā, Śṛṅgāra or Karuṇa rasa is set in ādi which pleases God and grants all pleasures.

(16) Jayamaṅgala is another prabandha in Kṛīḍā tāla but based on Śṛṅgāra or hāsyā rasa.

The following is an example of Dhruva Gīta given in "Saṅgīta Nārāyaṇa" by Śrī Nārāyaṇadeva.

Dikṣiṇa Śrī rāga—ādi tāla.

जय जय जनकसुताधव राघव निखिल भुवनजन रञ्जनरे

हैहयवंशावतंसमहीपतिभञ्जन भृगुपतिभञ्जन रे—उद्गाहः —Udgrāha.

तरुणसुधाकरमुकुटशरासनशासन मनुकुलमण्डनरे

विपुल भुवन भूषण दूषणमुखखर सैनिक खण्डनरे—ध्रुवः—dhruva.

शरणागतजन तारण वितरण लज्जित निर्जर तरुवर आति आ आह अ अह आत अहति ता

नारायणनृपसुत भवान्—[आभोग]—Ābhoga.

1. There is much overlapping in the definitions. For example see 8th or 2nd—same definitions.

Maṭṭa (मट्ट)

II. In this prabandha the Udgrāha portion consists of one or two sections and antara is optionally introduced.

Example :—

उद्गाह :—

अविकलशारद शशधर वदनं कुन्दमुकुन्दपरिहासकरदनम् ।

ध्रुवः—मनराताधिक सुरुचिर कायम् मृत्तिलवां विधुत दुरतरमायम् ।

पृथुतिलकुसुम सुसमवर नासम् वन्दे राममसितघनभासम्

आमोगः—

नारायण नरपति कृतगीतं सुखयतु सूरिजनम् सुखपीतम् ॥

For the six branches of Maṭṭatāla there are six prabandhas known as Maṅgala, Jayapriya, Sundara, Vallabha, Kalāpa and Kamala based on Śṛṅgāra, Vīra, Śṛṅgāra, Karuṇā, Hāsyā and Adbhuta rasas respectively.

III. *Pratimaṭṭakam* प्रतिमट्टकम् is like the Maṭṭa Prabandha in all aspects except the tāla. This tāla also has four branches and four prabandhas in them, with different rasas. The Prabandhas are called Amara, Tāra, Vicāra and Kunda.

Example :—

नौमश तदल मञ्चलानवमाहताखिलमानवः

खण्डिवाधिक गाधि सुतकृत यज्ञे धातकदानवम्—Udgrāha.

प्रलयजघनाघन धोरगर्जन तर्जितारिशराशनम्

निखिलसिद्धि वलमुनि निकरदुःख विनाशनम् ॥

..Dhruva should be sung high.

रक्ष रक्ष कृपाम्बुधेति अ आई आई अ आइ आ आई अति अति आ अ इ भूपरमण
नारायणम् ।—Ābhoga.

Nissāruka (निस्सारुक)

IV. Nissāruka prabandha is also like the previous ones, set in the Nissāruka tāla. There are six varieties of this prabandha. The chief prabandhas are composed in relation to Vipralambha and Sambhoga Śṛṅgāra. All of these have their particular names.

अइ अइ अइ दशरथनन्दन कौसल्या हृदय सुचन्दनमन्दोदितहासमुखरे

तरुमृग पति विहितानन्दन सुर भूसुर विरचित बन्धन निन्दित जनृपसुख रे

—Udgrāha.

निर्जित सुरनायक गजवरशुण्डो भवभुजयुग निर्भर परिपालितनिर्जर

करुणा परिपूरित सुदुर्जनतितर्जननिर्दयकृतरिपु भयजर्जर

—Udgrāha.

ति अ आ इ अइ अइ अ आ आ आ आ ई आ इ अ इ अ इ अ आ इ अ अ
इ आ आ आ.

तव रामप्रणमति चरणे नारायण भूपतीमणिमयमामुद्धर रे

—ābhoga.

V. *Adḍa Tāla* (अड्डताल) *Prabandha* is of six kinds and these are also composed in *Vīra*, *Śṛṅgāra*, *Vismaya*, *Vīra* and *Śānta rasa* respectively.

Example :—

सीतास्तनघन कुङ्कुम पङ्कललित वक्षसो लङ्कासुर शङ्कातुर सुरतहिहतरक्षसो

—Udgrāha.

नमो नमो दिनकर सुतमिथुनि कृतिहेतवे
रोषवहन शोषविकल जलनिधिबद्धसेतवे
हरिनृप मणिहृदय धरणिदारशरकेतवे

—dhruva.

इ अ इ अ इ आ इ अ इय इय इय आ अ इति नारयणगजपतिना गीतमिदं विरचितम्
—ābhoga.

VI. *Rāsaka* (रासक) *Prabandha* is composed in *Rāsa tāla* and this is of four kinds.

1. *Vinoda*.—In this the *dhruva* is composed of words ending in *ālāpa*. This excites delight in the hearers.

2. *Varada*.—Composed in praise of God and has *ālāpa* in the middle of *Dhruva*.

3. *Nanda*.—Here the first of the two *Khaṇḍas* of *udgrāha* is in the form of *ālāpa*. This suggests wonder.

4. *Kambuja*.—*Karuṇa* is the *rasa* of this *prabandha* when *udgrāha* is in *ālāpa* and *dhruva* of words.

Ekatāli (एकताली)

VII. *Ekatāli Prabandha* is composed in *Eka tāla* and this has three other varieties. (1) *Ramā*; (2) *Candrikā*; (3) *Vipulā*.

Example :—

हतदशकन्धर सखित सुरेश
निजकर संस्कार सीता केशव I *Khandha*.
मामव रघुनायक देव शङ्करकरविरचित पदसेव
त्वमसि नरोत्तम मामकशरणम्
कुरु हृदयं मयि धृतगुरुकरुणम्—*dhruva*.

सुखयतु गुणिनं श्रुतिपथनीतम्
नारायणनृप विरचित गीतम् ।

Besides the examples quoted above Śrī Nārāyaṇadeva gives a few more compositions as Sālaga sūḍa prabandhas.

Manda tala.

अमरवरमणिनिकर रुचिकान्ते कतसुकतमदन जनकननगतशान्ते

—Udgrāha.

रघुवंशतिलक मम शमय यमतापं
कृतवतो गुणनिधे तव विविधपापम्
त्वमाहं ध्यायामि विधृतशरचापम् साध्यैकगुणा श्रोतुः ।

—dhruva.

अइति आइ आइ अइति अइ आ आ
नृपतिनारायणं पाहि निमिजापते

—ābhoga.

Tripuṭa

2. सुरपतितनुतकरट धृतदण्डम् कुण्डलयुगमण्डित गण्डम्

—Udgrāha.

भजताग्रज हरयामि भवतम्—मनसोलव मिपिन नितमवतम्...

—dhruva.

नारायणनरपति कृतगीतम् जनयतुमुखमिदमनिमुदितम्...

—ābhoga.

3. पदपङ्कज रजसा कृतयोषे—क्षितिपतिदार विमर दम्पतरोषे

—Udgrāha.

भवतिद धातु मनोहिनिवेशम् भजतु जनकतनये शरलेशम्

आइ अति अ आइ आइ अइ इति आति आति आति आइ आ अ इति अ इ अ आ

—dhruva.

दण्डकविहरणमण्डिदेव नारायणनृपमवसुरसेव

—ābhoga.

Abhra tāla.

4. काकुस्थतनुविदित मदनशरोषम् पादुकादानकृतभरतगुरुषोषम्

I Khandha.

शिरसि धृत जटभरविकृतवासः त्वामहं मनसि निदधामि शशिहासम्

—dhruva.

वैदेहिधन देहि हृदयमविगीतं अत्र नारायणक्षितिपतिगीते

—ābhoga.

5. निधिदुष्टदशवदनमपिवालिनम् लीलयानाथमिव माधवशशालिनम्

I Khandha.

हे राम तव नाम यदि वदति खेलया
तरति भवजलधिमपि दुस्तरं हेलया
कृतदुरित जातोपि सरितमिव हेलया

—dhruva.

रतिरस्तु मम भवति सुहृदि कपिभूते
ननु कुनुषि जनुषि नारायणयतिपते

—ābhoga.

Rūpaka tāla.

6. अमृतजाति जीवतनिव मृतेरुमृग संहिते
प्रतिपादितलिङ्गा प्रदिसोदर मुखसन्तते

—Udgrāha.

जयकुशल जनकतक हरिताहरणम् गुणनिधे
बलदनुचित वृषलदोष चलित रोष वारिधे

—dhruva.

इ अ आ ई अ आ ई अ ई अ ई अ आ नारायणवारण वारण वारणपति शरणं भवति
अ इ आ ॥

—ābhoga.

7. रमापति गमप निकामर धाम गमयसे
अहिताहित हितमपि किमिति नाथ न दयसे

I Khandha.

ति अ इ अ अ इ आ ई अ इ अ ति अ इ अ अ इ
आ इ आ दिनागतिजन पतिमति पतितं रघुपते
पाहि पाहि दुरितदाहि मलिजजनममुम्

—dhruva.

अमरलोक शोकहरण रणमण्डित तवपदम्
भवपति पद्मनाभनृपति तनुज एष भवपदम्

—ābhoga.

Ālikrama and Viprakīrṇa Prabandhas.

The basis on which the prabandhas other than Sūḍa gītas, are divided into these two classes is not clear. But these compositions in common have many differences from the Sūḍa Prabandhas. The distinguishing feature of the viprakīrṇa and ālikrama prabandhas is that they are composed in prākṛt, the South Indian languages and other local dialects. Again among these we have many rāga mālīkā prabandhas.

First of the ālikrama prabandhas is called *Varṇa* the name being derived from the *Varṇa tāla* in which it is composed. *Varṇa* is in *Kannāḍa bhāṣā* and *udgrāha* and *dhruva* are of *Biruda* in *Kannāḍabhāṣā*.

Varṇasvara वर्णस्वर is another prabandha composed in the same language with *svara*, *pāṭa*, *pada* and *tennaka*.

Gadya गद्य is a noteworthy prabandha in this group. As the name suggests this is a purely prose composition. This is a striking point i.e., to have prose compositions as well in the days when musical compositions were always pieces of poetry. This prabandha has originated from *Sāmaveda*, and thus opens with 'pranava.' (ॐ) All the fifteen gamakas and all the varṇas are used in this. In the middle of the piece as well as in the end svaras are introduced. But the last portion consisting of the name of the author and prabandha is sung in a particular tāla. The piece is concluded with *ālāpa* in *vilambakāla*. The *Gadya* prabandha can be of six kinds according to the metre, style and diction. They are called *Vṛttagandhi*, *Utkalikā*, *Cūrṇā* or *Cūrṇikā*, *Lalita*, *Kanda* and *Citra*.

Bhūlokanātha gives the following example :—

अतसी पुष्प प्रसरण मनकायकान्ती—

उत्सङ्ग विष्टरोपविष्ट लक्ष्मी लोल लोचना चारुचम्पेपीयमानागणय लावण्य पीयूष रसविसर
अमृतकरबिम्ब विडम्बिना कम्बुना—विलून बाणबाहु चक्रेण प्रति हत त्रिदिव पति परिपन्थि भुजौ द्रत
मदेगदया च न त्रिखिलनाकनायकनिकायकामिनि नयना नन्दिन विराजमान करचतुष्टयं अयस्तंभ
विभ्रम भुजदण्ड मण्डल पुरस्सर महस समभ्यर्थित पादपद्म युगल मनिश मेशष त्रिभुवन त्राणपरा-
यण महरहरच्यतां जपतां ध्यायतां च ध्यायिनां भूगो भूयो भव भीषण भूम विभ्रन्त यो न भवन्ति
भवति च विलसति भवतिवर्द्धित जम्भाराति विभूतयो भूतय :

(The piece seems to be incomplete).

Kaivāḍa (कैवाड) is another prabandha, so-called because of the profusion of *karapāṭas* present.

Āṅgacārīnī (अङ्गचारिणी) can be sung in any *rāga* and *tāla* and conveys *vīra* and *raudra rasa*. The *Sāhitya* is in the form of *biruda* (*Sambodhana*). This has six varieties based on the number of *tāla āvartas*.

Example :—

असुरकुलान्तक दैत्यवंश दावानल बाणचाप भुवनकुठार रावणान्तः पुररावण संसारसागर
णयमशाम्भुतप्रथं मधुकैटभ सूदन गोलित नयनेन्दीवरचन्द्रतरुलता प्रसव कंदतिकुंबर चन्दनस्तम्भ
शदगण कृतारंभ त्रभग त्राणरक्षमां देवनारायण ॥

The prabandha called *Kandam* (कन्दम्) is composed in *Karṇāṭa bhaṣā*, say *Śarṅgadeva* and *Bhūlokamalla*. But *Raghu-nātha* remarks that this prabandha can be not only in the *Karṇāṭa bhaṣā* but also in other provincial languages. The *Sāhitya* portion is in *āryā gītā* metre and has *pāṭa* also. But in the example this portion is omitted. (This also has several kinds).

सिरिकौस्तुभरुचि अन्त क्रूर दोटकौ सुषतांग पोरपविर परिरे एष विप्रसुरगण परघृढ
नेमगि गे विष्णु लेबडित वरमम् ॥

Some of the prabandhas are named after the *tāla* in which they are composed. For example, *Turagalīla* (तुरगलील) or *Hayalīla* (हयलील) prabandha is so called because of the *tāla* of its name. The *Sāhitya* can be prose or poetry. There is also a view that the prabandha is so-called because of the 'aśvalīla' metre. *Bhūloka-malla* gives the *virutha* portion. But this should be preceded by *Svaras*.

सकल सुर मणिमकुट किरण सञ्चितचरण प्रणत भयकरण नारायण etc.

Gaja līla गजलील prabandha is composed in *Gajalīla tāla*. This also can be in prose or poetry.

Example :—

भवनाशकरं सकलार्तिहरं
प्रणमामि हरं भवदोषहरम्—

According to another version in between these two lines is the following— शुभकम्बुधरं वरचक्रधरम् ॥

Some prabandhas are named after the metre in which they are composed. Example :—*Krauñcapada* (क्रौञ्चपद) *Udgrāha* is made of *svaras*, and *dhruva* and *ābhoga* with *pada*. The prabandha is composed in *Prati tāla*.

Example :—

जनित कमलिनन्दं प्रणतसुरगोविन्दं दनुजकुलसंहार अधकमलनीहार भक्तजन भयहरण
सुरसङ्घनत चरण पुण्य सञ्चय सदन सरसीरुह निभवदन नीलजलधर वर्ण मकर कुण्डलकर्ण तरुण
रविनिभचक्र स्वभुजपालितशक्र हतदैत्यगणदर्प दमितकालीयसर्प कंस भुजबलचापूरमर्दनोमलन ॥

Āryā आर्या is a prabandha named after its metre. *Raghu-nātha* says that in this prabandha the signature and name of compositions are mentioned in *udgrāha*. There are also *svaraprayogas* in the middle. This has many varieties as well.

Dvipada द्विपद is so called because of the *Dvipada* or *dhotaka* metre. This prabandha has certain peculiarities. *Udgrāha*

and Dhruva, both can be of svaras, or udgrāha of svaras and Dhruva of prayoga. Or both parts will be prayoga. The whole piece can be of 'pada' (words) as well. In prākṛt, the prabandha is known as Doha. Based on the metre the prabandha has nine varieties.

Example :—

कुवलयकिसलयकान्तिर्वसौख्यं वितरतु विष्णुः त्रिभुवनसंभवपरिरक्षासंहरणप्रम-
विष्णुः ॥

Kalahamsa कलहंस is composed in the metre named Hamsa. After each foot there are svara passages. This is composed in jhampa or any other tāla of the same number of akṣaras. Bhūloka-malla says that the piece should be sung with words of adoration like भुवन धारण महाबल विष्णो etc.

Tōṭaka तोटक is another prabandha named after the Tōṭaka metre. This can be in any rāga and tāla and in Sanskrit or prākṛt. The prabandha concludes with svaras.

Example :—

अपि वामनरूपधरस्य हरे न धरासधराधरनारिनिधिः
पदमात्र मनुष्य गुणस्य—कथयेयुरमुं कथमल्पधियः ॥

This may be considered as the prototype of our present Tōḍayam (தோட்டயம்). Tōḍayam is also in the Tōṭaka metre. This is one of the few survivals we have together with Daṇḍakam, Cūrṇikā and Maṅgalam. The very names have survived.

One of the prabandhas is called Vṛttam (வൃத்தம்) itself and is sung in any tāla. Perhaps vṛttam (விருத்தம்) is a derivative or the Dravidian corollary of this.

Gāthā गाथा is a prabandha similar to āryā but composed in prākṛt.

पा अ सरोरुह जाअलं लंछीणाहर सणमहमत्ती ए जंसुमरिऊण पावह
मोक्रवसिरि सतिमुखोपि ॥

Cakravāla चक्रवाल prabandha is sung during the celebra-
tion of the spring festival (वसन्तोत्सव). The Sāhitya can be in
prose or poetry and if poetry the last two or three syllables of the
previous foot are repeated at the opening of the next foot. This
is a familiar feature in Tamil poetry and is called antādi—(அந்தாதி)

The piece should be composed in prākṛt language in Hindola rāga and carcari tāla.

Example :—

कमला कुचकलशकेलिकल्पित कस्तूरिकापत्रभङ्ग पत्रभङ्ग विषदापूतनाप्रलय करकलित
सुदर्शन दर्शनानुगृहीतपुरन्दर दरचकितभक्तजनवत्सल वत्सलकौसुम प्रभाजाल सहस्ररचन
विदग्धनिखिलदुरित भगवन्नारायण नमस्ते ॥

पद्मचक्र वेमोयुदाशशाङ्क सकलङ्कि कुमुद वनवहते हिमकरे तदर्माखिल विवसितं सितं विजयते
यते तव यशः चक्रवालकः॥

—Bhūlokamalla.

(Some svaras should be sung here).

Svarārtha or Svarastha—(स्वार्थः—स्वरस्थः)

In this prabandha, with the svāra syllables alone, the composer forms the Sāhitya and brings out the intended meaning. Sometimes a few words also can be interspersed amidst the svaras. The Svarasthāna padas and svarasthāna kīrtanas of the later period are further developments of this type of composition. The Svarākṣara sandhi is also a minor attempt of this skillful workmanship. This prabandha has only pada and āṅga.

Example :—

ga ma ga maa gama `paa pa maada madhaani dhaa
sa ni maa ni dhaa ni paa pa pa sa ni ga maa ga
maa etc.—Bhūlokmalla.

Sa ri ma ga ri ma dhaa rii yat kā ma ma paa pa
dha dha nii saa mi ni ni ri rii ga ma nii sam ga
ma paa paa maa maa dhaa ma.—Śrī Nārāyaṇadeva.

Mātrkā मातृका

This prabandha is generally composed in poetry but it can be in prose as well. The different padas of the Sāhitya open with akṣaras in the alphabetical order. The pada of the Udgrāha portion opens with the vowels and the Dhruva with the consonants. When the prabandha is composed in Sanskrit language and Mārga tālas it is called Divya Mātrkā. When it is in Prākṛt and Deśī tālas it is known as Mānuṣī Mātrkā. When there is an intermingling of both the varieties, for example udgrāha being in Sanskrit and mārga tālas and dhruva in prakrit and deśī tālas or vice versa, the prabandha is called Divyamānuṣī. The ābhoga is composed in accordance with the variety. Sacred mantras and bījākṣaras are introduced in this prabandha, and it is thus considered very auspicious.

Example :—

असौ शरण्यशरणागतानामाकारमाहात्म्य परास्तकामः। इष्टार्थदायी सततं प्रजानामीत
शानकल्पः कलिकालखेता ।। उदारनेपथ्यधरः परेषामुष्माणमंतं शमकारणेषु । भद्विजैराहिके
तिग्मतेजा एकातपत्रं कलयन् प्रभुत्वम् ।।

ऐश्वर्यवीरो हरिणक्षणानामुष्म प्रकम्पात्परमाप्त क्षमः। औदार्यवान् भ्रजदुपोढरागामङ्-
विपञ्चीमिवपद्मलक्ष्मीम्। अः केन मसा पृथिव्यां कृतावतारं किल कारणेन । सोमेश्वरक्षमापतिरभ्रगङ्गा-
रक्तसंस्पर्धियशास्त्रकास्ति ॥ by Someśvara.

Rāgakadambakam (रागकदम्बकम्)

As the name denotes this prabandha includes a cluster of rāgas or what is otherwise called rāgamālikā. Compositions of this type can be classified under two heads.

I. *Nandyāvarta* नन्दावर्त. In this the sāhitya is composed of many metres and with each metre the tāla changes. The rāgas change with every foot, or every Vṛtta or every half of the verse. According to one view if the tāla is of a few akṣaras like jhampa each portion should be repeated twice but if it is a long tāla like Simhanandana there is no repetition.

II. *Svastika* स्वस्तिक In this variety in rare cases there will be only one tāla for the whole piece. Generally this composition has eight vṛttas and eight tālas. This prabandha is also called abjapatra. This can be of 16 vṛttas and 16 tālas, 32 and 32, 64 and 64 and are called abjagarbha, Bhramara, Āmre-dita. It is not known whether there are svara passages.

The prabandha can be in prose also and in this case there will be only different rāgas and not different tālas.

Gopālanāyaka (17th cent. commentator) remarks that Bhramara prabandha is in prose and the first part (udgrāha) of the prabandha is composed in Mālavaśrī rāga and Simhanandana tāla. The next part is in Darpaṇa tāla having all the aṅgas except pada. In the other part vṛtta is omitted. In the last portion all the aṅgas are present. The rāga aspect is the most important feature and hence the name.

Dhvanikutṭṭani ध्वनिकुट्टनि is a prabandha where udgrāha and dhruva are composed in two different tālas as layas.

संसार नारणास्व गौताराग त्रिदशपरिपालनम् कुलसूदनं दनुजघातनं जलधिजल
शायिनम् ।

कंसवंशनाशकर्ण मनुजदेह वासुदेव मत्स्यकूर्म कालरौद्र वदन नरसिंह वामनांग राम
कृष्ण बुद्ध कल्कि मापदेव नमोस्तुते ॥

Pañcatāleśvara—पञ्चतालेश्वर

The very name suggests that this is a tāla mālīkā as the previous one is a Rāgamālīkā. The prabandha consists of five sections of five feet each. Each section is set in one of the mārगतālas and each foot has a separate dhātu. The piece opens with ālāpa and the antara of each section takes a different variety of pāṭa. The first section is in cacatpuṭa tāla and antara is made of pāṭa syllables of paṭahavādyā. This is of two tāla āvartas. The second section is in cācapuṭatāla and here antara is double the previous length.

The third section is framed in Ṣaṭpitāputraka tāla and with the sound syllables of Huḍukkā vādyā is used as pāṭa for the antara. The fourth section is in Sampakvēṣṭaka tāla and the pāṭa is of Śankha. The last section is composed in any other mārगतāla and antara is sung with svaras and murajākṣaras. The ābhoga is sung in an accelerated speed and the Sāhitya of this portion should be praise of the prabandha containing its name and the name of the hero of the piece. This should convey 'maṅgala.'

The prabandha, if in heroic sentiment, is called Vīrāvatāra; if in erotic sentiment Śṛṅgāratilaka.

Tālārṇava तालार्णव

This also is another tāla-mālīkā but not divided into several sections and composed with no change of dhātu. Udgrāha, dhruva and ābhoga are in different tālas. The Sāhitya can be prose or poetry and there is no fixity about the aṅgas.

Viprakīrṇa विप्रकीर्ण—prabandhas.

Śrīraṅga, Śrīvilāsa, Pañcabhangī, Pañcānana and Umātilaka prabandhas belonging to this group are rāga tāla mālīkas. The first (Śrīraṅga) prabandha is composed in four rāgas and four tālas; the next has five rāgas and five tālas and the piece is made to terminate with a svara passage. The third and fourth both have two rāgas and two tālas, but while the former concludes with tennaka, the latter concludes with pāṭa. Umātilaka prabandha is composed in three rāgas and three tālas with all the aṅgas, but ending in vṛtta.

Tripadī, Catuṣpadī and Ṣaṭpadī are named in accordance with the number of feet present in the composition. All the three prabandhas are in Kanarese language. The Sāhitya of Tripadī really has four feet but the third feet is split up into two halves

and the first half is added to the first two lines and the second half to the fourth line. At the end of dhruva there will be svaras. Example :— (incomplete).

मेदिनी वर्णसल्लकादिललु....

गयनलदन्त देवनपायुगतिके रहिमेय—

Bhūlokamalla

Catuspadī.

सुरगिरिभामाद्वियातवातिदरिमकः

सुरविलसि च यरोततलोडिदरुहरि अङ्गमालगलु ।

There should be svaras at the end.

Ṣaṭpadī.

Example :—

गडण दितर गणमिदि वर्णगळदीप्तिगोडे गांचतमगेत्तिवारति धासोडर्गळ पालिपालुगड
लोतदं विष्णुकु इतिकनमगस्त संसदण ॥

Tribhangi

This prabandha is composed in three kinds of metres and tālas. It takes svara and pāṭa as well.

नीलनीर रुचे स्वमाते कौस्तुभद्युतिविराजितवक्षः पाञ्चजन्यपरिभूषितपाणो साच्चिरंशु
सबलकमुघनाभः सृजसि देव जगतिरजोन्वितस्तदनुपालयसिस्पुटसत्ववान् अपि च संहरसेतम
सावृतो जगति चक्रमदंतवचेष्टतमः ॥

नाभीसरोरुहजुषा चतुराननेन

संस्तूयमान पदपङ्कज पुष्कराक्षः

दुग्धाम्बुराशि भुजगाधिप भोगशायिन्

त्रायस्व मां दुरितनाशन कृतेनमस्ते ॥

अमरराजशिखामणि रामिचेरञ्जिताङ्घ्रिसरोरुहयुग्मकम् । वन्दे देवं त्रिभुवनगुरुं पावनं वासुदेवम् ॥

Vijaya, Simhalīla, Hamsalīla and Carcarī are some of the Viprakīrṇa prabandhas named after their tālas. Jhampata, Kanduka, Paddhati and Pahadi are named after the metre.

Daṇḍakam is composed in *Daṇḍaka* metre.

Example :—

अजमजरमजसतेजस्विनं चिन्तयन्तीहयतापसाः कापिपुण्येपादयोमित मनसः स्थिरीभूतः
भूतेन्द्रिया क्षान्ति भाजः

समीभूत मृत्काञ्चनाः रुचिरचित सुरासुदं विभ्रतं विभ्रमादर्शमाद—

शानांभोधिजाद्विह कौस्तुभं हरिवेद्यत्रापामम ॥

Dhavalā is a prabandha very popular in the time of Śārṅga-deva. This composition is considered a very auspicious one because of the presence of the word

धवटशामाल उधवलग्यां धवटराग एवणु धवटचन्द्र धवटमहेसरु धवट चत्र आबदेच्च-
वसने धवट जसु आशीर्वाद युत्तैपादै रीदकि धवल पूर्वकैः ॥

Maṅgalam.

This prabandha is composed in maṅgala metre and sung in Kaiśikī or Botti rāga in Vilambakāla. The piece is adorned with the words denoting auspiciousness like śaṁkha, cakra, abja, koka, kairava, etc.

दधदूर्वाकृत चूतपल्लव कनक कलशमातुटङ्गकम एस्वस्तं कनंघावर्तनन्द कुसुम चन्दन कुंकुम
लाजादिमङ्गल द्रव्यविप्राः प्रणयतमावोषतः महर्षयः देवमानरः

नवग्रह लोकपाल श्रवणविष्णु महेश्वरः

एते प्रमच्चतु मम मङ्गल ॥

Ovi, Loli, Dollari, and Danti are prabandhas in prākṛt, Kana-rese, lāḍa bhaṣā and other local dialects. The names are derived from the compositions ending with the word Ovi, Loli, Dollari and Danti.

Vastu, Tripatākā, Caturmukha, Heravilāsa, Sudarśana, Sva-rāṅga, Śrī Vardhana, Harṣavardhana, Vadana, Caryā, Viraśrī and Maṅgalācāra are other Viprakīrṇa prabandhas.

Matanga gives forty-nine prabandhas and Śārṅgadeva deals with seventy-five. Bhūlokamalla gives account of a few prabandhas with examples not mentioned by Śārṅgadeva. They are the following:—

Addhilla (अद्धिल).

This prabandha is in prākṛt language.

सोमगिपंपर पुण्डरीका सेविणं णंस्वामेकपुण्डरी अं अविसंगरणिजि अ पुण्डरि अं जोरख
इधीतरि पुण्डरी अं ॥

The same two lines are repeated for the latter half, but with a different meaning. If two more lines added, the prabandha is called Viddhilla.

रेह इह फुल्ल सरोरुह वदणो नर्मकहा सुविसच्च कवचनो

ळीळाविममरन्त अराम सामनहीपइ संगर रामो ॥

Jayamālikā.

This prabandha should be composed in Jayatāla and the name of the prabandha is derived from the tāla as well as from the use of 'jaya jaya'.

Example—

जय भुज परिघोद्धत गोवर्धन धराधर जयकल्पान्तकालकरा—

लाकार कालियन् प्रशय कारिशत जयमधूवधू वदनविधुवि धुन्तुदा

जयगोपीजन नयन नीलवन विकाशशीतकिरण

जयमन्दमन्दर प्रावकषणनिर्मलीकृतकेयूरमणिकिरण भासुर मण्डल

जयराहुवधूवैधव्यदीक्षादानदक्ष जयनरकासुरकान्ता कठिन कुचकलशकस्तूरिकाश्वासका-
हारिन् जयमठर कुहरनिक्षिप्तत्रिभुवन त्रायस्वदेव ॥

Hamsapadam (हंसपदं)

The sāhitya consists of two feet both in Sanskrit or one in Sanskrit and the other in any provincial language.

जयनिर्जित दुर्जयदानव जनार्दनाकंसासुरमर्दन

भक्तिदेवस भाममृतमाधव मदीपरकी जेसूरम् ॥

Śukasārika (शुकसारिक)

The peculiarity of this prabandha is that here the subject matter is set out in the form of question and answer. The prabandha is set in two tālas. The same prabandha when composed in Kannada and lāḍa bhāṣas is called Chukasārika (छुकसारिक)

Śukasārika—बहिकीयं चक्रीवितररुचिरान्दोहनघटीम्

हरिर्बालेसिंहं व्रज भजनिकाङ्काननभुवम्

मधुध्वंसीमुग्धे भवतु भवता चैत्ररिपुणा

जितोगोपीवाक्यैरिति विजयतेकंसमथन ॥

Chukasārika— छुकसारिक

एल्लेलाली नीनेलि गेवारिः सुत होदे हेनं देनगलानित हंटिस्म जाणउ हलनि
ल्लुभमये तोरनासधां तुच्चतु इदं जइहा गोविन्द सह खिलन एनादेहानिनितेदातरियुगोलं देवेम्।

एतगातत एन्द हेनीन्दोहरिपं गोविन्दनेन्दहे एनगातन तोरातोरा हणिजेकाभाह्मणसी
बाइलि आनारयणुजग तोरांतोहम्मणे काह्मणशलाटलियनायेणा जगहके रगोसाविम् ॥

Sarabhalīla—(शरमलील) This prabandha is composed in eight rāgas and tālas.

कन्देवनीलोत्पलदलसमानकोयकान्तिविहित सकल भक्तलोकदुरितशांत

इच्छामात्रजनितनिखिलजगज्जन्मकरकमल कल्पित पाञ्चजन्य

नाभिनलिनस्थ पद्मसन स्तूयमान पादस्पर्श पवित्रीकृत वैनतैया

तननाकालेकनेत्रामृतायमानमूर्ते तुभ्यं नमः प्रासाधितबलकीर्ते ॥

Vicitra (विचित्र)

Vicitra prabandha is composed of various provincial languages set in many tālas decorated with pāṭa and tennaka.

ओजेणेरसातलउणु सामच्छ रूपेवेद आणियले ममूशिवभ्याणियले । तोसंसारसा अरसा अरत्रणु महते राखो नारा अणुकूर्मनाममन्दर वैचवेंनांत सुराराग मृतमंसाधनं कोटदेव नेमगी-गेवरवा जोसुवररूवें बया आलुलैसिदाण उहरिणक्कवसुमावविं गाढं गोविटं धरणि उद्धरि अं सोदेउ यवरइहोउ पच्चण्डेनि श्रीनारसीहुदैहिरण्यकशिपु रोमसुगोछन प्रच्चचंवेनादिव्यतुमनवल वेदिकन निच्चरिमम् ।

रूहमनरूपएत रइपुकेति दैत्यबलिबल्लति भूमित्रे परिदहिन्मात्रेयाक सूधावेकम्मधुकूसुके बाहणेरकुले उपनियुकातवीर्याजुणो राजाहुरसे खण्ठमु परशुरामदेवु सेमहरममलकर उनंदगो उतेस्वायू खहाचो गोविजाणां पडिहे लोमेन अनें मोवि आ महणाच्यर आधर रआटनाच्चा निहक्कारि आकन्वो भरदासो अम्हाणोविति आदेउ ।

बुंधरूपें जौदाणवसुरां पंचउणिवेददूसण बोळवुणिमायूमोमालिमोतोदे उपारिमा साउकर रुकतिक भूमृज्व अश्व मारुख खङ्गहस्तजनसंहरणोद्यतः निष्कृपणः कृपाण पाणिः कृपोपंकरोतुमे॥

Simhavikrāta— (सिंहविक्रात)

This prabandha should be composed in *Adi tāla*.

सुदर्शनदलित बाणबाहो शिरोमात्रावशे प्रकृतरुहोनिरवधि शास्त्रार्थोपदेशदक्ष-सङ्गररङ्ग दलितडिरण्याक्ष समुत्सारितपुरन्दरभयानहित प्रणत जनपापक्षय संसार पारावार सन्तरणसेतो —जयजयनादनैव तेयुकेतुकतो ॥ These should be pāṭa here.

Pratāpavardhana (प्रतापवर्धन)

त्वयामहाकुहमटस्यरूप धारिणा रसातलनिमग्नादंष्ट्राम् कुरामेनसमृद्धतानि वेदवेदाङ्गानि किन्न समानीतानि त्वयाकमठरूपेण पृष्ठभ्रमदमन्दमन्दरेणाक्षीरोदमुन्मथ्य किन्देवानाममृतमर्पितं त्वयावराहरूप धारिणा रसातलनिमग्नादष्टाङ्कुरेणकिन्न समुद्धृतात्वयानरसि हवपुष्पाकुल शशिस्वरर तैरनख यशिकाभिः किं न दारितं हिरण्यकशिपोरुरः तस्मात् स्मरस्वमात्मात्मानम् राघव समाह्वय पन्नगाकुल भक्ष्येक्ष्यंछिन्दिमेधनादयुक्तन् नागपाशान् इति विकृतप्रोत्साहनारामः प्रणतमुनाम-कुटघटिताब्जलिपुटैस्सुरगणैः तद्धणाते स्मृत प्राप्तवैनतेय विघाटितनिबिडनागनिटबन्धः सोत्साह शौर्यगुणारम्भः निशितदशाननो दशरथ नन्दनो रक्षत्वस्मान् ॥

Muktāvali (मुक्तावलि)

आवटोगरकटिशयुवाजौ वानारसिद्धयदंदिस इकालाहरिणुवेधं धूमरां सगनाठ जतृसन्देजहप रिवाजइ गोवर्धनगिरिकांचरुग वारुणजइ सुरेन्द्रहयुणवाशि भयोदेदमनमणकन्हादो वेषकश्चयुरो-वेसल केणो सावतमागो टतंवातझंपरिवैनयणां रविकदेटंवातया ॥

Rasasandōha (रससन्दोह)

As the title suggests, the sentiment forms the significant feature in this prabandha. This consists of eight sentiments from Śṛṅgāra.

स्मरशर भरविशदराधाहचयबालगोपालमूर्ते कीटविकोततः ।

विकृतवदनदशनजनितहेसलोष्णनयुसोदकस्मृतमन्दोदरि ।

प्रलपदिक्षतस्वाकृतभीरुभर्तवपगजातकंपावना दैत्यदयतासंमोहकारनारदानंदप्रवृत्तकुतनास्तन-
वानद्य जकुष्टरुदाख....नामस्यष्टपञ्चकटषकृतनं दगोपगृह प्रांगणदुष्टदैत्यम्...

द्रस्तं चास्वालनमात्राविभुजा भुजपूर्वं नरहरिन पूर्वलोक सात्वस्मरोहं चकंचुके^श।
श्रयाय प्रवर्ततवहैस्तोत्रथुगारायुगा ॥

Svaramañjari (स्वरमञ्जरि) The theme of this should be praise of God.

नमो नारायणन्देवं त्रैलोक्यत्रणकारणम्

नमो नीलोत्पल श्यामं क्षीरोदावटशायिनम्

नमो शंखगदापद्मं च कनीरजदुर्महे

नमो लक्ष्माकुचा भागकुंकुमारुणितं हरिम्

नमो गोपेयस्वं सेजविकासनदूकरम् ॥

Some of the tālas used in these prabandhas are current at the present day though under different names.

Rasa or Ādi is our Eka tala (1). Pratitāla (100) is our Ādi or Tripuṭa tala. Yatilegna (01) is the present Rūpaka. Nissaruka is the present Jhampa.

The prabandhas and gītas continued to be popular up to the 18th century. They increased in number and variety and continued to be important forms in the first two centuries of the modern age. Pratapacakravarti of the 16th century gives a list of hundred prabandhas. In the seventeenth century Venkaṭa Makhi poured in his many lakṣaṇa gītas. Rāmāmātya, Venkaṭamakhi and Ramaswami Dikshitar have composed lakṣaṇa gītas and prabandhas. These compositions are reminiscences of the classical age during the modern period.

The following is an example of a rare grahasvara prabandha :—

Rāgam-Bhairavi—Matyā tāla

;; ni ni da da pa ma digi digi dam — dam —	ni da ni sa ga ga ma ga ri sa dru mi Ki ta tom — ga na — ngi
Sa ga ga ma ga ri Sa ni do ni tha tha da gam tha gam — — da gam	Sa ni nii da pa daa pa ma dhi mi dhi mi ki thom ki na
ga ga ma da pa ma ga ga ri sa tha ga na ga na ga na ga na ga	Sa ga rii gaa maa maa Chi a Ka ni Kra na
ni da ma ni da ni Saa Saa Ka — Sa na — ta Ka lam	ga ri Saa ni da ni Saa Sa Ka — ra thu ma Cha ri ri
Sa ga ga ma pa ma gaa ri Sa ma dhu ra Ka vi — jee va na	ga ri Sa ni da ni pa ni da ma Sa ra Sa dhu — Ka ma no — —
Pa da ni Sa ga ga ma ga ri Sa vi la — — — — — Sa	no da ni Sa ga ga ma ga ni Sa na va ra Sa ra Si Ka re — re
ga ri Sa ri Sa ni Saa Saa ni ri va la ra — ri ri	ga ga ma ga ri Sa ma ga ri sa the — na tho — na the — — nem
Sa ri ga ma pa ma ga ga ri Sa the — — — na the na the — na	gaa gaa ma ga ga ga ga ri the na the na the na the na
ga ri sa ri ga ma ga ri Sa ni the — na the — na the — nam —	Saa Sa ni da pa da pa ma da da pa ma ga ma ga ri
pa da ni pa da ni pa da ni Sa ga ma pa ga ma pa ga ma pa da	ma ga ga ma Sa ma ga ri Sa ri ri Sa Sa ri da ri Sa ni da pa
ni Sa ga ri Sa ni ni da nii pa da Sa ri da pa pa ma paa	Sa ri Sa ni da ni pa ni da ma vi ma tha ma tha vi ha — — ha
ni da da ni da ma ga ga ri Sa vi tha ra na na — the' — — ya	Sa gaa gaa ma ga gaa ma vi — dya — ga na thi
ma nii da ni pa da ni Saa U pa Sa na ppa ra pa thi	ni da ni Sa ni Sa ma ga ga ma Sa va tha va ri Ku Sa — na thi
ni da ni Sa ni da pada pa ma Ka ru no Ka — — rana ma ya	ga ga ri Sa ; ; ; pra vi — na — — —

REVIEWS

THE SUCCESSORS OF THE SĀTAVĀHANAS IN LOWER DECCAN by Dineschandra Sircar, M.A., Ph.D., Lecturer in the Department of Ancient Indian History and Culture, Calcutta University; Published by the University of Calcutta, 1939.

Since the publication of Professor G. Jouveau-Dubreuil's "Ancient History of the Deccan," the history of the royal dynasties that held sway over the Deccan and South India in the early centuries of the Christian era has been engaging the attention of scholars. Many monographs and articles bearing on the subject have been written and published from time to time; and South Indian history as a consequence of these researches has gradually lost its nebulous character, and assumed a tangible shape, though it still continues to be indistinct and vague in places. The present publication incorporates not only the conclusions of previous scholars in the field, but the valuable results of the author's own investigations. Dr. Sircar has, indeed, brought to light some important facts which remained unnoticed *e.g.*, the Nāga rule over the country of Arournoi mentioned by Ptolemy. If the identification of Arournoi, *i.e.*, Aruvanāḍu, with the coastal region between the Northern and the Southern Pennars is admitted, it follows from this that the Pallava rule in the Kāñcī region was preceded by that of the Nāgas. This seems to corroborate the statement in the Velūrpālaiyam plates that the first Pallava ruler obtained his kingdom through his marriage with a Nāga princess. Another important point to which Dr. Sircar has drawn attention is the probable conquest of Ikṣvāku dominions by the early Pallava king Sivaskandavarman. The authority of the Ikṣvākus, as far as it can be inferred from their inscriptions, extended over the coastal region between the mouths of Northern Pennar and the Krishna. As the Pallava kings from Śivaskandavarman onwards held sway over this tract, it is obvious that they got possession of it probably by means of conquest. Dr. Sircar's attempt to glean historical information from the titles embodied in the praśastis of these early dynasties, though not quite new or original, deserves notice, as he has clearly shown that they are not meaningless epithets devoid of significance. His interpretation of the terms *aśvamedha*, *dharma*, *dharma-vijigīṣuh*, *dharmamahārāja* is indeed interesting as it brings to light important historical facts which lie hidden under them.

Dr. Sircar's book consists of two parts. He describes in part I the history of the Ikṣvākus, the Br̥hatpalāyanas, the Śālaṅkāyanas, the Viṣṇukunḍins and the Pallavas in order. One important omission must be noticed here. The Rāmakaśyapa kings who ruled in the Godāvāri valley in the period intervening between the Viṣṇukunḍins and the Eastern Cālukyas find no place in this work. Dr. Sircar takes up the history of the Cūṭus, the Kekayas and the Kadambas in Part II. As the information about the first two of these dynasties is extremely meagre, this part is almost entirely devoted to the history of the Kadambas. The omission of the Gaṅgas and the Bāṇas on the ground that they ruled far to the south of the Sātavāhanas is hardly justifiable, as the Sātavāhana authority extended, as pointed out by the author himself (pp. 149-50) over the Kāñcī region, *i.e.*, over the Toṇḍaimaṇḍalam or the Drāviḍa. This is probably due to the defective knowledge of South Indian geography which the author frequently betrays in the course of his work (pp. 131, 146, 197, etc.). Dr. Sircar has not considered it worth his while to bestow attention on the requirements of unity. The work produces the impression that it is made up of a series independent articles strung together without much internal cohesion. Moreover, the plan adopted in the treatment of the subject frequently breaks the progress of the narrative, and diverts the attention to small unimportant details and petty problems which ought not to find a place in a work of this description. The author's account of each dynasty falls into three sections, genealogy, chronology and history. His treatment of the last section is somewhat exceptional. Having settled the genealogy and chronology of a dynasty, he does not proceed, as one would expect him to do, to give a connected account of its history. Instead, he catalogues, with a brief introductory note, the inscriptions of each king, discussing the paleography, the orthography, and the meanings of administrative and other terms, as if he is engaged in editing them for some scientific journal devoted to epigraphical studies. Though these discussions are quite interesting in themselves they are entirely out of place in a general account of the early South Indian dynasties of the kind which the author has undertaken to give. The advantages of this method, whatever they may be are more than counterbalanced by its defects.

Dr. Sircar is the first scholar to lay emphasis on the importance of the history of the Ikṣvākus. Most of what he says about them is quite reasonable, though the fanciful anthropological gossamer which he attempts to weave around their origin (pp. 12 ff.) may not stand the test of scientific criticism. Dr. Sircar's reconstruc-

tion of the genealogy of the Ananda kings is utterly untenable. His contention that Dāmodaravarman of the Maṭṭepāḍu plates was a son and successor of Attivarman of Gorantla plates (p. 60) is contradicted by the evidence of paleography and language of the two inscriptions, though he labours hard to prove the contrary. His discussion of the early history of Veṅgī is valuable as it rectifies some of the defective conclusions of the previous scholars. Attention may be drawn in this connection to the Prākṛt copper-plate inscription of Vijaya Buddhavarman who has been wrongly regarded as a prince of the Śālankāyana dynasty. The reconstruction of the Viṣṇukuṇḍin dynasty, though not entirely free from difficulties, appears to be reasonable and satisfactory, but the chronology is utterly impossible. Dr. Sircar maintains that Viṣṇukuṇḍins continued to rule over Veṅgī up to the end of the 7th century A.D. (pp. 116, 120) though he brings forward no proof in support of his contention. He brushes aside inconvenient facts. He attempts to discredit the evidence of Koppāram plates on the ground that they 'are full of textual mistakes' (p. 117). His statement that Karmarāṣṭra belonged to the Viṣṇukuṇḍins at the time of Pulakēśin II's invasion is erroneous; for the Chejjerla inscription of the Pallava Mahendravarman I (SII, vi, No. 595) clearly shows that Pallava sway extended as far as the Krishna on the eve of the first Cālukyan invasion. The Cālukyan invasion was not a passing episode involving 'temporary occupation' of the Viṣṇukuṇḍin territory as Dr. Sircar would have us believe. It resulted in the permanent subjugation of and the establishment of the Cālukyan power in Veṅgī. The Koppāram plates state explicitly that Prithviduvarāja 'having defeated the circle of enemies by his arm has secured the kingdom for his son' (EI xviii, pp. 257 ff.). This disposes of the theory of temporary occupation. On the contrary, evidence of the Cālukyan rule over the east coast from Karma rāṣṭra to Palakirāṣṭra during the first half of the 7th century A.D. is furnished by the inscriptions. No useful purpose is served by attempting to explain them away. His account of the Pallavas, though interesting in certain respects, is on the whole incoherent. He pulls down the edifice reared by the patient labours of the scholars of the past generation, and holds up the dismantled bits for our admiration. His repudiation of the identity of Vijaya-Skanda with Śivaskandavarman is not successful; his contention that the term 'Śiva is not honorific when used singly though it has such significance when it is joined with the term 'Vijaya' is hardly convincing (p. 167). Much cannot be built upon minute paleographical differences, as such differences are discernible even in the inscriptions of the same king engraved at different times and

places. Dr. Sircar does not declare his attitude regarding the place of Yuvamahārāja Viṣṇugopavarman and his descendants in the Pallava genealogy. He quotes the opposing views of Fleet and Hultzsch about the identity of the Maharaja Simhavarman in whose eleventh regnal year the Uruvapalli plates are dated (p. 170). His statement (p. 169) that 'the Pallava kings mentioned in these northern inscriptions can scarcely be identified without difficulty with the Pallava princes mentioned in the inscriptions of the rulers of Kāñcī' does not bear examination. There are, no doubt, difficulties, but the available records contain valuable hints which indicate the connection between the two branches of the family.

The second part of Dr. Sircar's work presents a more connected appearance. There is, however, nothing quite new or original in his account of the Kadambas, as conclusions more or less similar to his have been put forward from time to time since 1929 (see e.g. Trilōcana Pallava and Karikāla Cōḷa, pp. 44-55). One important point, however, deserves mention. Dr. Sircar repudiates the identification of Śāntivaravarman, the jyeṣṭhapitā of Viṣṇuvarman, mentioned in Birūr plates with the Pallava Śāntivaravarman of the Hebbata grant suggested by Mr. M. Govinda Pai (p. 282). The suggestion is not only ingenious but quite plausible. The husband of one's mother's elder sister, according to the common South Indian usage, is also spoken of as jyeṣṭhapitā, and this requires no special proof. Moreover, an epithet applied to Śāntivaravarman in the Birūr plates seems to support Mr. Pai's identification. Śāntivaravarman is there referred to as raṇarabhasa-pracaṇḍadaṇḍa (see Kaḍūr No. 162 EC vi Plate II-b, l. 2) which is certainly more accurate than the erroneous 'raṇapravarttada' adopted by Rice and all others. 'Pracaṇḍadaṇḍa', it may be pointed out, is identical with 'Caṇḍadaṇḍa', the title of the Pallava king of Kāñcī whom Ravivarman had vanquished. The fact that the Jyeṣṭhapitā of Viṣṇuvarman is described as 'lord of the lands of the entire Karnāṭa country adorned with (the capital) Vaijayantī' does not disprove this identification, as stated by Dr. Sircar. The Kadambas never succeeded in imposing their authority over the whole of Karnāṭaka. Now the Gaṅgavāḍi was as much a part of Karnāṭaka as Banavāsi or any other district. Nevertheless the Gaṅgas did not acknowledge the supremacy of the Kadambas. Moreover, it is definitely known that about this time they owed allegiance to the Pallavas of Kāñcī. Therefore, the Kadamba Śāntivaravarman could not have been the 'lord of the lands of entire Karnāṭaka.' The Pallavas, on the contrary, could lay claim with justice to this title. It may be remembered in this connection that

Pallavas overthrew the authority of Kṛṣṇavarman I, who put forward his pretensions for independence. It is suggested that Kṛṣṇavarman 'usurped the throne of Kakusthavarman and ruled before Śāntivarman' (p. 283). Assuming that this suggestion is reasonable, it follows from this that Kṛṣṇavarman's rule extended over the whole of the Kadamba dominions. The Pallava king Śāntivaravarman, having put down Kṛṣṇavarman, installed his son Viṣṇuvarman, who, as pointed out by Dr. Sircar, revolted against his father, (p. 290). It is not unlikely that the Pallava king would have subdued the entire Kadamba territory including Vaijayantī. Though Viṣṇuvarman was placed on the throne of his father, the Pallavas took care that he was dependent upon them. They remained in the country as shown by the inscriptions of Mrigeśa and Ravi. The Birūr plates were dated in the third year (current) of Viṣṇuvarman, *i.e.*, quite early in his reign. The Pallavas could not have lost their hold on the Kadamba territory so soon after the overthrow of Kṛṣṇavarman I. Taking all these facts into consideration, it seems reasonable to hold that the jyeṣṭha pitā Śāntivaravarman mentioned in the Birūr plates is not the Kadamba king of that name but a Pallava prince, as suggested by Mr. Pai.

There are other problems of interest discussed in this work. The note on 'Yavana and Pārasīka' (App. I, p. 321) is quite interesting. Dr. Sircar supports his conclusions with sound arguments. The other problems discussed in the series of appendices demand careful attention. Dr. Sircar deserves the thanks of the students of South Indian History for having made the first serious attempt to present a comprehensive account of South Indian dynasties during the early centuries of the Christian era.

N. V. R.

FOUNDERS OF VIJAYANAGARA: By S. Srikantaya. The Mythic Society, 1938, Bangalore, Rs. 5 or 10sh.

From Sewell to Srikantaya is quite a huge library of Vijayanagara literature and the views held in these writing by the scholars especially on the origin of the city and the empire, on the persons who founded the city and empire, on the nativity of Bukka and Harihara and on the identity of the literary and religious personalities like Vidyāraṇya who are said to have taken part in the foundation of this empire, have been conflicting and to an average reader, most confusing. Recently the question of the origin of the empire has assumed great size thanks to the rise of provincialism, and here we have the latest book arguing the case that

Vijayanagara which was founded to stem the tide of Islam was a Karṇāṭaka kingdom, not a Telugu kingdom. The contents of the book were originally delivered as lectures at Chidambaram, Bangalore and Mysore.*

Mr. S. Srikantaya has taken great pains to digest the numerous articles and books, inscriptions and archaeological reports bearing on his subject. At every stage, he summarise some of the other writers' views but in many places, it must be said, leaves us in doubt whether he agrees or disagrees with them. We don't know where the Pūrva pakṣa ends and his Siddhānta begins. The following conclusions of his may be cited here.

Vijayanagara was Hosapaṭṭana, a residential capital of Ballāla III, then Hoysala emperor (p. 37). Harihara and Bukka were themselves chieftains under the Hoysalas *in all probability* (page 38) (*italics ours*). The Anegoṇḍi chiefs *probably* were feudatories of the Hoysalas (p. 41). Ballāla III *must have* (*italics ours*) greatly assisted in the foundation of the Vijayanagara empire (p. 63). *If* the Hoysalas were lords of the kuntalas, *if* Vijayanagara was in the Kuntalas, Vijayanagar was in the Hoysala territory. (p. 68). The first Vijayanagara rulers were Karṇāṭakas and while Andhra defeat at their hands is referred to, Hoysala defeat is not referred to (p. 75). Ballāla III *must have participated in the foundation, even if he were not primarily responsible for it* (p. 98). It is to be noted that none of these statements are free from the grip of a 'Syādvāda' of 'If' 'Probably' 'Must have' and so on. Regarding the author's statement that Hoysala defeat by Vijayanagara rulers is not referred to anywhere, attention may be drawn to Mysore Arch. Report for 1936, p. 91, where Bukka I is mentioned as conquering Hoysala country. As against all the probablys, ifs and must-haves, it may be pointed out that the tradition of Bukka and Harihara having been Telugus employed in Telugu country under the Telugu King Pratāparudra is reinforced by a Nellore inscription which refers in A.D. 1314 to a subordinate of Bukka ruling over that region.

About the literary and religious personalities of the time of the foundation of this empire, Mr. Srikantaya holds that (i) Mādhavācārya and Cāvuṇḍa Mādhavā are different. (ii) Mādhavācārya became Vidyāraṇyā. This Mādhavā-Vidyāraṇyā was an eminent statesman and scholar. (iii) Vidyāraṇyā is not Kriyāśakti.

The first and third are easily acceptable conclusions, but not so the second; for, from the accounts we know of Vidyāraṇyā, he

was already pontiff when Vijayanagar was about to be founded, but some years after the firm establishment of the kingdom, Mādhavācārya as Mādhavācārya is still eulogised in verses in the literary productions of his brothers. Mr. Srikantaya's information on p. 138 that in the regular services for the pontiffs conducted at Śṛṅgeri there is none for Vidyāraṇya proves definitely that Vidyāraṇya was never on the Śṛṅgeri seat.

On p. 103, Mr. Srikantaya gives Prof. Venkateśvara's opinion about the identity of Vidyāśaṅkara. We are not able to know whether Mr. Srikantaya agrees with this view or disagrees with it. According to this view Vidyāśaṅkara is Sahaja Sarvajña, son of Śārṅgapāṇi, who is referred to in the Śaṅkara darśana, of the Sarvadarśana saṅgraha. This is wrong. For, Sahaja Sarvajña Viṣṇu bhaṭṭa referred to in the Śaṅkara darśana of the Sarva darśana saṅgraha is the author of the Rju vivaraṇa or the Viva-
raṇa vivaraṇa and was the son of Janārdana and pupil of Svāmī-
ndra pūrṇa whereas the other Sarvajña Viṣṇu was the son of Śārṅgapāṇi.

To scholars like Mr. Srikantaya engaged in this subject, I wish to address two more problems of identity in the field of the literature of these times : (1) Who is the Nilakaṇṭha Bhāratī Śrī caraṇa whom Sāyana Mādhava quotes on page 137 of the Sarva-
darśana saṅgraha, Anandāsrama edn.? (2) who is the Vidyāśaṅkara Bhāratī who wrote the Jyotiṣa work Khacara darpaṇa (Adyar catalogue, II, p. 55-a) ?

V. RAGHAVAN

MANU: A STUDY IN HINDU SOCIAL THEORY by Kewal Motwani (enlarged edition) 1937; Ganesh & Co., Madras. Price Rs. 3.

The study of Hindu social thought and the conception of Hindu social progress has been of late a favourite theme with many scholars in India and in the West. But no study has so far succeeded in placing the true view point of Hindu ideas and ideals. In the book under review Dr. Motwani endeavours to emphasise this point. The author begins his book with a survey of the science of sociology as understood at the present day together with an account of the sociological system as prevalent in the West (also published separately as a brochure entitled Sociology). After defining what sociology means, the author deals with the history of social thought, in India and in the West. The abstruse problem of social thought is approached from the ecological, cultural

and psycho-social points of view. After an examination of the different social processes, social change and progress, Dr. Motwani proceeds to study the psychological foundations distinguishing personality and individuality, and lays special emphasis on the unique nature of individuality.

But the really interesting part of this book is that on Manu which consists of nine chapters. In these chapters Dr. Motwani attempts to state the social theories of the Hindus, basing his exposition on the Code of Manu. The chronological examination of the Code is not sufficiently critical, though to assign it to the Epic period would not be unacceptable. In chapter iii the author shows with clarity how Manu follows closely the fundamental Vedic thought in regard to the form and character of social organisation which he formulates in his Code. Manu's social theory of varṇas and āśramas—which is of course the typical Hindu theory—is treated in the succeeding chapters. In dealing with the fourth group, the Śūdra, the author says that 'he is still once-born,' 'he is still in the child stage,' and 'still an undefined type of personality' in more than one place. It is rather difficult to accept such statements. For the Śūdra type of personality is as clearly defined as the other types, and its aptitudes and activities indicated. Manu does not seem to mince matters. This estimate by the author is due to the fact that following Western writers in general he sees in the term Śūdra an *ethical* reference. A critical study of Manu's Laws shows that in society the Śūdra groups has as much responsibility to shoulder as the other three groups. And the fact that a Śūdra is born from Brahma, as others, and that he could not be deprived of his freedom, would be sufficient to indicate the true position assigned to him in society at large.

The author proceeds to study in detail educational institutions and ideals, the institution of family and of marriage, its biological and ethical basis, economic institutions, and political institutions. In dealing with the state, the author refers to its three-fold basis—physical, political and spiritual. The attempt to find the legislature or the law-making body in Manu as distinct from the judiciary cannot stand critical scrutiny. One has to agree with the statement that the state enabled each individual to develop his or her personality and to aim at the goal which was true liberation of the soul.

After a brief enumeration of religious institutions, a bird's eye-view of Manu's conception of social progress is given in the concluding chapter. Manu is neither exclusively materialistic nor is he a theologian. He does not again subscribe to the biological

theory of progress. That Manu was eminently practical and that his theory was one that would suit all ages, leading the country not to social conflict but to social harmony are vividly put in this interesting book of Dr. Motwani.

The book, however, suffers from lack of diacritical marks and there are a few wrong spellings of Sanskrit words.

V. R. R.

THE GITA: A CRITIQUE by P. Narasimham, M.A., L.T.,—
Madras, 1939.

Professor Narasimham's name and the title of this slim volume raise great expectations; and there are some passages in the 270 pages of this book that will make the reader sit up and seek to think out for himself the path of spiritual progress that Mr. Narasimham is seeking to open out before him. But when he gets to the end of it all, we are afraid that the reader will lay down the book with a sense of unfulfilled expectations. To translate the *Gītā*, to criticise its doctrines and assess its philosophical value, to determine its place in the evolution of Indian thought, to expound your own attitude to life and test how far the *Gītā* supports or contradicts it, and finally to decide how much of the *Gītā* represents the original *samvāda* (conversation) on the battlefield of Kurukṣetra, what parts of it are later interpolations and to what sources they may be ascribed—these are totally different tasks; every one of them is well worth doing and would exact from the author the exercise of a great measure of specialised skill and aptitude. Professor Narasimham has sought to combine all these aims in his book; and in some of them he fails badly on occasions; that seems to us to be the main reason for the sense of dissatisfaction which grows on the reader as he works his way through it.

K. A. N.

THE YOGA-UPANIṢADS, translated into English by T. R. Srinivasa Ayyangar, B.A., L.T. and edited by Pandit S. Subrahmanya Sastri, F.T.S.; The Adyar Library, 1938; pp. vii, 502.

All who are interested in Indian Philosophy and religion owe a deep debt of gratitude to the Adyar library for their excellent edition of the 108 Upaniṣads with the commentary of Upaniṣad Brahmayogin. That debt is sought to be increased now by a series of English translations published and projected. The present volume comprises translations of the twenty Yoga Upaniṣads pub-

lished under that title by the late Pandit A. Mahadeva Sastri. The translator has provided a valuable and detailed table of contents, beside giving in a foreword the various śānti-pāṭhas with their English renderings. The commentary has been consulted in the preparation of the translation. A full and free use of the commentary is specially necessary in the case of a volume like this, dealing with details of Yoga, where misinterpretations are both possible and dangerous. The translator seems to have become alive to this danger only at a late stage of the preparation of this volume. Thus the translation of the *Maṇḍalabrāhmaṇopaniṣad* (pp. 217-245) is fairly accurate, while the rendering of parallel passages in the *Advayatāraṅkopaniṣad* (pp. 1-8) is inadequate and misleading; the kuṇḍalini is not midway between the mūlādhāra and the brahma-randhra (p. 2), but "in the core of the suṣumnā-nāḍī" (p. 221). When there is practice of "intermediate introspection" it is not that "there ensues the great Ether" &c. (p. 4) but the sādḥaka "becomes the transcendent Ether" &c. (p. 223). The avoidance of such mistakes will make the translation more reliable and useful. Like all volumes from the Vasanta Press the volume is attractively and sumptuously got up. We shall eagerly look forward to the future volumes in the series.

S. S. S.

THE BHAVASAMKRANTI SŪTRA, THE BHAVASAMKRANTI ŚĀSTRA OF NĀGĀRJUNA AND MAITREYANĀTH'S BHAVASAMKRANTI ṬĪKĀ. Restored from the Tibetan and Chinese versions and edited with Tibetan versions, English Introduction. English Translations and Indexes by Pandit N. Aiyaswami Sastri of Madras, Professor of Buddhistic Studies, Viśva Bhārati, Śāntiniketan. Published by the Adyar Library, Adyar (1938).

A belief in *karma* and re-birth seems inconsistent with an attitude either agnostic or negative to a permanent substratum. The mere pentad of Form, Feeling, Ideation, Volition and Consciousness interacting and throwing a unity, strictly apparent and temporary, cannot explain *karma vipāka*. In his Visuddhi magga, Buddhagoṣa explains how there is rebirth but no transmigration of anything from one life to another. But there arose among the Buddhists the *Pudgalavādins* who held a rebirth through a transmigration (*Samkrānti*) for which they postulated something tangibly surviving called the *Pudgala*. Kamalaśīla explains that according to the school of the *Sarvāstivādins*, elements of existence have two

phases, real and momentary, and that the real phase of the five groups of elements explains transmigration without any need for a *pudgala*.

It is this question which is tackled in the *Bhavasamkrānti sūtra* in which king Bimbisāra puts the question to the Bhagavān. The Bhagavān replies : There remains nothing that transmigrates from body to body (*Tatra Mahā rāja ! na kaścid dharmah asmāl lokāt param lokam samkrāmati*). This answer would mean that the text supports a rebirth without a survival and its transmigration, but Bodhiruci's Chinese version, the earliest, (A.D. 386-534), reads here the Bhagavān's answer as an affirmative : 'there really is one *Dharma* going from one world to another.' On this alternative reading, the title of the *Sūtra* also becomes more intelligible. The editor surmises from this vital variant reading that the *Sūtra* originally belonged to a school of *Samkrāntivādins*, either the *Pudgala vādins* or the *Sarvāsti vādins*. Though the Buddhists hold everything as perishing, they accept the fruits of karma as imperishable. The Buddha says so in this *Sūtra* that regarding *karma*, there is *Avipraṇāśa*. The editor understands this *Avipraṇāśa* as an agency through which karma produces its fruit, and on its basis suggests that the *Sūtra* originally belonged to the *Sarvāstivādins*.

To explain rebirth, the appearance of the old karman in it etc., the Buddha employs the analogy of one's recollection of a dream-experience. Though nothing out-lives death, the first consciousness in the new life catches up the karma of the past life, even as one recollects, after waking, his dream-romance. But does this dream-analogy explain a permanent substratum in which recollection could happen or explain *Śūnya* as the thing in which everything happens, the *cyuti* of the final *viññāna*, the *utpatti* of the first *viññāna* in the next birth etc.?

Mr. Aiyaswami Sastri first edited this *Sūtra* with an English introduction and translation, and with the Tibetan version in Volume V of the *Journal of Oriental Research Madras*. In this edition now offered through the Adyar Library, he has added English translations in parallel columns of the three Chinese versions and one Tibetan of the *Sūtra*.

In the *Journal of Oriental Research*, Mr. Sastri promised to explain the relation which a text called *Bhavasamkrānti* ascribed to Nāgārjuna bore to this *Sūtra*. In the present edition he has edited Nāgārjuna's short text with a commentary on it by Maitreya-nātha. The title '*Bhava samkrānti śāstra*' given by the editor to the text ascribed to Nāgārjuna is fashioned by him on the basis of its titles in the Chinese and Tibetan versions. Two of these ver-

sions are in verse and call themselves (Madhyama) Bhava saṁkrānti and Bhavasamkrānti parikathā and the third version is styled Bhavabheda śāstra and is in prose. There is no evidence to decide whether the Nāgārjuna to whom it is ascribed is the Nāgārjuna of 200 A.D. or his later namesake who flourished in the first half of the 7th century A.D.

Equally indeterminable is the identity of the commentator Maitreyanātha who cites Bhartṛhari's philosophy and mentions Śāntideva (*circa* 675-700 A.D.) twice. All that it is possible to say is that he wrote between the latter parts of the 7th and the 11th centuries.

The editor has given an English translation of Nāgārjuna's text and an English summary of Maitreyanātha's commentary. The Tibetan versions of all the three texts and indexes form the rest of the contents of this book. We would like to know the relation which is assumed between the Bhavasamkrānti sūtra and the text of Nāgārjuna; for the latter explains Śūnya in general and does not focus attention on Bhava-samkrānti.

V. RAGHAVAN.

INTRODUCTORY SCHOOL MATHEMATICS by L. Crosland, M.C., B.Sc.

The treatment of the subject is psychological and simple. The elementary ideas are dealt with by simple and direct methods. The author has devoted careful attention to the choice of Problems.

There are three parts in the text dealing with (i) Arithmetic, (ii) Algebra, and (iii) Experimental Geometry. Though almost an equal number of pages has been devoted to them, the distribution is not homogeneous so far as time element is concerned. Judging from the Madras Government syllabus the arithmetic portion does not completely cover even the third form course, the algebra is just short of the fourth form course and the geometry portion is just sufficient for the fourth form. The arithmetic portion stops merely with fraction and its applications. To be complete, it should include Ratio and proportion, percentages, profit and loss, and simple interest. The Algebra section should include an elementary treatment of brackets, multiplication and division by binomials, the first three identities and their application to numerical simplification.

The geometry section should drive more on practical problems than on practical questions. With these additions the book may be used as an excellent text up to the fourth form. As it is the middle school teachers won't prefer it as it contains far less in arithmetic

and far more in algebra and geometry than they require, and again most of the middle schools use text books in the mother tongue.

Whatever is treated in the book has been carefully considered and the best approach has been followed.

The get up of the book is very good.

K. SRINIVASA RAGHAVAN, M.A, L.T.

BULLETIN OF LEAGUE OF NATIONS TEACHING. THE
TEACHING OF THE PRINCIPLES AND FACTS OF INTER-
NATIONAL CO-OPERATION. NO. 5. DECEMBER, 1938.

The special feature of this number of the Bulletin is the enquiry into the teaching of modern languages as a factor in the mutual understanding between peoples and the number of very interesting and instructive reports that resulted from the consultations of experts held during the year. We give below a number of extracts bearing on the study of modern languages, its relation to the mother tongue and on some wider problems of educational organisation and standards; these will be read with considerable interest by those who concern themselves with similar problems in our own country.

The question of modern means of spreading information in the cause of peace is the subject of an article which describes the League's efforts in this field. The technical work of the League furnishes the subject matter of several reports on the work of the Economic Committee, the European Conference on Rural Life, on Epidemics, the role of exhibitions in international education and so on.

EXTRACTS

I. *Modern Languages and the Mother Tongue*

(a) 'The mother tongue is the most direct means of expressing thought. Mastery over one's mother tongue is therefore an essential condition for acquiring a thorough knowledge of a foreign language.

'At the same time, the study of modern languages, by the comparisons to which it gives rise, is of use in adding to one's knowledge of one's mother tongue.' (pp. 19-20).

(b) 'In several countries, attention has been drawn to the imperfect way in which young graduates speak and write their own language, and it has been pointed out that a way of solving

the difficulty would be to associate modern language teachers in a task which is of primary importance in public education since its aim is to give to children a feeling of respect for their own tongue.' (p. 30).

(c) 'It is only fair to note that when the teaching of modern languages was being organised in England, the methodical study of English and English literature was almost unknown in our secondary schools, and still more so in our Universities. Our pupils who study two foreign civilizations more often than not receive a singularly incomplete education. They have some pretensions to philosophy, but have neglected their mother tongue. They read Descartes and Pascal, but know nothing of Bacon or Locke. They will have no hesitation in holding forth on the style of Racine, when their own English style is still unformed. They are selling their birthright.' (pp. 79-80).

II. *Influence of Universities on Secondary Schools*

'We would mention those admirable institutions, Oxford and Cambridge, and the considerable obstacle they constitute. The conditions for entering those Universities and for obtaining their scholarships exert an influence that extends far beyond the chosen few who are in later life to perpetuate the entirely superficial rivalry of those worthy twins.

'French and Latin monopolise the attention of pupils who might more profitably study two modern languages; and those who are already studying two modern languages are often obliged to overwork in order to learn Latin at the same time. Latin and French overburden science students, who consequently neglect German. All that undeniably helps to discourage initiative. Yet the obvious remedy is simple: two languages should be required for the Faculty of Letters (or Arts), with no obligation to learn Latin, and for the Faculty of Science one only. We would mention the fact that the University of London has recently decided to accept certain modern languages on an equal footing with Latin. That is the beginning of wisdom.' (pp. 76-77).

III. *Conditions of High School and University Education in Europe*

'The number of college students is increasing at an abnormal rate: whether gifted or not, healthy or sickly, townsfolk or peasants, rich or poor, children are sent to the *lycées* and from there to the University.' (p. 84).

‘A staff three times the size would be required to give proper instruction to such a large number of students of such varying standards. One can imagine the difficulties with which a professor has to contend at such lectures, the amount of time which he has to devote to them (often wasted) and the almost heroic resistance which he must offer to weak examination candidates who sometimes present themselves for the degree examination as often as four times.

‘What are the causes of this rush to learning? Is it a thirst for knowledge, as was generally the case before the war? Alas, not in the least! It is almost solely due to the wish to obtain posts in the civil service—and poorly paid posts at that.

‘On the one hand, there is an economic crisis: on the other, a crisis of mind and will. The free professions, such as trade and industry, are difficult to enter, and require initiative and endurance, which are lacking in most young people to-day. The post-war generation’s markedly changed attitude to life is shown in a weakened sense of responsibility, and an ever-increasing claim to support and protection from the community. As a rule, the extent of the claim is in inverse proportion to the merit of the claimant.

‘Under these conditions, the University offers a providential refuge. One enters freely. Matriculation fees are low. Lost in the mass of students, the lazy and incapable young man peacefully allows himself to drift on floods which overflow all barriers. An ancient and honourable tradition invests the student with a mantle of romance, and, what is more, provides him with many facilities of a material nature: he is cheaply housed and fed in student hostels and in “university cities” built by noble founders (such as King Alexander of Yugoslavia, who built a magnificent home for five hundred students in Belgrade, and Queen Marie, who contributed to the foundation of a home for a hundred students): he gets scholarships and longterm loans from funds to assist poor students, and he travels by rail at a quarter the usual fare!

‘With the community making such sacrifices, one would expect the students to show an ability and intellectual energy worthy of encouragement. Unfortunately, although there are a limited number of gifted and hard-working young people, the great majority are unworthy of the noble name of student. They do not study; they have never been taught the habit, and are quite content not to learn. To get their degrees, they have only to follow the stream, get the “index” signed, and make a slight effort on the eve of the examinations.’ (pp. 85-6).

IV. *On Examinations.*

'The *baccalauréat* should be reformed and its standard raised. This highly important examination has fallen into some disrepute. The war brought in its wake an absolute mania for kind-heartedness: anything, or nothing, was an excuse for leniency. We are told that the candidate is "poor," or "ill." If his composition is bad, why, "everyone can't be talented;" if it is chock-full of spelling mistakes, it is because the candidate was "nervous and upset." Nobody asks how his fellow-students so miraculously passed the examination. Instead of giving way to this leniency, which is ruining higher education by recruiting an army of second-raters, would it not be preferable to take pity on the entire generations of pupils who will be sacrificed at the hands of such teachers, and give a thought to our national culture, to which they are a menace? It is no longer a praiseworthy feeling of charity; whether it be demogogy or intellectual short-sightedness, it shows at any rate a deplorable lack of the sense of responsibility. The duties of a judge are not a personal matter; they are a social function' (pp. 88-89).

V. *Students and Society: An International 'Conversation' for Students at Luxemburg*

'The question of the autonomy of the University was considered from two points of view. One the one hand, who possesses this autonomy, and with reference to whom is it manifested? On the other hand, what are the functions of autonomy? The problem was dealt with in close connection with the problem of the responsibilities of the university towards the community. Everyone agreed that the separation between the University and society, if it ever existed, can no longer be maintained. The students who met at Luxemburg proclaimed their solidarity with society as a whole and manifested their will to serve it. They condemned, however, the tendency to enrol university young people in groups for direct political action, when their role ought to be, on the contrary, to seek with complete objectivity the elements capable of uniting the various groups which make up modern society.

'In discussing the problem of the university as a community between teachers and students, delegates were faced with the difficulty of finding a satisfactory solution, which would preserve the youthful personality of the student in its individual liberty. References were made in the course of discussion to certain methods employed in the Anglo-Saxon universities (tutorial system, study groups, etc.), and in various traditional schools in India,' (p. 110).

VI. *State and Text-books*

Seventh International Conference on Public Education.

‘In spite of the great variety of views expressed in the course of the discussion, the recommendation adopted by the Conference is in favour of increasing the control of the State and the educational authorities over school textbooks. Section 2 of the recommendation states that, in countries where education is directed or controlled by the State, it is for the State to take appropriate measures to ensure the improvement of text-books and to supervise their use. Elsewhere, this duty would fall on whatever other authorities are responsible for schools.

‘The Conference also emphasised the desirability of official action to secure the publication, for use in primary schools, of well-printed and inexpensive text-books prepared in accordance with sound pedagogical principles.’ (pp. 199-200).

VII. *Technical education and vocational guidance*

(a) One important difficulty lies in the necessity of giving the pupils, at least in the first years of their secondary education, a sufficient degree of general culture to enable them, if it should prove desirable, to transfer from one type of education to another, at the same time providing all pupils with the necessary minimum of disinterested knowledge. Again, since not all children can study the classical humanities, it would be desirable to work out an educational method capable of obtaining from modern and technical studies their full cultural value.’ (p. 209)

(b) ‘The provision of sound vocational guidance for young people in schools and universities is one of the most effective means of promoting the re-establishment of a lasting equilibrium in the distribution of intellectual workers; such guidance should be based on systematic studies of the supply of and demand for intellectual work and its evolution.’ (p. 224)

UNIVERSITY NOTES

During the year Diwan Bahadur S. E. Runganadhan continued to be the Vice-Chancellor. The Hon'ble Mr. C. J. Varkey became Pro-Chancellor from 7-1-39 consequent on his appointment as Minister for Education.

The Editorial Board of the University Journal was reconstituted by the Syndicate as follows, for a period of two years from August, 1938:—

Sri K. A. Nilakanta Sastri (*Editor*).

„ V. K. Ayyappan Pillai.

„ R. Gopala Ayyar.

Dr. M. O. Parthasarathy Ayyangar.

„ M. Damodaran.

„ P. J. Thomas.

Sri S. S. Suryanarayana Sastri.

Mr. William McLean, Registrar of the University, was made a Member of the British Empire ; and the title of Rao Saheb was awarded to Mr. S. Vaiyapuri Pillai, Reader in Tamil, and Pandit M. Raghava Aiyangar of the Tamil Lexicon staff.

His Excellency Lord Erskine, G.C.I.E., Chancellor of the University, presided over the Annual Convocation in August 1938 ; and Sir Mirza M. Ismail, B.A., K.C.I.E., O.B.E., Dewan of Mysore, delivered the address to the graduates. This is the first time that a person other than a member of the Senate or the Academic Council of the University delivered the address.

Messrs. C. Achyuta Menon, Head of the Department of Malayalam, and S. Muhammad Hussain Nainar, Head of the Department of Arabic, Persian and Urdu, who had gone to London on study leave, returned in September last after obtaining the degree of Ph.D. of that University.

Dr. M. Damodaran, Director of the Department of Biochemistry, who had been to Europe to study recent developments in biochemical technique, returned in November.

Mr. N. Sundararama Sastri, M.Sc., Lecturer in Statistics, has gone on study leave to England.

The Department of Economics, which was entrusted with the work of investigating the effects of Prohibition in certain villages of the Salem district, has published its report.

The departments of Geography, Politics and Public Administration and Indian Music have now been made permanent departments of study and research.

Consequent on the inauguration of the Travancore University in 1938, the colleges in the Travancore State affiliated to this University are conducting only the senior classes; the Training College, Trivandrum, ceased to be an affiliated college of this University. Only the Maharaja's College of Arts, and College of Science, Trivandrum will continue as affiliated colleges of this University, in 1939-40 conducting the final year Honours class.

The Stanley Medical College, Rayapuram, Madras, was granted recognition for the Pre-registration and First M.B.B.S. courses; and several other institutions were granted recognition, affiliation or approval with regard to particular courses of studies.

New regulations were framed for the institution of a degree in Pharmaceutical Chemistry (B.Sc. Pharmacy) and the Diploma course in Librarianship. Regulations for the L.T. Degree course have been revised. Higher degree courses in teaching, B.Ed., and M.Ed., have been proposed. The number of branches for the M.L. examination (from 1940) have been reduced from nine to six. Hindi has been included as an optional subject for the B.A. and B.A. (Hons.) degree examinations. A new optional group 'Home Science' has been included in the B.A. and B.Sc. Degree courses.

A new Title of Sangīta Śiromaṇi and a new Degree of Bachelor of Music (B.Mus.) were instituted in the University under the Faculty of Fine Arts.

Three candidates qualified themselves for the D.Sc., eighteen for M.Sc., and one for M.O.L. during the year. Their names and theses are noted below :

Doctor of Science

Mr. B. V. Raghavendra Rao, M.Sc., for his thesis, "Investigations in Light Scattering and Spectroscopy."

Mr. K. L. Ramaswamy, M.Sc., for his thesis, "Studies in Electrical and Optical Polarisabilities of gases and vapours."

Mr. L. S. Ramaswami, M.Sc., for his thesis, "Some aspects of the Anatomy of Anura (Amphibia)."

Master of Science

Mr. A. Abraham, M.A., for his thesis, "Chromosome structure and the mechanics of Mitosis and Meiosis in *Lilium*."

- Miss S. Pankajam, M.A., for her thesis, "On some topics connected with Boolean Algebra."
- Mr. D. Krishnaswami, B.Sc., (Hons.), for his thesis, "Some studies in Magneto-elasticity and other papers."
- Miss P. Devi, M.A., for her thesis, "The Chemical composition of fat from the seeds of *Garcinia Indica*, etc."
- Mr. P. S. Krishnan, M.A., for his thesis, "The Globulin from the seed of the Water Melon, etc."
- Mr. T. K. Krishnaswami, B.Sc., for his thesis, "A New Glutelin from the seed of the Water Melon, etc."
- Miss Mary C. Mathen, B.A., for her thesis, "Studies in essential oils and their constituents."
- Mr. S. Rajagopalan, B.Sc., for his thesis, "Synthetic experiments in the Benzo-isoquinoline series."
- Mr. K. Ramakrishnan Nayar, B.Sc., (Hons.), for his thesis, "Glutamic Dehydrogenase from germinating seeds, etc."
- Mr. R. Ramaswami, B.Sc., for his thesis, "Isolation of 1-3:4 Dihydroxyphenyl Alanine from the seeds of *Mucuna Pruriens*."
- Mr. K. Sankaran, B.A., for his thesis, "Synthetic experiment in the 1-coumaryl isoquinoline series, etc."
- Mr. N. Subrahmanya Wariyar, B.A., for his thesis, "A chemical examination of some Travancore plant products."
- Mr. K. S. Srinivasa Ayyar, B.Sc. (Hons.), for his thesis, "On the Morphology, life-history and Cytology of *Riccia himalayensis*, st., etc."
- Mr. K. Bhaskaran Nayar, B.A., for his thesis, "The reproduction, Oogenesis, and development of *Mesopodopsis Orientalis* Tatt."
- Mr. N. Ganapati, M.A., for his thesis, "Studies on two new Sporozoa."
- Mr. M. D. Paul, M.A., for his thesis, "Studies on the growth and breeding of certain sedentary organisms in the Madras harbour."
- Mr. K. Lakshmana Rao, B.E., for his thesis, "Deflections in reinforced concrete structures."
- Mr. P. Uthaman, B.Sc. (Ag.), for his thesis, "Parasitism of *Striga Lutea* (Lour) on rice with special reference to its histology and anatomy."

Master of Oriental Learning

Mr. T. P. Minakshisundaram for his thesis, "The Tamil Sounds."

The University deputed the following delegates to the various Congresses or Conferences during the year :

Indian Mathematical Society's Conference at Lucknow in March 1938.

Dr. R. Vaidyanathaswami.

Fourth International University Conference at Switzerland in July 1938.

Mrs. Mona Hensman

Dr. M. Damodaran.

Indian History Congress at Allahabad in October 1938.

Dr. N. Venkataramanayya

Sri V. R. Ramachandra Dikshitar.

Session of the Indian Historical Records Commission at Poona in December 1938.

Prof. K. A. Nilakanta Sastri.

The First Indian Political Science Conference at Benares in December 1938.

Dr. E. Asirvatham.

Indian Philosophical Congress at Allahabad in December 1938.

Sri. S. S. Suryanarayana Sastri.

Dr. C. Kunhan Raja.

Indian Economic Association's Conference at Nagpur in December 1938.

Dr. P. S. Lokanathan.

Sri K. C. Ramakrishnan.

Karnataka Sahitya Parishad, Bellary in December 1938.

Sri W. Chennakesava Ayyangar.

Sri H. Rama Rao.

26th Session of the Indian Science Congress Association at Lahore in January 1939.

Prof. R. Gopala Ayyar.

Dr. R. Vaidyanathaswami.

Sri B. M. Tirunaranan.

Indian Statistical Conference at Lahore in January 1939.

Dr. P. J. Thomas.

At the invitation of the University, the Indian Science Congress has agreed to hold its next session in Madras in January 1940.

The Oriental Mss. Library which was till now situated in the premises of the Madras Museum, Egmore, has now been housed in the University Library.

Lectures as usual by Hony. Readers and Heads of Departments of the University and under various Endowments were delivered. University Extension Boards were, as in previous years, appointed to arrange lectures of a popular nature at various centres. There were also special lectures by the following :

Lt. Col. R. B. Seymour Sewell (Retd. Professor, University of Cambridge)

Dr. F. W. Thomas (Emeritus Boden Professor of Sanskrit, University of Oxford)

Mr. Adolph Myers (Times of India Press, Bombay)

The following work was published by the University in its Historical Series :

Administration and Social Life under the Pallavas by Dr. C. Minakshi.

A proposal of the Government for the reorganization of Elementary, Secondary and University Education was considered by the University Authorities and the following two resolutions were communicated to the Government :

- (1) That the University establish its own Matriculation Examination for entrance to its courses ; and
- (2) that no change be made in the length of the Intermediate & B.A. Degree courses of this University.

The question of the institution of Extension Boards with a view to inaugurating a programme of Adult Education is engaging the attention of the University, and with a view to taking further steps in the matter, Principals of Colleges were circularised on the question of the formation of such associations to conduct night schools, rural welfare work, etc.

A scheme for the institution of an Employment Bureau was adopted by the University. After consulting the Madras Chamber

of Commerce, South Indian Chamber of Commerce, Madras Trades Association, Employers' Federation and other interested bodies, a representative Employment Bureau was constituted. Wide publicity was given of the institution of the Bureau, and about 230 applications were received for registration with the Bureau. A small Sub-Committee consisting of 4 members with the Registrar as Secretary was appointed to interview applicants in the Madras area. District (and Divisional) Committees, where there were candidates, were also constituted with the assistance of Chambers of Commerce and D.E.Os for purposes of interviewing candidates in the locality. It is the intention of the Bureau, after interviewing suitable candidates, to draw up a list of persons who could be recommended to employers.

The following subjects are under the consideration of the University Authorities :—

Institution of a Diploma Course in Co-operation.

Institution of a Degree in Physical Education.

Institution of a course in Technological Education.

ACKNOWLEDGEMENTS

Journal of the University of Bombay, Vol. VI, Part vi, Vol. VII, parts ii and iii.

Annals of Oriental Research of the University of Madras, Vol. II, part ii and Special supplement and Vol. III, part i.

Quarterly Journal of the Mythic Society, Vol. XXIX, Nos. 2 and 3.

Brahmavidyā (The Adyar Library Bulletin), Vol. III, part i and ii.

Journal of the Andhra Historical Research Society, Vol. XI, parts 3 and 4.

Indian Co-operative Review, Vol. IV Nos. 3 and 4.

The New Review, Vol. VIII, Nos. 47, 48, Vol. IX, Nos. 49, 51, 52 and 53.

The Madras Agricultural Journal, Vol. XXVI, Nos. 10, 11, 12, Vol. XXVII, Nos. 1, 2, 3 and 4.

The Old College Magazine, Trivandrum, March 1939.

The Madras Engineering College Magazine, Vol. VII, March 1939.

Journal of the Annamalai University, Vol. VIII, No. 1. October 1938.

The Nagpur Agricultural College Magazine, Vol. XIII, No. 2 and 3.

Indiana, November 1939.

Fortnightly news of the League of Nations (Information Section).

The Monthly summary of the League of Nations, Vol. XVIII, No. 10, 11 and 12, and Vol. XIX No. 2.

Bulletin of League of Nations Teaching No. 5.

The Recreational Cinema and the Young (League of Nations).

Harijan Uplift by Government of Madras.

PRINCIPAL MILLER ENDOWMENT LECTURES (1938-39)

INDIVIDUAL AND SOCIAL PROGRESS

BY

H. D. BHATTACHARYYA

PRINCIPAL MILLER ENDOWMENT LECTURES (1938-39)

INDIVIDUAL AND SOCIAL PROGRESS

BY

H. D. BHATTACHARYYA

I

Let us start with a confession of ignorance and a consequent spirit of humility. To none of us has been vouchsafed the privilege of knowing the fullest meaning of even the most insignificant things of the world—much less of “the inner meaning of human history.” We may readily agree that to us has been accorded a much fuller knowledge of nature and man than to our ancestors; but we must admit at the same time that the expanding circle of our knowledge has also served to bring us face to face with a bigger field of encircling nescience. In stating this we are not passing any judgement on the value of knowledge, namely, whether it is folly to be wise where ignorance is bliss. We are simply recording a fact when we say that man now knows more things than his primitive forbears and that, although with increasing knowledge his sense of ignorance is also increasing, his wit and wisdom far exceed those of people of ancient times. To-day we are in wider and deeper contact with both nature and man, and every day the walls of narrow isolation are crumbling to pieces. Many hidden mysteries have yielded up their secrets to the inquisitive and persistent scrutiny of man and the frontiers of our knowledge are extending by leaps and bounds into the once unknown realms of nature. We possess greater understanding too of the inner springs of human action—of the motives of personal and social life. We know more of individual and collective minds, of minds in sanity and in aberration. The psychology of primitive minds, of peoples and races, of interacting social groups, of nations in war and peace, of classes and crowds is more or less known to us to-day; and a study of these social phenomena has enabled us to detect and dissect unexpected motivations in human conduct. The study of lower forms of life and mind has thrown considerable light upon our understanding of personal conduct and social behaviour among

human beings, even though it may be admitted that the predominantly objective attitude in our study of minds has temporarily thrown introspective self-analysis into the shade. A new method of studying the mechanism of mind has been evolved in recent years in the psychoanalytical schools and has ushered in an era of depth-psychology as opposed to the surface-psychology of the introspective-analytical method of mind-study. The influence of attitude and environment, of climate, diet and bodily condition upon the nature and amount of human output in art and industry is being widely studied now. Economic, political and social organizations are being scrutinized, criticized and rectified in the light of their effects upon personal feeling and social efficiency. All these studies have materially enriched our knowledge of the intricacies of the human mind and enabled us to tackle them with surer chance of success.

But with the expansion of knowledge the universe of nature and mind has gone on expanding too. If we know more to-day about the inner constitution of stars and the laws of their being and becoming, newer stellar regions with more complex problems have also come within the purview of our astronomy and astrophysics. We are recasting and rejecting many of our older conceptions of light and ether and space to accommodate our newer findings about Nature's facts. We are less sanguine now about the finality of our dicta about the material universe, and our Applied Mathematics and Theoretical Physics are bidding fair to rival Metaphysics in their abstruseness and the tentative character of their theories of the ultimates of Nature. Our knowledge of the infinitely small is becoming similarly riddled with obscurities and symbolizations. Gone are the fixity of weight and the rigidity of the atoms. In the works of Aston, Bohr and others we are presented with a world of atoms where weights are fixed on the basis of a statistical average and qualities are determined by the number and arrangement of electric particles. The positive nucleus and the negative rotating particles and the delicate balance of energy that maintains an atom in existence and in its proper chemical form are to-day text-book topics of information. But they open up a much vaster field of study than the Daltonian atoms did, and we are yet far from an accurate knowledge of the nature of the different elements that go into the composition of an atom or the precise way in which they maintain or lose their balance. Here again we can only theorize and try to imagine whether the rotation of single particles or a wavy motion would give a more adequate picture of the behaviour of the electrons. In the train of sub-atomic physics have

come the problems of formation and disintegration of atoms, of transmutation of elements, of the age of the earth, of the possibility of utilizing solar radiations and liberating the locked-up energies of atoms in the event of the normal fuels of the world running short. Once possessed of the knowledge of their properties, we have begun to enquire about their kinds and capacities and about the uses and abuses to which we can put visible and invisible radiations of different kinds. We have already learnt the trick of converting one kind of energy into another—heat, light, electricity and magnetism we are using as battledores between which we throw energy as a shuttlecock, changing one kind of energy into another as need or contingency arises. We have partially battered the wall of separation between physics and chemistry and drawn them both towards mathematics. But with all our knowledge we are obliged to confess that Nature is still an enigma to us and that the more we know about her the more mysterious does she become and the more does she allure us towards her profounder depths.

The same complexity meets us as we progress in our knowledge of living forms. When people complacently accepted the theory of special creation and credited God with creating life and life-forms and Noah with preserving the existing species of animals during the Deluge, they did not bother their heads about the interrelation of living forms and their relation to the inorganic world. But we have dared since to raise fundamental questions about life without reference to God ; and while we have not succeeded as yet in originating life artificially in our laboratories or detecting any natural case of spontaneous generation, we have learnt a good deal about the nature of life and the laws of heredity and variation. The science of plant-breeding, experimental zoology and genetics have familiarized us with types of plants and animals which even Nature could not create in ordinary course and with modes of reproduction and regeneration altogether unknown to Nature. Plant and animal hybrids produced by Burbank and Loeb respectively, artificial parthenogenesis initiated by Boveri and Loeb, rejuvenation of the type mentioned by Child and Loeb, and artificial insemination and test-tube babies are not ordinary natural phenomena ; and yet, relying on Nature's own laws, man has succeeded in varying Nature's method of reproduction and regeneration, although he has not always succeeded equally well in making the monstrosities live long or the heterogeneous hybrids breed and multiply and establish new species. We have partially succeeded in tracking down the bearers of racial and individual heredity and succeeded

also in many cases in improving the stocks of plants and animals by judicious cross-fertilization and cross-breeding. We have been enabled by our knowledge of the laws of heredity to scent danger in the multiplication of social misfits, aments and dements, and in progressive states the idea of sterilizing the idiot, the lunatic and the criminal is already in the air. Not only in our knowledge of the laws of species but also in our knowledge regarding the potentialities of the living organism we have made notable progress. We have more precise information now regarding the powers of adaptation and acclimatization possessed by a living body. We know more accurately now the way in which disease attacks an organism and spreads to other organisms and we know also how it can be combated, curbed and cured. Our knowledge of the laws of infection and resistance has led to remarkable developments in the science of preventive medicine. Not only are we now able to secure immunity beforehand by suitable prophylactic treatment but we are also able to arrest the spread of toxin in the system through various agencies—biological, chemical and physical. We know a good deal now about the ductless glands and the hormones that act as chemical messengers between different parts of the organism and help to unify the same as also to develop particular traits in body and mind. Our knowledge of the results of experiments on animal bodies we have utilized in the service of man, and our knowledge of the chemical composition of the blood we have found helpful in detecting the presence of deleterious factors and also in the transfusion of blood in cases of anaemia and even in settling disputed facts of paternity.

But here also increasing knowledge has brought us face to face with an ever widening nescience. The triumph of the mechanical sciences in inorganic fields raised hopes in some quarters that in the world of life also the laws of mathematics, physics and chemistry would completely explain all phenomena and that it would be possible one day to effect the great synthesis artificially, just as it was probably done by Nature sometime at the beginning—if it is not being done by her even now in suitable circumstances. There are others who are struck by the unique qualities of life—reproduction, regeneration of parts, repair of injuries, assimilation, growth and irritability, and would rather think of the whole physical world as a living system than a living organism as a machine which possesses none of these capacities—not even as a crystal, which mimics some of the phenomena of life. If life had no tellurian origin but came from some other realm, did it originate there spontaneously? Did it come here riding on a

meteorite or wafted by radiant energy? Does it fill inter-stellar space, waiting for a vehicle to land on a suitable planet in order to grow and multiply? Do we possess any accurate knowledge of the strains and stresses that determine the ultimate form of each living organism? Do we know why there should be any atavism and regression to the type and why ontogeny should recapitulate phylogeny? Have we any exact knowledge of the chromomeres that are responsible for developing this or that feature in a body and of the forces or agencies that marshal the forces and elements to a predestined bodily form? What controls the phenomena of reorientation of cleavage-cells even after disturbance, regeneration of all forms, restitution of function, vicarious function, orderly growth, symmetry, chemical correlation, and similar other vital activities? Is it a kind of blind ideation or incipient consciousness (Von Hartmann, Hegel), a non-material and non-spatial logical agent called entelechy (Driesch), an unconscious memory (Butler, Hartog, Orr), a mnemonic factor (Semon), molecular vibration (Haeckel, Hering), supergene (Von Uexkull), nervous accumulation and discharge (Rignano) or a constellation of elementary substances and forces (Weismann)? What are the respective functions of the cytoplasm and the nucleus in determining growth and structure? What part do external factors play in bringing about differentiation of organs? Does matter contain within itself "the promise and potency of every form and quality of life" (Tyndall)? Are living creatures only "whirlpools in the universal ocean of matter and energy" (Cuvier, Huxley, J. A. Thomson)? Or is life co-eternal with matter, if not its *prius* (Bergson)—a directive force (Descartes, Sir Oliver Lodge) or an entelechy suspending physico-chemical operations (Driesch)? That the pendulum should swing from mechanism to vitalism within the 19th century itself and should still be swinging between these two opposite poles of thought shows the imperfect character of our knowledge of the nature of life and the law of its operation in organizing the bodily forms of plants and animals.

If from the individuals we turn to the species, our ignorance is no less profound. We all swear by the theory of evolution nowadays and there is no doubt that the light thrown by the biological theory of evolution on other fields has been considerable. We talk now of mental, social, political, moral and religious evolution as also of cosmological and atomic evolution; and those who are acquainted with the works of Herbert Spencer know how he tried to apply the same formula to explain the phenomena of evolution in the different fields of enquiry known in his time. The genetic

method of study is now a well-recognized, if not indispensable, mode of handling a problem, whether of nature or of life or of mind. But as we are indebted to the biologists for a precise formulation of the theory of evolution, we might turn to them for appreciating the extent of our ignorance. We many take the fact of evolution for granted, even though religiously minded people are beginning to assail the doctrine or put a theistic interpretation on the same and even though Darwin and Wallace did not agree about the place of the human mind in the scheme of evolution, the latter reserving a place for God in the origin of the human soul. But waiving aside the question of teleology, for which philosophers and theists have alike fought when they failed to defend special creation, and of a new interpretation of life-phenomena, which is neither mechanical nor teleological, as supported by Bosanquet and Bergson, let us turn to the natural scientists themselves for discovering a uniform explanation of the march of life and the formation of species. We are disappointed to know that the bifurcation of the protophyta and the protozoa out of a common protistan stock is still a matter of conjecture and that whether plant and animal forms came one after another or have been running side by side all along is yet far from being settled, apart from the fact that plants with the nutritional capacities of animals and *vice versa* have not yet totally disappeared from view and suggested a third possibility of their mutual relation, viz., original oscillation between opposite tendencies and subsequent bifurcation. The same uncertainty hangs over the problems of sex, although sexual dimorphism is admitted to be a later phenomenon; and we are told that we are all hermaphrodites with one sex-tendency keeping down the other and making the sex that we are. We do not know, again, the exact rôle played by external and internal factors in determining an individual and we are unable to say, therefore, if nature creates forms suited to her needs or simply selects the successful variants. We are still debating whether structure determines function or just the reverse, and how far acquired characters are transmitted to later generations and get fixed in the family and the class.

Supposing that the present living forms have all been derived out of one or a few microscopic types, do we know why, how and when mitotic division of one unicellular organism into two was replaced by a multicellular organization in the plant and animal worlds? Was it accident or spontaneous variation that brought about this happy change? When once a multicellular organism came into being, how did itself vary in the direction of variety and new species? What again fixed the type that arose by variation

or accident? How do heredity and variation maintain their balance, the one making for the stability of the species and the other for ushering in new types? Taking into consideration the fact that types generally change at an exceedingly slow rate and induced changes seldom persist beyond the life-time of the individual, it has not been unreasonably held that unless there is some germinal change, whether spontaneously produced or induced by such a violent treatment as affects the germinal matter as well as the body itself, there is no permanent deviation from the existing type. But there is no unanimity of opinion on this subject and the upholders of the theory that long subjection to a constant set of stimuli may induce variation are not extinct and they quote with approval the pangenetic theory of Darwin and the experiments of Brown-Séquard on inherited epilepsy in guinea-pigs. Still, it must be admitted that the neo-Darwinism of Weismann, viz., that spontaneous variation of the germplasm is responsible for variation and evolution, is to-day the dominant hypothesis. But if variation is so much dependent on chance, how does it maintain itself and start an evolutionary process? Can there be no reverse variation which would nullify the earlier deviation from type? What again is the amount of each individual variation? Shall we subscribe to the Darwinian supposition of continuous insensible variation, or shall we side with Galton and De Vries in their view that variation is saltatory and that, therefore, the Darwinian missing links are mostly fictitious? Of what use to the individual, again, is an infinitesimal change and how does this enable the individual to win ultimately in the struggle for existence unless correlated changes in other parts of the body are forthcoming at the same time? Does the Mutation Theory with its belief in the possibility of a large number of simultaneous variations then offer a better explanation? But what guarantee is there that the so-called saltatory variation is not a mere dissociation of the Mendelian unit-characters that went into the composition of a hybrid type in which the dominants completely submerged the recessives in the parent stock? Have we again any exact notion of the nature and function of the ids, unit-characters and genes, by whichever name the ultimate micromeric elements may be called, that determine the character of the individual and the type? Again, how do variations accumulate and form the basis of evolution? Is there any orthogenetic impulse in life-forms, as Eimer supposed? Or is it by a lucky accident that variations have been heaped on variations and led to the evolution of higher forms of life and mind? Is there any purpose behind the process of variation—a purpose to advance the forms of life along the road of progress? Why should death and

decay overtake every form of life and the worms eat up the noble frame of a Goethe, a Shakespeare or a Śaṅkara ? Who will answer all these perplexing questions connected with the world of life ? How, again, are we to relate the body and the mind, to explain the origin and evolution of consciousness, the relation of bodily structure and mental function, the relation of animal mind and human mind, and the nature of consciousness, if any, that might be present in the vegetable kingdom ?

Our main object in drawing attention to the gaps in our knowledge of matter, life and mind is to bring out the fact that progress in knowledge does not necessarily mean perfection—in fact, very often it makes us painfully aware of the imperfections of our intellectual achievement. You can no more encompass the immensities of reality with your intellect than you can bale out the waters of the ocean with a bucket. Reality has always new surprises in store for our apprehension, and we are constantly obliged to amend, recast or alter our theories in the light of its new revelations. Our attitude towards the world must be that of a wayfarer who takes delight in the travel itself and to whom destination is so remote that the next step forward alone is what counts. We should be satisfied with being led onward by the kindly light of our intellect and following knowledge like a sinking star beyond the utmost bounds of human thought. Of course, the one consoling thought that must accompany every endeavour is that we are making progress, which means, again, that we must have some kind of awareness of the direction in which advancement or achievement of higher magnitude or value lies. We need not discuss just now whether without the assumption of a knowledge of the highest or absolute value it is possible to arrange the stages of progress or whether a consciousness of 'more' suffices to indicate progress without there being necessarily a knowledge of an absolute scale of values. There are difficulties in both assumptions, for the realization of an absolute scale of values would demand a type of perfect knowledge which we do not unfortunately possess while the assumption of a relative scale, on the other hand, would necessitate a knowledge of the direction in which the highest value is located. The distinction between progress and process lies exactly in this that progress implies a direction while process need not necessarily have that implication and can be identified with a mere temporal succession of events if we do not stick to the etymological significance of the word. If we accept the position that knowledge has increased in all fields, we must accept at the same time the implication that we have a knowledge of an ascending scale,

whether of quantity or of worth or of both combined, even though the consciousness of increased knowledge be accompanied by a feeling that the realm of nescience has grown wider at the same time. It is as if a man ascending a hill leaves behind the circumscribed vision of his position in the plains and yet, as he mounts higher and higher, gets a better idea of the immensity and expansibility of the field of vision and the recession of the horizon with every higher step taken. There is something more involved in the idea of progress. A process, inasmuch as it primarily signifies a change, need not implicate any organization or order. A given collocation will be replaced by another grouping the next moment, and provided the continuity of the changes is maintained, it is immaterial whether they are leading to any definite direction, higher or lower. The end result is of no consequence to the events that are concatenated in time—it is their product and not their objective. In progress, on the other hand, we are forcibly reminded of the goal towards which the process is moving and of the order that subsists among the different parts which are deemed to form a single whole. In process, ups and downs being of equal value, we do not care to enquire about the relative worth of any event in the series. In progress, on the other hand, every event is assessed as being either a help or a hindrance towards the realization of the better or the best; and where faith in the irresistibility of advance is absolute, even the so-called obstacles are regarded as necessary means towards the realization of the objective just as backward pace is helpful in taking a long-jump or dealing a cricket ball or as the fatigue of exercise is indispensable for making the muscles grow stronger.

We shall take it for granted that the world is a process—that it is a realm, not of static facts or spasmodic changes, but of a series of continuous events. We shall assume, that is, that continuous becoming constitutes the life-history of the phenomenal world and time as the principle of change is a real factor in the life of that world. We shall go further and assume that the changes that fill the flow of time seem to be qualitatively distinct so that the phenomenal world is a field of diversity as well. In fact, the apprehension of change is in most cases the apprehension of qualitative difference. Every event is what it is by virtue of its special characteristics—even if these characteristics are no more than its position in the spatio-temporal series, and transition from one event to another is detected by a change in the character of our experience. A change that is not apprehended does not give rise to the idea of process, and it is only when cumulative changes

have altered the character of the experience that we grasp that an imperceptible process has been going on all the time. The motion of the sun across the firmament is the classical illustration of Indian philosophers—the successive positions occupied by it cannot be made out by the naked eye and yet when a number of points have been traversed we notice that a change in the position of the sun has taken place. But more fundamental changes than mere shifting of the space-time position may similarly remain unnoticed, and then one day we may wake up to the fact that things have altered their character or that a new order of things has come into existence. When the theory of the evolution of species was originally attacked, one of the arguments adduced was that we do not notice any change in the character of the species that might justify the assumption of variation. As the original theory advanced by Darwin contemplated only infinitesimal variations, and not sudden leaps, the critics had to be silenced by the assertion that the process of change being inconceivably slow, it could not be perceived except after the lapse of a considerable stretch of time. The age of the world demanded by the evolutionists to explain the formation of the different species of plants and animals, when calculated according to the principle of insensible variation, would naturally run into many figures; but the point of interest for us is that a process may not be apprehended as such on account of its extreme slowness. And what is true of living forms may be true of social organisms also—these too may seem to have remained stagnant and stationary for ages and lost all momentum. Here also patient watching for years, if not decades and centuries, can alone enlighten us as to whether there has been process of any kind—for good or for ill—in the life of the community concerned.

Now, the question may be asked whether process as such interests us at all and whether we can refrain from seeing in every process something additional to change or movement. Let us take some typical examples. When we notice and record the movements of stars and planets we do not ask whither they are going. The change of seasons may mature other things but the seasons themselves come and go in an endless procession without any objective of their own. Seas heave and roll, winds blow and rage, rocks form and decompose, and similar things of nature go through processes of change without any obvious end in view. The brute elements and forces raise no curiosity in us about their doom or destiny. Similarly, stones, meteors, leaves and fruits, when they fall, draw our attention as things in motion but not as means to

any end. What does it matter to us if stars are forming or exploding in distant space or atoms are being composed or disintegrated? Till we are able to associate these processes with some order of value, they remain mere processes or driftings of cosmic matter which are of no interest or consequence to spiritual beings. Of course, it is quite possible sometimes to mark an artificial progress in these processes, as when the rolling of the earth is used to mark the progress of time and to measure out the years; but it is evident that here the progress is not of the earth but of beings which are affected by the efflux of time. Plants and animals grow in stature as years pass and our wisdom increases with the rolling of the sun—this is why we think of progress in connection with the process of time. But without that reference to life and mind the processes of nature are mere changes even though we punctuate them by days, months and years. When the process is circular, as in the rotation of the year, the time-cycle monotonously repeats itself. In such cases we may think of intra-cyclic progress; but even there we are not obliged to think of the progress of the system as a whole unless the movement ceases to be circular and assumes a spiral form. The informed reader will recall at once the many theories of eternal return or recurrence with which some eastern and western thinkers have familiarized us. In the Stoic philosophy and the system of Nietzsche such a conception of the eternal return of all things and events is to be found. In the preaching of Buddha we are introduced to the theory of the Tathāgata whose life-history in different births in different periods of the world repeats itself in its essential details. Occasionally, each cycle is considered to be composed of an organizing and a disintegrating phase—a phase of progress and ascent and a phase of decline and descent, and yet this biphasic (or polyphasic) cycle is supposed to repeat itself. Herbert Spencer's theory of the alternate formation and dissolution of the universe, the Jaina belief in the succession of the *utsarpiṇī* (uprising) and *avasarpiṇī* (declining) periods of the ethical universe, the Hindu belief in the repeating cycle of *satya* (golden), *tretā* (silver), *dvāpara* (brazen) and *kali* (iron) ages are instances in point. Here the process is not random or equational in character but is characterized in one part by an ascent or acquisition of worth and in another part by the liquidation of the value attained so laboriously. Once the peak of perfection is reached the downward journey begins, to be succeeded once more by the ascending movement, and so on without end.

Such a conception is obviously based upon our experience of living forms. Life begins with a lowly seed and gradually acquires

the plenitude of power and perfection. Growth, differentiation and organization characterize the vital process in all higher living forms for some time, and then decay sets in and the organisms die. But their seeds begin the same process over again and repeat the life-history of the parent organisms; and in this way the different species maintain themselves in unchanging existence for an indefinite period of time. Except when spontaneous variation or artificial improvement pushes the stock on to a higher level of excellence, the life of each living species is, as Bergson aptly points out, like an eddy where marking time seems to be the only occupation. Birth and death are the pulse-beats of life in every species and all growing things march with the beating of time to their certain grave. There is no indefinite growth anywhere and most often the process is cyclical—returning like a circle upon itself to the same point, and not, like a spiral, to the same starting line but at a higher level. If the world were to represent the same phenomenon on a larger scale, we are to admit that, as in individual species, process is characterized by repetition and there is no forward movement leading to a more valuable mode of life in the long run. Intra-cyclical progress is replaced by gradual decay till the Sisyphean task of mounting upward begins anew. In the Brāhmanic speculation about the succession of *kalpas* or cycles of existence we have such a picture of the world and in many other primitive cosmogonies also we meet with the theory of one or more deluges overwhelming creation and forcing a repetition of the world-process. If we believe that the end of such a world is sudden and catastrophic, and not slow and gradual, we may maintain that the picture is one of progressive development all through till that end; but the usual method is to postulate a progressive advance during the earlier period and a progressive decay during the closing period and extinction at the end of the period of decay. Whether the iniquities of finite spirits bring down Divine wrath upon the world or the alternation of cosmic rise and fall in the scale of values is governed by an inexorable law or by mere chance or by Divine caprice need not be discussed just now. If we could be assured that a catastrophic end did not stop the wheel of progress but that the suspended world-process resumed its progress from the point at which it had temporarily halted, then a succession of worlds would not have mattered, although it would then have become unmeaning and unnecessary. But generally in the theory of great dissolution (*mahā-pralaya* of Hinduism) this assurance is not forthcoming and we start with a new heaven and a new earth which are in no way an improvement upon their predecessors. Matters would have been different had the succession of worlds imitated the evolution of

species so that each later world was better than the one that had gone before ; but in that case the assumption of a deluge or such other catastrophes would have been unnecessary and unmeaning, for the same world might have gone on developing indefinitely without having its continuity and progress interrupted by cataclysmic events. Lurking somewhere is the belief that, like a machinery or a living body, the world must decline in course of time and that renewed vigour of growth, like that of a seed, tuber or graft, can belong only to a new world which rises phoenix-like out of the ashes of the old. Not being cognizant of any instance of indefinite progress in our experience, we interpret the universe in terms of the kind of progress with which we are familiar, namely, that of the world of life which exhibits the alternation of growth and decay. Although an appeal to the progressive development of the mind would have furnished a more satisfactory analogy, we somehow think that even the mental powers suffer decay towards the close of our individual lives and repeat the tale of vital processes—with, however, one significant difference, namely, that the social heredity they leave behind is cumulative in character even though each mind has to start afresh in its quest of materials like a living germ and to build up its body of experiences.

It is possible, however, to conceive of indefinite progress in individual life on two suppositions. We might believe that in never-ending time men have been coming again and again to this world and that it is possible by the acquisition of personal merit to advance one's spiritual status. We might suppose that a life well lived begets a better life in the next birth and that in this way men might progress indefinitely in perfection. Unfortunately, however, apart from the fact that the doctrines of Karma and Transmigration have not been universally accepted, or understood in the same sense even by those who accept them, there is the additional difficulty that the individual concerned does not know that he is progressing, if he is really progressing at all. The breach in the continuity of consciousness would alone rob progress of all its real meaning when individual lives are concerned. Besides, the theory of Karma admits ups and downs in moral fortune and does not permit the assumption of automatic progress in time ; and quite logically so, as it makes status dependent upon personal achievement, which may be either good or bad. A glance at the Jātakas (Birth-stories) will show that even Buddha was credited with many lower forms of existence in his different births and did not show a steady progression in the scale of being through successive lives. He even

combated the theory of automatic perfection through the efflux of time. Hence the first assumption of continued progress in individual life through successive births in this world must fail.

Nor does the second assumption fare any better. Suppose we believe that progress cut short here below is resumed in a separate realm. Students of philosophy are familiar with the Kantian postulation of immortality as a requirement of our moral life. We refuse to believe that after ascending the scale of values man should utterly perish and so much effort to achieve perfection should end in nothing. Hence the necessity of believing that in a supersensible world we shall by constant progress in goodness approach nearer the ideal of perfect holiness. Similarly, in the Vedāntic theory of *kramamukti* (gradual liberation) we have the supposition that men might by good act attain a higher world and thence achieve salvation by further acts of goodness and wisdom. Howsoever plausible these views might be, it is evident that we are obliged here to leave the sensible world behind to establish the continuity of personal progress. It is believed that between the littleness of man and the greatness of his ultimate destiny—whether this be salvation or proximity to God—such a wide gulf is fixed that, unless other fields of activity are provided, man will never reach the full stature of his real being; hence the necessity of postulating other realms where the soul might start with the perfection it has already attained here below. Obviously, without the further assumption that the progressing soul retains its individual existence and memory in the supersensible world this theory is in no way an improvement upon the theory of transmigration mentioned above. The craving for personal immortality proves ultimately to be a transcendental application of the instinct of self-preservation as the individual refuses to have his substance or character dissolved at any time and wishes the persistence of time beyond this sensible world so that his identity and progress might be maintained in a supersensible realm as well. As is well known, early Buddhism, in spite of its birth-stories and Karma doctrine, ridiculed the belief in pre-existence and post-mortem existence alike and orthodox Hindu speculation also mostly decried all belief in the continuance of the finite personality in the state of salvation. We need only refer to similar speculation in the writings of Bradley and Bosanquet about the nature of the finite selves in an ultimate reference to show that indefinite progress of the finite individual is not a universally accepted creed of religion or philosophy and even his persistence in a supersensible world has been widely questioned.

All considerations seem inevitably to suggest that progress that is indefinitely continuable cannot belong to any single individual. The limited span of existence that is allotted to him cuts short his career here below and we have no means of ascertaining whether, why, and in respect of what characteristics he should resume his career of progress in some other realm or mode of existence. Besides, we cannot distinguish the deserving and the undeserving by any absolute criterion nor can we be sure if a merciful Providence should not be more solicitous about souls that have degenerated than about those that have more or less fulfilled Divine expectations. If every soul is a thing of value, then God cannot allow any to go out of existence or become eternally stagnant or regressive unless we hold that those who have misused or neglected their opportunities have forfeited their right to consideration at the hands of God according to the Biblical principle that to him that hath more shall be given but from him that hath not the little that he hath would be taken away. Society has, in fact, established the convention that moral worth should alone count in the scale of spiritual values, and religious progress is the only consideration that should weigh when personal immortality is concerned. No philosopher has yet seriously suggested that an atheistically inclined scientist or an artist of eminence should have his prospects of further progress assured in another realm. Under the dominating influence of social need we have reserved such persistence for the morally good and the spiritually devoted, for into our connotation of holiness, intellectual knowledge and apprehension of beauty do not materially enter, even though we describe Heaven as the house of song and insist on the knowledge of self and God as a fundamental requisite of spiritual life. The suggestion that only those through whom some Divine purpose can be realized have a right to continuance and progress in another realm does not settle whether their progress or persistence is eternal and whether the purpose for which they persist is designed to benefit them personally or only uses them as means to some ulterior Divine end in the sensible or supersensible world. We must point out at the same time that progress in knowledge has in one sense contracted the sphere of the knowable. We no longer dabble in cosmic ages, theogonies, and the different levels of heaven and the underworld which an earlier generation loved to people with different types of superhuman and non-human beings, possessed of diverse powers and of opposite types of moral qualities. The genealogies of the gods do not interest us any more nor their occupations in their respective heavens; and in demons we have still less faith. No wonder, therefore, that we should discourage eschatological

speculations of all kinds as having very little bearing upon our duties here below and should applaud such religions as the early Hebrew religion, Buddhism and Confucianism for their avoidance of the question of the condition of the soul hereafter in connection with the problem of individual moral perfection in this life. Our latter-day philosophy, mostly under theistic influence, has seen fit to dissociate life and mind—the latter more than the former—from brute matter, because, according to it, the last never becomes genuinely individualized while the first two can be thought of only as embodied in unique objectively real individuals, each with an independent career of its own. Naturally, therefore, the individual becomes the object of attention and interest in the worlds of life and mind.

It is indeed difficult to dissociate progress from individual life for it is in and through individuals that all advance has to be made. We may be thrilled by the conception of an original vital impulse or a universal mind, but we have to confess that the only life and mind with which we are acquainted are associated with individual beings. Naturally, therefore, we think of progress in terms of individual things. Besides, just as we cannot conceive of reality progressing as a whole, so also we cannot understand a universal life or mind as subject to waxing and waning. Either we think of it as the expression of a higher principle and, therefore, capable of advancement when giving a fuller expression of that principle, or else we think of the principle itself as a unity in diversity which, although incapable of affecting the integrity of its indwelling factors, is able to change their relations and thereby increase its own value as a systematic whole. If we think that life is only a stage in the evolution of consciousness—because the ultimate principle is spiritual and nothing non-spiritual has any existence of its own, then we can explain why life should assume higher and higher forms in order to bring out progressively the element of spirituality that is latent in it and is working within it for fuller expression. We can even explain why the externality of relation which characterizes the world of dead matter should be superseded by the internality of relation to be observed in the world of life and this in its turn should culminate in that intimacy of relation among mental facts with which we are acquainted in our own conscious life. Proximity in space, organization and personal identity represent an ascending scale of excellence for the universal spirit that is operating in the world. Similarly, chance impact, constant assimilation and deliberate association represent a progressive scale of values when we pass from the inorganic to the organic and

from the organic to the conscious. Or we may think that the elements that make up the texture of the world are themselves unalterable in their nature—what changes is their configuration or organization. The materials that make up the physical world, when taken up in the living world, acquire a new value because of the organization they receive, and these, when forming part of the organism of a conscious being, get an intimacy of relationship which is not found in the non-sentient world of life. Reality is always a system but the worth of the system varies according to the type of relation that holds among its constituents. Like the embryonic stages of a developing animal, lesser perfections are successively passed over so that greater perfection may be progressively achieved (Hobhouse).

But in spite of the undoubted value that individuality possesses we must reject the view that the perfection of any individual is the objective of the world-process. Time not only matures us but callously rejects us after gathering the seeds of vitality and wisdom from our life and mind. We are not, as Nietzsche thinks, a bridge to the superman but we prepare the way for a better race. Life knows not only of the unchanging species but also of the evolution of better forms—the lower forms may not die out in the process, but the best of them sow that seed of variation which lifts the type to a higher pedestal. Let us learn the lesson of human destiny from the world of life. Most of us would merely carry on the lower form of cultural existence in which we found ourselves at birth. But some of us are destined to start the upward march of mind—to be the heroes, saints, prophets and progenitors of the incoming era. Each successive age uses the preceding age as a jumping board to mount to higher things. This does not necessarily mean the disappearance of the lower forms of culture just as the evolution of higher forms of plants and animals has not meant the disappearance of all primitive forms of life. Apart from the cultural stratification of the different races we have in the same culture-group people of diverse attainments and abilities. The levels may differ absolutely and yet there may be heights and depths in each level, just as the Eastern Ghats rise abruptly from the sea-level while Mount Everest towers above the table-land of Tibet. What forces are at work to raise a few individuals above their fellows we are unable to guess. These are akin to biological freaks or sports which may prove the starting points of a higher synthesis of culture. But even they are not the final aims of nature, for they too must make room for others who would reap the benefit of their vision and provide the point of departure for their own supermen. There is this difference,

however, between biological heredity and social heritage that we are all equally the inheritors of the wisdom of all the preceding ages in our social life whereas in our biological existence we inherit traits from our own line of ancestors only. In our social life we draw from a common fund of culture into which our predecessors had all thrown their individual insights and acquisitions. But just as the individuals perish and yet the race grows more and more and better and better, so also the progress we achieve we bequeathe to our posterity and we personally cease to be. Just as the biological unit persists in the race, so also the conscious unit lives in the social culture that he has been instrumental in enriching. The indefinite progress of the individual can be raised to a creed only by abstracting the moral and religious aspects of human nature from the intellectual and aesthetic aspects and then conceiving of the former as achieving indefinite progress in some other realm or realms. But, apart from this question of abstraction, the existence or the nature of the hostile factors that might give opportunities of moral growth through struggle in any supersensible world is not easy to comprehend, and automatic perfection or perfection by mere rumination in that world over the doings of this world is fundamentally opposed to our idea of the nature of moral growth. Like a flower that has faded but has left its perfume behind, we leave a legacy of culture behind us to uplift the race and the only persistence we have is of this impersonal kind, namely, in the memory of the race and in the blazing trail of wisdom, beauty and goodness that our personality leaves in the social firmament. We prolong and better our existence both biologically and mentally in the race ; and, thanks to the instinct that does not grudge a gift to the race, we do not spare ourselves and deprive posterity of our contributions to its well-being, just as our predecessors did not deny us the privilege of a better life, which was made possible through their contributions to social progress. The cultural heritage of the race has been made possible by the synthesis and organization of the contributions of the earlier generations, and the diffusion of culture through contact has been on a far larger scale than the cross-breeding of different biological strains. We are far more indistinguishable as the founders of culture than as the progenitors of our individual families and clans, and to that extent we have far less of individual immortality in the cultural life of society than in the biological life of the species. In many primitive and ancient mythological beliefs the hero or the clan-leader was alone supposed to have an immortal life. In the cultural life of the community also only a leader of thought can be said to have substantial persistence. The multitude that quickened his thought and resisted or assisted the

diffusion of his ideas form an indistinguishable mass, if they persist at all in the racial civilization. In the formation of social tradition or the furthering of social arts many more may have a share ; but their individual contribution is either forgotten or not ascertainable, and hence they suffer from complete social oblivion.

Whether there is any other persistence to enjoy the fruits of merit or demerit and, if so, of what character it is, we shall not discuss here ; but if such there be, we should be constrained to deny that there is any progress in such a type of persistence. Hindu philosophy generally thought of heaven and hell merely as places of reward and punishment respectively for a specified period. It generally refused to apply the law of moral action to spirits enjoying the sweets and bitters of heavenly and hellish life respectively and reserved progress for earthly life alone. We would rather favour that position and refuse to postulate indefinite progress in the purgatory or some other supersensible realm or to accept the contention of the theosophists or psychical research enthusiasts that spirits may belong to a different plane of existence and yet come down to, or interfere with, the events of this terrestrial plane. Nor would we be justified in believing that others can speed a departed soul on to higher perfections by their oblations to the dead or gifts in honour of the dead or masses for the benefit of the departed ; these would take away the main element, namely, personal endeavour, from the concept of individual progress. All of us may share equally in the legacy of the race, but nothing comes down from the past to benefit specified individuals ; similarly, no one can get individual benefit from a later generation and attain a better state with the help of a pious posterity. Apart from other considerations, its pragmatic value would be negative from the standpoint of social progress ; for while a gift in the spiritual interest of a departed soul ennobles the giver, the hope or prospect of receiving such a gift from pious descendants (and gifts would naturally be greater for the benefit of the worse souls) and of evading the consequences of a sinful life would take away the main incentive to moral action from a person even if he believes in a hereafter. A meed strictly in consonance with personal worth or worthlessness is a far better hypothesis than a mitigation of post-mortem suffering or an improvement of post-mortem status effected by prophetic intercession and by pious gifts of posterity. Let us admit that funerary rites and pious offerings, in so far as they widen the sphere of benevolent thought and action so as to include unseen worlds, do have an educative value and not only foster the sense of kinship but also expand the charitable attitude of man. But let us admit also that

ancestor-worship of all forms has oscillated between the utilitarian motive of providing material and moral sustenance to the departed fathers and the egoistic motive of receiving blessings from them in return, especially in the shape of increase of family and good luck, just as funerary rites are intended as much to prevent the dead from returning as ghosts as to help them in attaining a good hereafter. Those who trust more in personal merit and yet feel that moral achievement can never fulfil adequately the requirements of a blissful immortality rely more upon faith in God or prophetic intercession and fondly believe that the deficiency in works may be made good by faith, if not totally replaced by the latter, and that even death-bed profession of faith in a particular creed can advance the post-mortem status. Repentance that implies a genuine change of heart is sometimes so indistinguishable from formal confession and mechanical repetition of a creed that professions of faith are often designed to overload the scale of merit in the eyes of God. We have to repeat the same warning here: faith may be a moral act in so far as it implies a determination to establish a right relation with God's creatures; but it cannot replace morality or, when divorced from moral attitude, benefit the sinning soul in any way. The recluses and mystics of all races and ages have mostly found faith, meditation or contemplation sufficient for their spiritual needs and have not shown any great willingness for shouldering the duties of social life; but their omission to practise active charity can in no way be compared with the attitude of those who believe that once spiritual illumination or correct devotion has been cultivated the ordinary laws of morality cease to have binding force and they are permitted to indulge in any immoral act without risking the safety of their soul.

Let us return from this digression and reiterate the view that till belief in transcendental persistence and indefinite personal progress cease to dominate our thought and conduct we shall not be able to appreciate the value of social immortality or further social progress in a disinterested manner. History becomes a biography of heroes when society is reduced to a background for the exploits of the heroic leader. How far such a leader is able to pull society up with him becomes a matter either of no concern or only of secondary concern. He attains an isolated eminence and hands over the society to the next strong man to rule. When the masses are sunk in poverty, ignorance and squalor, the odds are heavily against a regular succession of great men; and the absence of ability and incentive to emulate them is so marked that nothing short of a miracle can improve the condition of such a society.

Unless the light and air of the cultured world outside can effect an entrance into such a community and kill the germs of ignorance and imbecility and sweep away the mass of superstition and primitive credulity, such a community would be condemned to a perpetual darkness and chronic inactivity. If it could be shown that the breath of culture is not vitalizing any considerable part of the globe at any time, then it would be difficult to discover any meaning in human history. We wish to maintain, in other words, the thesis that human progress is not to be judged by the advancement of any single race, tribe or nation just as it has no meaning when applied to single individuals here or hereafter. It is not to glorify the Israelites by making them the chosen race or to establish the Prussian State as a complete expression of the Objective Spirit or to reach self-consciousness in and through the philosophy of Hegel that the Ultimate Principle of the universe works. The Universal has no particular individual's benefit directly in view although it has to use the individuals as tools of its operation.

If then we must limit our consideration to social groups as the objective of progress, how are we to read aright the meaning of history? The drama of human life does not embrace the whole race within its cast; and when groups live in isolation or in mutual ignorance of one another's existence, there can possibly be no single history of the human race. We shall not enter here into the vexed question of the monocentric *versus* polycentric origin of the human race. We shall not attempt to ascertain if the ape-like anthropoid ancestors of man gave up arboreal habits in different parts of the globe and evolved the different types of primitive men whose skulls have been excavated in widely separated regions of the world, or if, after originating at one centre, the human race broke up its original home and migrated in different groups to different parts of the world and then these groups not only lost touch with one another but created a babel of tongues that took away their capacity to understand one another. We shall discuss later on the nature of the progress that we consider to be ideal and which, in our opinion, constitutes the inner meaning of human history. But before we can do that we are faced with this formidable difficulty that unless human history is itself a fact there is no sense in trying to fathom its meaning. By the very nature of the geographical distribution of the habitable parts of the globe the different human races could not have had a single history. The distribution of land and sea in earlier geological ages was possibly, as scientists point out, somewhat different and lands now separated were joined to one another in those times and *vice versa*. But it is doubtful, if

not improbable, that man had evolved so early and in any case the same problem was possibly present then as now although in a different form. We are obliged, therefore, to ask if each region had its own history of the human race and yet all developed on identical or similar lines like the geological strata in different parts of the world and thus the operation of a uniform principle was visible from the very beginning. Apart from the fact that we have no recorded history of all regions or all times, the simultaneous presence of different grades of civilization and types of culture down to the present times is itself an evidence that the different races moved with unequal paces through the ages, and, what is worse, even the capacity for cultural development did not grow at an equal rate in these races and their power of adaptation to a civilized mode of life was so unequal that many of the primitive tribes seemed to be doomed to extinction in a cultured environment. In these circumstances the only consolatory surmise seems to be that the existing races must have been better than those they had supplanted in point of adaptation to environment, for otherwise they could not have survived in the struggle for existence. And if the survival of any human race implies that its members were more keen-witted and better organized in peace and war, if not also more courageous in mind and strong in body, than the members of rival races, then the evolution of such a race would certainly be a proof of the operation of a principle of selection. But as different surroundings require different talents for adaptation and advancement, it would be risky to postulate any single trait as the uniform objective of the evolution process. The utmost that can be conceded is that the brain developed everywhere in keeping with the needs of adjustment to a more complex situation and a greater intelligent opposition, perhaps not less often than as a result of some favourable chance variation. As spirit answers to spirit, we may suppose that the absence of intelligent individuals to whom they might respond was responsible for the backwardness of some groups and that to that extent progress in any primitive group with very limited opportunities of intercourse with more intelligent groups was a matter of luck, depending upon the chance appearance of intellectuals within the group by birth, capture, find, or migration from some other group.

But does our admission end here? Can we assert that the drama of human progress has been enacted on a uniform pattern all the world over on the principle of the triumph of the better over the worse? Has progress been steadily and consistently maintained in all fields of racial development? Have we no ups and

downs in the fortunes of the races in any region or any time? Does human progress march like a steadily ascending curve—sometimes slowly perhaps and sometimes quickly but never with any break or fall? Or does it move in a dialectic fashion—with occasional falls that are necessary preparations for higher successes? Or, lastly, does it move with no plan whatsoever or only in a serpentine fashion, but still accidentally attain higher and higher levels and thus produce an illusion of planned advance? We should clearly dissociate in our reading of the march of history the subjective category of purposiveness from the objective presence of purpose. The extolling of the later conditions of things over earlier ones may be only an extended egotism—an indirect claim that we the latest are the best. It may also be that we cannot understand the meaning of the flow of time except as a change for the better, interpreting every cosmic movement in the analogy of our own acts as an attempt to get away from an absolutely or comparatively undesirable state to a more satisfactory condition. We may even put a palliative meaning on uncomfortable facts in the shape of a hope that they too would introduce a better state of things in the future. Who in the ancient world did not deplore the extinction of the glorious Roman Empire at the hands of the barbarian hordes? And yet have we not been told that it was necessary that the effete Mediterranean civilization should perish in order that the less sophisticated barbarians might accept, and be instrumental in spreading, Christianity? Who in the modern world except the aggressors concerned would not deplore the enormous loss of innocent and valiant lives in Abyssinia, Spain and China, which ambitious nations and individuals have caused to satisfy their lust of conquest and power? And yet in course of time would appear apologetics and defences of the cruelties of these wars with a catalogue of goods that the world would not otherwise have achieved. The healthy instinct of seeing the bright side of things, without which life would have been more miserable and intolerable, makes us incorrigible optimists, and so we interpret worldly happenings as being always designed for the best. Even natural catastrophes we take in a similar light. The Great Fire of London was taken as a providential arrangement for making a cleaner and more healthy city possible. Religious historians of earthquakes would probably regard the great earthquakes of Lisbon, Quetta, Tokyo, Monghyr, Shillong and other places as similar providential decrees for better town-planning and structural construction! As every calamity affords an opportunity for learning

by experience (possibly the primitives learnt less and could counteract evils less), it is not difficult to find out some justification for every untoward and injurious event. Had man acquiesced in these calamities (as probably he did in olden times, but even then perhaps only partially), they would have been unmitigated evils; but the human mind refuses to be subdued and every misfortune teaches it how best to counteract or minimize it in future. Hence we have learnt to regard every event as an example or opportunity of progress—whether the event is good or bad at the time does not matter, for ultimately the human mind benefits from each happening. We are presented in fact with two alternatives. If their bearing upon human life is excluded, then natural events are mere transformations of matter and energy and are beyond the province of valuation. If, on the other hand, they do affect human life and are utilized by man as opportunities for improving his conditions of existence, they cease to be pure evils and can in fact be regarded as designed for educating the race in knowledge and adaptation to environment. It is this habit of reading beneficence into all events and acts that is responsible for the view that a personal providence is at work in the world, arranging things always for the best, whether in the form of uninterrupted progress or in the form of occasional or systematic disturbance of peace in order to elicit from a man a more satisfactory method of overcoming the evil and improving his position and prospect.

It is not easy to say where this subjective way of reading purposiveness into happenings ends and an apprehension of objective purpose begins. That from the experiences of the same world a Leibniz should be able to say that it is the best of all possible worlds and a Schopenhauer that it is the worst of all worlds, or that a Hegel should build up a rationalistic theory of the universe and a Von Hartmann or a Bahnsen a pessimistic and irrationalistic theory is enough to prove that much of philosophical speculation depends upon the temperament of the thinker concerned and that even philosophers are not free from the faults of omission and commission when dealing with the universe at large. With an admittedly warped attitude towards life, a perfect and impartial view of things is not expected of man, and much of our so-called knowledge would naturally be nothing more than personal opinion. But just as subjective idealism in philosophy has failed to give entire satisfaction because even after making allowance for the ideational character of all knowledge we have to admit that certain ideas, because of the force and liveliness with which they strike upon the mind and of the regularity and uniformity with which they

appear in different minds, seem to reveal an objective world, so also certain stubborn facts of nature and history raise the presumption that something akin to the presence of an ideal is at the root of cosmic operations. The evolution of plants and animals and the contact of cultures are not subjective fancies even though we are unable to say whither they are all tending. That both naturally and artificially a better adapted and probably a more artistic world of things should gradually come into being betokens the presence of a principle that creates and conserves values. Possibly a similar adaptation to a primitive world was made by an earlier type of life ; but the complexities of a later world were probably absent at the beginning and the level attained by later forms of life was unknown at that time. Adaptation is not the only criterion of progress for plants and animals may by regression also adapt themselves to their life's situation, as is done, for example, by parasites. A neurotic and a person suffering from inferiority-complex may similarly sink to a less diversified and less advanced social life to find an environment that fits them. It is the capacity to accept higher and higher developments of the universe in his particular sphere of life with appropriate faculties and organs that marks an individual's path of progress. And if such progress is present—and a candid examination of the world will show that it is, then the reality of something akin to purpose in cosmic happenings has to be admitted even though a detailed knowledge of its operation is not possible on account of the dimensions of the object and the limitations of the thinking subject. It is this purpose that gives meaning to the world-process.

Does this purpose act whimsically and in contravention of law? Are we to suppose that to benefit single individuals the purpose neglects the constancy and steadiness of happenings, faith in which is the basis of all rational thought and uniform conduct? Does it take things out of their proper turn and snatch at this or that perfection according to its sweet will and pleasure? Or have we only one standard by which to judge progress in every sphere, and are the stages thereof rigidly fixed so that, even if skipping be possible, reversal of procedure is not permissible? We have to confess that things act uniformly in the universe and that the ascent also follows a uniform law all the world over. Not only is the physical world subject to uniform laws, but life also evolves according to a uniform procedure and is unable to make a direct ascent from an amoeba or an ant to a man. Man also is subject to uniform laws in his mental behaviour and in psychology we undertake to study the laws of his mental life. Even in the appre-

ciation and pursuit of ideals men do not differ from one another, for otherwise aesthetics, ethics and logic would have been impossible and all philosophical, academic and religious endeavours to educate the different races of men in a uniform system of culture and appreciation of values would have been futile and unmeaning. Now if there be universality and uniformity in progress, we have to assume the operation of a single principle all throughout in space and time. But we are not necessarily bound to assume at the same time that a personal power is behind this uniformity, for a spiritual principle operating according to law would serve the purpose of explanation and would not introduce complication about the possibility of arbitrary deviation from plan in individual cases. In fact, the real difficulty is not about the principle but about the personalities through which all progress has to be achieved. Whether a personal power overrules all events or whether an impersonal principle of spiritual law is in operation, the share of free individuals in shaping the destiny of the world is not easy to understand. Are we permitted to interfere in any way with the scheme of things or is the plan of the universe so unalterably fixed that finally, whether we co-operate with or oppose the ultimate principle of things, that plan always realizes itself? Like an eddy in a river we seem for a moment to have an individuality of our own and to run counter to the main flow of the stream of reality; but in the end we are carried downstream and then lose our individuality, and the stream resumes its downward course as if nothing had happened to ruffle its bosom. If it is a God that overrules the destiny of the universe, He may give us a measured latitude of freedom; but He does not allow us to interfere with His scheme of the world. Even if we cease to believe in the miraculous interference of God in the affairs of the world to set right a disjointed world, or in the dissolution of the world when things are past remedy, we still hold the view that the scope of human interference is extremely limited and that we are condemned to the laborious task of building up monuments of art and industry which the ruthlessness of nature or man destroys in a moment or which crumble to pieces in course of time by a slow but irresistible process of natural decay. Not only the evil but also the good that we do seem to have no abiding effect on the course of things, and the spirit of the world seems to move on regardless of what we do or undo. This is enough to breed pessimism about our own worth and our contribution to the progress of the world. A way of escape may indeed be found in the consoling thought that we are here not to make the world advance (the Zoroastrian *frashokereti*) but to advance our own spiritual interest here and hereafter so

that we may ultimately deserve well of God and enjoy eternal felicity. But, apart from theoretical difficulties attending this position also, we have to confess that this solution does not appeal to us and that like the Mahāyānists who disapprove of the idea of personal liberation as held by the Pratyekabuddhayānists, we too think that in an ultimate reference life for others is what counts.

II

It is perhaps disquieting to be told that a disinterested study of the worlds of life and mind reveals the fact that it is only by a universal living for others that species and societies have been maintained and improved. If each individual had insisted upon living for self, then neither race nor culture would have been possible. Each organism is used as a bridge by which life passes on from one generation to another and each species is similarly used by the life-force to pass on to higher forms. It seems as if reality is permeated by certain forms or configurations that act like universals and also that there are not only forms but also a *nisus* which is responsible for the evolution of higher specific types. While consciously pursuing our selfish ends; we unconsciously allow ourselves to be used as tools by the racial impulse for propagating the species. While our intelligence acts as an individualizing agent and we build up a personal history and a personal objective with its aid, our instinct acts as a universalizing force and makes us work for the benefit of the race. The egoistic instinct is thwarted not only by the erotic impulse but also by the instinct of sympathy which is incidental to the operation of the parental instinct and is also aroused in other situations. In our solicitude for the children, in our pity for the distressed, in our love and kindness towards the weak, we reach out beyond ourselves spontaneously except where a cold intellectual calculation of the profits and losses to self keeps us back from expressions of sympathy and succour. Whether to gratify our impulses or to derive a feeling of complacency and pride in dominating others, we get wives and rear up families, and this becomes instrumental in pushing us from egoism to altruism. The creative impulse of the poet and the artist refuses to be contained within the four walls of their private personalities and issues forth in music, poetry, dance, painting, sculpture and similar artistic expressions that may incidentally enhance the self-feeling of their authors but primarily subserve, whether intended or not, the interest of a social group for whose delectation, in fact, they take an objective form. Similarly, a prophet or a seer may have revelations from on high that make him personally a better man; but he cannot contain himself and goes out to preach a message of salvation for the benefit of

others and not for glorifying himself. Even a funny thought we cannot keep to ourselves but must express in a witty utterance or a catching cartoon. Joy is doubled and sorrow halved in company. For protection as well as for enjoyment we require the presence of others. In distress we require friendly help, and in attacking others we similarly want social assistance, even though after the fight is over we may fall out among ourselves. In our opinions and acts we require social backing; in fashions we follow social tastes; and even in our appreciation of things of value we follow the social standard. Thus, in spite of our engrossing pursuit of self-interest, we cannot get rid of all social reference; and on last analysis, it will be found that much, if not most, of our personal enjoyment borrows its vitality and colour from social appreciation and approval. Just as a procession would be off colour if there is no crowd to watch it, so also we shall not enjoy many of our egoistic pleasures without being assured of social observation, approbation or support. When we wish to enjoy thoroughly our wealth or strength, we parade it in public. We take delight in being seen when driving a car or wearing costly dresses and ornaments. Even our capacity to inflict punishment must be noticed, or we shall not relish the cruelty of our conduct; and our calamities must be noticed and our bereavements mourned by others if we are to feel our personal worth in the social group. A social outcast or a political outlaw, with all the resources of enjoyment at his command, would feel miserable; for in the absence of social notice our enjoyments prove ashes to the taste. Except by special training in the art of solitary living, no individual can stand a solitary cell for long—he loses wit or health or both in the absence of the customary social contact even when all his physical comforts are adequately attended to and he is supplied with necessary physical and mental recreation through bodily exercise and literary pursuit.

Now it is this instinct of living for, in and through others that lies at the basis of social progress. A group of living beings neither requiring nor offering assistance of any kind is to be found only among the lowest organisms where living in groups, if at all present, has no social significance. Each lives unaided and unaiding, pursuing its preys and avoiding its enemies, while mitotic division makes it unnecessary for the members of the species to seek out a mate. There is no mutual imitation or any danger cry or any concerted action in attack or defence. The race survives by its sheer capacity of rapid multiplication as the plants do. Above this level we have species which have periodical matings or flights in swarms where the reproductive function comes into play. In many species the reproductive act terminates the life of the individual—

the single social act is the culmination of the animal's career ; like the cereals and annuals in the vegetable kingdom it only lives long enough to hand down the lamp of life. It is only when we come to animals that live in herds, shoals, flocks or swarms, whether habitually or seasonally in order to raise the next generation or to attack others or to defend themselves, that we have the genuine beginning of social life, however short-lived this might be. It is not the number but the degree of interest in others that determines the cohesiveness of a group. A large concourse of people does not necessarily develop a sense of unity till some stimulus makes them of one mind as, for example, in a crowd. Judged by this criterion, individuals living apart might be better knit together by mutual attachment than those living together in loose mental association with one another. A herd of cattle or a flock of sheep grazing apart from one another in the same field is more socially disposed than a thick cluster of millepedes or worms, for in weal and woe they have a tendency to gravitate towards one another and present a combined reaction. Where herds develop a kind of leadership, as among monkeys, elephants, migrating birds, etc., the unity achieved is greater in spite of the fact that the association may be purely temporary. In all these cases, however, each individual is self-contained regarding function and each duplicates the work of the rest in its own life. The structural resemblance carries with it a functional resemblance and none is expected to specialize in a particular direction and to be relieved of other functions in consequence. Barring the respective functions of the male and the female on account of sexual dimorphism, the other functions are discharged uniformly by all the members of the species.

The most notable departure from this repetition of functions is made by social groups where a division of labour is established by structural polymorphism. Bees and ants furnish the most instructive examples of such structural differentiation and of a type of society where an allocation of different functions is forced by the structural dissimilarity of the component units. As Bergson has pointed out, such groups stand, as it were, for individuals with the different organs located apart in space. The group works as a whole, for its component types dovetail into one another to form a single viable unit. Under the exigencies of circumstances the members of each type may be varied in number or occasionally transformed in character (as when a worker bee is changed into a queen bee); but once the typical structure is attained, the function becomes stereotyped. In rigid social groups an imitation of this condition is met with, as when professions go by castes and guilds and a turning over to other occupations is regarded as impossible

—at least, not at all easy. Here the polymorphism is not corporeal but mental—there is somewhere an inertia which prevents a swift turning over to new occupations in keeping with the changing demands of life, and thus the inner mobility of the social groups is paralysed. Here perfection has been attained at the cost of pliancy. Like instinctive animals that function more accurately in accustomed environment than intelligent beings but lack the adaptability and progressiveness of the latter, a rigid social organization is best suited for routinized life but proves defective in rapidly changing conditions of existence. Social unity must not, therefore, follow too closely the social organization of polymorphous bees and ants. The ideal social life is that in which individuals are allowed to specialize in certain functions but can switch over to other functions as circumstances demand or talents permit.

The evolution of complex human society has been made possible not only by the liberation of the hand from the function of locomotion but also by the progressive division of labour among different groups. In primitive times each man was expected to be a jack-of-all-trades and to satisfy most, if not all, of his personal needs himself. In family life the beginnings are made of the distribution of work, and naturally the member who most excels others in any particular direction is entrusted with that particular type of work oftener and becomes an adept in that line. But it is in society that this division of labour attains perfection, and, instead of each man doing all necessary things imperfectly, different men do different things with greater perfection. The founding of cities accentuates the process of specialization as mass production becomes indispensable for meeting large needs, and gradually in course of time castes and guilds are formed to concentrate works of particular kinds in the hands of select bodies of people specially trained in their respective arts and crafts. But cutting across the principle of aptitude comes the principle of inheritance, for families naturally attempt to keep particular arts and avocations a close preserve for their descendants and resist the intrusion of other families or groups into their special domain. But as the inheritance of special aptitudes is not absolute but limited, all persons born in a particular caste or family are not fitted to follow the caste or family profession, with the effect that either they have to abandon the profession or they bring it into disrepute by their slovenly performance. Besides, tradition is the greatest enemy of innovation and this, in a changing world demanding rapid progress, is one of the greatest drawbacks of routinized production. One born in a caste or guild can perhaps improve the *technique*, but the

importation of *ideas* is less satisfactorily achieved through hereditary groups of craftsmen. As the spectators often see more of the game than the players themselves, so people outside the group can often detect blemishes and suggest improvements which escape the notice or transcend the intelligence of the traditional performers. To exclude individuals from groups to which they belong by nature, though not by birth, is to keep out men who can sometimes take the profession out of a rut and push it on to a further stage of progress. Hence while one section is needed to conserve the conquests already made, another section, which is capable of making original contributions in that particular realm, should not be denied the right of operation simply because it does not possess a hereditary right to that domain.

It is essential for social progress, therefore, that those who have ideas should have the right to express them. No less essential than freedom of conscience is the freedom of thought and of its expression with due respect to the legitimate sentiments of the people at large. No existing social evils or superstitions can be attacked or dissented from without offending somebody; if it is demanded that free thinking should be conceded on the understanding that it offends none, then this concession is illusory. You cannot attack abuses in any sphere without affecting vested rights—you cannot even set a fashion without injuring some interest somewhere. To dare to offend and to be a nuisance are not identical—one can do the one without being the other. It so happens sometimes that men's minds are insensibly and widely prepared to receive certain changes; in such a case they seize the occasion of a free critic's expression of views to side with him, and then the contagion of advance spreads rapidly among the people at large. The spread of western culture in eastern countries is an instance in point. As a consequence of the liberal secular education received, a particular section may be more prone to change unsatisfactory modes of thought and action than another, which clings more tenaciously to ancient culture. But this does not always happen, and a prophet or a reformer may have to fight long and single-handed, or with a small following, to spread his ideas among the people at large. Think of Socrates, Jesus, Muhammad, Zarathushtra, Galileo, Gandhi and others who had to face contumely and persecution to spread an idea or a truth. If those that have vision are not permitted to show the way to others who, like the chained persons in Plato's allegory of the Cave, stubbornly refuse to turn towards the light, how would the world progress at all? The birth of a genius who sees better and farther is an essential condition of social advance and this type of variation the spirit

of the world has achieved in all times and climes, albeit at different rates of progress.

Far more effective, however, than this unaided advance of any group is the contact established between a more advanced and a less advanced cultural unit. We are accustomed nowadays, with exceptions that are recent and by no means rare even in a civilized age, to peaceful penetration of more advanced ideas, institutions and cultures into less advanced culture-groups. Even in ancient times the eastern religions, which were not identified with any state policy, were disseminated in distant countries by peaceful missions. But in primitive times war was a potent instrument of the spread of ideas, and not only savages but even civilized nations learnt a good deal from their more cultured enemies, whether these simply fought and departed or conquered and spread their ideas by peaceful means or thrust them upon the vanquished people by force; conversely, the victorious in arms had to submit sometimes to the vanquished in matters of culture. Think of India's indebtedness to the Greeks and Romans in astronomy and art and of Rome's to Greece in culture to appreciate our statements. When nations go to war, do they intend it as a cultural mission? The religious zeal in early conquerors might account for a few such wars; but although a pretence of this kind was put forward in a recent war of conquest very few people believed it to be anything but an exhibition of lust of power and property. The conquest of the New World by the Europeans and the spread of Islam were not achieved without bloodshed; but it is not unlikely that many Spaniards and Musalmans felt themselves like crusaders against paganism and superstition. Many of them, again, went with the primary motive of pillage or trade and followed up their financial venture with a missionary activity. Many, again, married or carried away women to satisfy their love or lust; but this also served a missionary purpose inasmuch as the mothers and the children were converted to the religion of the conquerors or the traders.

Now this has been possible because of the operation of two factors, one physical and another mental. The geographical location of countries is responsible not only for certain national traits but also for certain wants. Arabia cannot grow enough delicacies and either trade or conquest must supplement the national food and fund. The heights of Afghanistan do not afford much luxury; nor do the countries of Europe grow or possess all the requisites for food, shelter, wealth and armament—in respect of many objects not

singly, and in respect of some not even collectively. No wonder, therefore, that the Arabs should spread out or that the hilly gates of India should be knocked at by a succession of invaders from the north-west or that the European nations should choose a career of conquest in the defenceless East, West and South. The problem of over-population or growing population also complicates the geographical difficulties of raising enough foodstuff of the requisite kinds. But climate and population do not explain migration to or invasion of other lands. The Tibetans do not descend upon Nepal or India from their inhospitable bleak plateau nor does China with the densest population of the world go to swallow Japan or Siberia. Without dissatisfaction, venturesomeness and ability a nation may suffer all the hardships of an unkind geographical position and not think of migration or attack. The strong and the ambitious may wait for a pretext or may create one or even dispense with its necessity and the needs of self-preservation may outweigh considerations of justice and propriety in the national mind ; but where strength or disposition is lacking, it is only migration to regions of easier life or livelihood, or cultural mission that is resorted to and the sword is completely laid aside. But whatever might be the motive of transcending the geographical bounds of national existence, two things stand out prominently, namely, unequal distribution of the amenities of life and the refusal of the human mind to remain content with the apportionment of nature. Nature has prevented an entropic condition by her unequal distribution of the blessings of life and has thus forced a perpetual circulation of the adventurous, intelligent and able section of her population through different regions and made it the instrument of spreading ideas, institutions and ideals.

As wants create desire, we are faced with the paradox that human progress is linked up with a progressive increase of wants. We may not go so far as to support Mandeville's thesis that civilization depends upon the vices of society ; but there is no doubt that a curtailment of wants would make us not only self-contained but also lacking in incentive for wider contact. What we call raising the standard of living is really creating necessities of cultivating larger interests and establishing wider contact with the world at large. Naturally, it is the material aspect of foreign countries that interests us at the outset, for we are dependent upon it for some of our bodily comforts ; but contact on the material plane has a tendency to be supplemented by a desire to meet foreign people on the mental plane also, and with the interchange of merchandise grows up an active intercommunication of thoughts—also, together with it, a quickening of personality,

specially in the less cultured of the two parties. The explorers, the traders, the missionaries and the scholars form an ascending ladder of inter-regional contact, each paving the way for the succeeding one in understanding the mind of the foreign nation or group. Those who advocate the blessings of isolation, national and individual, believe in intensifying a small contact of the soul; but those who advocate the cause of expansion in national and individual lives believe in establishing a wide contact for realizing a fuller life. History bears unmistakable testimony to the progressive breaking down of all national and regional frontiers as a consequence of the spirit of adventure and enquiry of the nations of the earth. A tribe or a nation that has never had any connection with other nations it is now difficult, if not impossible, to find. For gain or adventure or out of curiosity or love, even the most isolated tribes in the remotest corner of the world are being visited by civilized races. Civilization as a capacity to take interest in the affairs of the world at large has made the modern newspaper possible. The extension of interest to distant groups is responsible for material improvement in modes of communication. The civilized nations of the world have not only built ships, railways, automobiles and aeroplanes but also invented instruments for telegraphic and telephonic communication and wireless transmission. In other words, as the necessity and amount of contact are increasing, space and time are contracting, thanks to the rapid advance of science in all fields. And not only are meat and vegetable put in cold storage for longer stay and transit but speeches and songs and sights and scenes are packed in material frames for preservation and wafted to the remotest parts of the world. Gramophone and literature, photo and cinematograph bring distant things near and establish contact with unseen persons and things. In all these ways the bonds of isolation are visibly breaking on all sides.

Do these facts carry a moral for us? Man does not completely possess himself at any time and his own capacities become more and more manifest as he comes into contact with wider groups. Man in society is a much fuller man than man in isolation—he realizes his failings and strong points much more effectively and keenly through his dealings with other men. Blemishes that go unnoticed and excellences that remain undetected otherwise come out in our social dealings; and the larger the points of contact and the more alien in thought and belief the groups with which contact is established, the more conspicuously do our defects and capacities reveal themselves. But unless we give free scope to those instincts that bring us into contact with other men and groups and peoples, our capacities remain undeveloped. Nationalism breeds a narrowness

which is related at bottom to the instinct of self-preservation and is justifiable in situations where self-preservation is permissible, namely, where the existence of the individual as a free agent is threatened and his attempt to better himself is thwarted. But a nationalism that breeds insularity and prevents an understanding of national limitations and a development of national capacities is akin in a way to retirement and solitude in individual life. Just as sympathy is natural to man, so the cultivation of neighbourly feelings is the natural culmination of national life. Similarly, just as the only effective way of promoting social good is to form a league of honest men pledged to prevent social injustice and social disorder, so also the only proper method of ensuring peace in the world and promoting prosperity and freedom is to form an international league pledged to combat injustice and aggression in international relations. Once the blessings of liberty are appreciated in personal lives and the achievements of free nations in art, industry, science and literature are noticed, no intelligent or cultured race is likely to remain content with a position of humility and servility. Apart from the limitation which foreign domination imposes on individual progress, it cripples a nation's capacity for mediation in international conflicts and for armed intervention to bring an unjust and offending nation to book. Imperialistic nations that fail to realize that distant subject nations become restive and difficult to keep in bondage with the rise of new strong nations in the neighbourhood and that they become a subject of weakness and anxiety rather than strength and complacency if they are unwillingly kept within the empire, are blind to the lessons of history. Just as adult children are encouraged to set up independent households, instead of jostling together under the same roof and creating perpetual bitterness by their quarrels, so also a timely concession of power to intelligent and puissant subject races binds them with ties of loyalty to the sovereign state and increases their usefulness as component units of a far-flung empire. Once this right is conceded, the other troubles incidental to inferior position will disappear automatically; then there will be no colour bar, no discriminative legislation, no differential treatment in any part of the empire and no restrictions on movement and residence except such as are in the national interest of any particular country and apply to all aliens. A heterogeneity that is not organized properly cannot form a unit; and the circulation of power in the periphery of the empire being naturally slow and the privileges of citizenship being rather intangible, big empires have always been threatened with defection when

they failed to keep the subject races attracted to themselves by fair and equal treatment and timely endowment of power and privilege. A single nation cannot police a whole world of dependencies. The history of the world points to the free association of equal partners within a big empire as an effective bulwark against international struggle for the domination of weak and backward nations. Some recent imperialistic wars waged against inoffensive nations have served to show that, without greater understanding and mutual co-operation for justice among the powerful nations of the world, peace on earth cannot be secured and maintained. One of the essential conditions of peace on earth is goodwill towards men, i.e., a forsaking of the narrow outlook that refuses to look beyond the immediate interests of self. When the conscience of the world points its accusing finger at any backward or tyrannical country, that country cannot long refuse to accelerate its rate of progress. But backwardness of one nation is no pretext for another nation to overrun the country and occupy it for self-aggrandizement. No conquering nation has willingly vacated a conquered realm after temporarily occupying it for purposes of accelerating culture. It has tried, on the other hand, in most cases to perpetuate the ignorance and the subjection. Mandatory powers have shown a general unwillingness to release their charges when it is not to their immediate interest to do so. But the spirit of the world is wafting the message of emancipation from ignorance and sloth to every subject country to-day in spite of the inaction and opposition of the powers in possession. The time-spirit is doing its work slowly and silently but surely enough. Free association, as individuals and nations, of the emancipated in thought and action is what human history is painfully achieving through the ages and will continue to do—in peace if the nations cultivate sympathy, and through struggle if they remain selfish. If you lubricate the wheels of progress, the friction is avoided and the creaking ceases; but even if you do not, the friction itself wears down the resistance and brings about smooth running in time.

What then prevents the advent of the age of the association of the free? It is the development of the intellect out of all proportion to the development of the feeling and willing aspects of mental life. Man carries the habit of callousness he cultivates in dealing with the material world over to his dealings with the sentient world. The necessities of existence thrust upon man the task of keeping in check and utilizing the forces of the material world which threaten his life. Sun and wind, rain and cold, he must avoid and resist properly to live at all, and a considerable part of human civilization is concerned with the discovery of the methods

of harnessing the forces of nature and resisting their destructive energy. Using the materials of nature for adornment and luxury is a secondary development, made possible by the primary discovery that they can be moulded and directed to meet the necessities of existence. A house is a greater necessity than a monument or a stone figure, and the former must have suggested the latter. But, while hammering and chiselling and piecing things together, man has not to consider the feelings of the materials he deals with. The same remark applies to his treatment of wood and metal—the other materials he uses for constructing his house and articles of everyday domestic use. Now this habit may easily be carried over to man's dealings with the sentient world. The cult of *ahimsā*, so sedulously preached in India, combated this habit of mind by drawing pointed attention to the clinging to life exhibited by all types of living beings, and urging the duty of remembering this fact when dealing with any sentient being. A widespread prohibition of killing in all forms (and consequently for food as well) was intended to instil into the mind the lessons of kindness and compassion and to prevent thinking of killing merely as a partitioning of organic molecules like the breaking of a stone or metal into pieces. An insatiable hunger for readily assimilable nitrogen has made the major portion of the human race insensible to the cruelty of killing for food, and this additional callousness has helped to prevent kindly thoughts and amity among nations. When people get into the habit of thinking their own bodies as destined for length of life and other bodies as means thereto, whether as supplying food or as supplying labour, the seeds of cruelty are properly sown. Capitalism that grinds the poor and militarism that uses the youths of the country as gun-fodder are only refined forms of the cruelty of killing for the pleasure of the self. Vivisection has at least one redeeming feature, namely, that the knowledge gained is used in alleviating human suffering; but every scientific military invention is ultimately directed towards quicker devastation and greater massacre. The fact is that the cruelty inevitable in the struggle for existence we have voluntarily introduced in our social and international relations. In spite of the fitful advocacy of mutual aid as a potent factor in evolution we have chosen to vote for the survival of the fittest with the connotation of struggle for existence and weeding out of the unfit which it carries.

It would be ungenerous to accuse science of the manifold evils which its inventions have introduced. But it is important to remember that the cold intellectualism of the spirit of research has something to do with the multiplicity of lethal discoveries in

modern science. When Buddha attained enlightenment under the Bo-tree he hesitated for long as to whether he should preach his new message of salvation and was ultimately persuaded by one of the Great Brahmās, Brahmā Sahampati, to declare it for the good of gods and men. Would that the same Brahmā had approached the author of a destructive invention and dissuaded him from the resolve to publish the same on account of its injuriousness to life ! It is no consolation to learn that the aerial bomber has brought into being its antidote, the anti-aircraft gun, or the poison-gas the gas-mask. We wish that neither had been invented and that human ingenuity had stopped with the invention of the aeroplane. Disinterested search after truth is not without its dangers, for like the scriptural apple-tree there are discoveries of which the fruits are better left untasted to prevent a lapse from the duties of human relationship. Surely the beneficent secrets of nature have not been all exhausted so that it is necessary to explore her destructive mysteries to keep our brains and hands engaged ! It is necessary to remember that just as the devil can quote the scripture, so also the wicked can use an innocent or beneficent invention for evil ends. Hence a special responsibility rests upon those who wrest from Nature her secrets, for unless the moral faculties develop along with intellectual acumen there is every chance that scientific inventions would be misused and, instead of being the blessings that they are intended to be, they would turn into veritable curses. If scientists allow their curiosity to get the better of their morality and allow their murderous inventions to be applied to human beings, they would fail to come up to the standard of an ideal perfection, namely, of the personality as a whole. What is necessary, therefore, is that the bearing of all discoveries on human life should be scrutinized first and then given out to the world. If that is impossible, for man is not omniscient and much good may be thrown away with the bad, it is essential that the education of the human race in moral conduct and sympathetic dealing with fellow-men and, in fact, with all creatures, should be vigorously pushed forward and all tendencies towards a misuse of knowledge checked in time. This seems to be a Utopian ideal ; but the lessons of civilization give grounds for hope that the moral sense of mankind is progressing steadily, if not as rapidly as its intellect, throughout the ages. There is more of control and sublimation of the primitive urges of life in civilized societies than in savage ones.

It is well to emphasize, therefore, the instrumental character of all intelligence. Originally developed and primarily designed to meet the needs of adjustment to our surroundings, the intellect has a tendency to outgrow its original primary function and to be

changed from a means to an end. Just as the need of keeping the body fit for work may beget the habit of taking regular physical exercise and this habit may pass over into the professional career of a gymnast or an acrobat, so also the intellect may, after fulfilling its primary function of adjustment to pressing needs, go forward to speculate without reference to the actual problems of life and, instead of meeting needs, create them and then invent fresh methods of adjustment. Intellectual dissatisfaction is, it is true, the source of higher standards of living; for if needs had not been multiplied artificially, life would have been a much simpler affair and mostly monotonous. But there is the obvious danger that when the intellect goes beyond the actual necessities of life and makes discoveries, it does not know whether they would always be utilized properly. Drugs discovered for alleviating human suffering have, for instance, been used by addicts to their utter ruin. When out of curiosity, men began to taste and collect fermented liquids they did not anticipate the evil effects that alcohol would have on the health and happiness of future generations. When surplus knowledge is available, it is quickly put to some use—something has got to be done with the device that human ingenuity has discovered. Besides, the discovery that things meant to meet the necessities of living can be utilized for other purposes also, tempts man to extend their use and also to abuse them occasionally. It is here that moral training is necessary to keep the discoveries within the limits of usefulness or at any rate harmlessness. A fascination for multiplying discoveries without reference to their usefulness is a sign of developed intellect, no doubt, but it does not always betoken a higher morality. Like the antlers of the Irish elk that grew out of all proportion to the rest of the body and were probably responsible for the extinction of the whole species, an intellect developed out of all proportion to the other faculties of the mind may prove the ruin of mankind. The intellect may have unrestricted excursion in the realm of the non-sentient and the lifeless, for we are not called upon to establish a moral relation with them or enter into their feelings for adjusting our behaviour. But things are quite different when man has to deal with fellow-men and the world of sentient beings, for here the possibility of establishing another kind of relation than that of a mere knower and fashioner cannot be ignored. The main attitude towards inorganic things and plants is one of appropriation and use. Infliction of cruelty on animals may not be avoided in all cases on account of the need for non-vegetarian food and also for preventing injury by them. But the main attitude towards other human beings is social relation

—interchange of thoughts, sharing of feelings, co-operation in action. Hence callousness, indifference or refusal to acknowledge the rights of others is not a justifiable attitude so far as our fellow-men are concerned. Even when they are wrong or wantonly aggressive, the way of dealing with rational beings is not the same as taming or getting rid of brutes or controlling the blind forces of nature. We must develop not only the power of understanding their thoughts and motives in order to deal with them better, but also the power of sharing their joys and sorrows, of understanding their wants and limitations and of acting for their advancement and also of co-operating with cultured peoples for the betterment of the human race as a whole. We must develop, in short, those aspects of our personality that knit us closer to one another as human beings.

This throws upon us the responsibility of instituting, maintaining and developing all such institutions as help the fruition of the ideal of understanding, amity and co-operation. The venturesome spirit of the modern man is the tool with which the spirit of progress is achieving the aim of establishing contact among all races. Trekking into unknown regions which are full of hazards and sailing into uncharted seas, man has discovered peoples and cultures of all kinds. The immensity of the task of mutual understanding men have realized with the discovery of cultures extending from savagery of the most revolting type to civilization almost akin to their own. The diversity of tongues is not the only obstacle to mutual understanding, for, when that is surmounted, such a bewildering variety of mental capacities, social customs, religious beliefs and moral ideas are disclosed that one often despairs of establishing effective contact with the different races and pulling up the intellectual, moral and spiritual levels of the backward peoples of the world. If curiosity had been the only factor in human adventure or cupidity had been the only additional incentive, then discovery and conquest of lands and planting colonies of emigrants from one's own country would have completed the work of contact. But a conquering nation has been obliged to establish closer contact with the local populace, whether to get brides or to secure labour or to ensure safety; and this has been instrumental in developing the need and the desire to know more about the conquered race and to take an interest in its welfare and progress. Conversely, the conquered race is attracted by the superiority of the conquering tribe or nation in strength or culture and responds readily to sympathetic treatment. This, then, is the cunning of the world spirit that out of strife it achieves understanding and out of difference and discord it gene-

rates unity and amity. Whosoever reads aright the lessons of cultural contact cannot fail to be impressed by the strange ways in which assimilation of culture is going on all over the world and people are groping for a formula of life that will fit the whole human race. Man refuses to accept diversity at its face value and tries to ascertain if it is not possible to probe the depths of the human mind in order to discover the fundamental similarity of constitution whereon to build a lasting edifice of mutual understanding and universal concord. Possibly it will be discovered at the end that all diversity is not banishable and that constitutional dissimilarity is ineradicable. It is then that we shall need sympathetic understanding and large-hearted tolerance. Universal equality or exact similarity is neither possible nor desirable; possibly to draw the best out of us there is need of diversity and gradation as of calamity and conflict. Would there be pity if there were no distress or helplessness in any quarter? Would there be compassion if there were no want or sorrow? Where would be patient toil if there is no ignorance, disease, spiritual darkness or moral obliquity? Nature does not require man's aid to perpetuate these—they are always present and crying for human aid to eradicate them. Whether in endless time things would so materially improve that all these would totally disappear and the kingdom of heaven will descend on earth is more than what the human intellect can divine. Possibly uncontrollable natural forces will remain as injurious as now although man will bring them increasingly under subjection by a knowledge of their laws. But it is permissible to hope that human suffering will substantially diminish and that, with more of knowledge, mutual understanding, active sympathy and inter-social co-operation, the artificial distinctions of wealth and opportunity will progressively disappear.

What human history teaches is the discovery of the value of personality. Useless perhaps in an ultimate reference, each individual is unique in qualities and capacities, and a society that puts any impediment in the way of any individual's mental and spiritual growth is as guilty as the Chinaman who still wants to cramp the feet of his daughter. Each man has a right to contribute his share to the development of culture and to equip himself for that task. The original social condition where the individual figured only as a member of his tribe or socio-political group is still retained in organizations where individual freedom is subversive of discipline and is an impediment to concerted action. We lapse back to such a condition in crowds and political parties, because success there depends upon

following a leader, and in military organizations where want of directive intelligence and unitary control reduces the fighting units to mere rabbles. In all situations where collective action is a vital necessity and right of independent thinking would interfere with the realization of a unitary plan or delay the execution of any urgent measure, individual liberty has often been suppressed or subordinated to the will of an authority. But what is permissible or even desirable in a state of emergency cannot be made into a law of social action for the very simple reason that no state or society can hope to have a succession of benevolent and wise despots and it is a positive disadvantage to kill independent thinking and prevent the possibility of the collective thought and concerted action of the wisest in the group. A state or a society may owe its initial greatness to the genius and energy of a single man, but its continuance depends upon the wisdom and effort of the multitude, just as a tree may grow out of a single seed but lives with the help of its many roots and leaves. As thought is quickened by intellectual contact, a wide divergence in mental equipment between the highest and the lowest strata in society is not conducive to an all-round development, for due to want of education the lower classes do not get the quickening in thought that comes from intercourse with the cultured. At bottom the refusal to educate the lower classes would be found to be based upon the belief that unquestioning obedience to authority should be habitual with the uneducated section in the society or in the state so that acts of defence and offence may be readily undertaken by at least one section of the populace without questioning. International, inter-tribal and inter-communal jealousy, suspicion and antagonism are primarily responsible for this necessity of maintaining an unthinking inflammable mass; with the disappearance of the former this necessity will disappear also. No elevation in the status of the masses is likely unless we follow the Kantian dictum 'Use human beings, including yourself, always as ends and never as means.' A person is not merely a member of a group—he has a distinct individuality of his own which he is capable of developing under favourable circumstances. The world is slowly awakening to the fact that a labourer is not born to labour only and to do nothing else—that he is not all hand but that he has a head and a heart also. We do not assign to him a destiny like that of a beast of burden for he is a bone of our bones, a flesh of our flesh, and what he is to-day we may sink to at any moment under an adverse economic, social or political condition.

The recognition of this fact will mean a good deal. Once we abandon the habit of thinking of and dealing with individuals as

members of classes, we shall have to discard the system of permanent classification which pays no heed to the possibility of deviation in individual cases. Sir Henry Sumner Maine has remarked that the movement of the progressive societies is one from status to contract—a movement distinguished through all its course by the gradual dissolution of family dependency and the growth of individual obligation in its place. We may stretch this point further by suggesting that human history discloses a gradual recognition of the right of the individual to be treated on the basis of his personal equipment and merit and not on his ancestry and parentage. Prejudice dies hard and the how and the where of birth are still potent considerations for determining our attitude towards our fellow-men. A Jew is hated and persecuted in Europe because he is a Jew, even if that Jew happens to be an Einstein or a Freud. Simply because he was born a Kṣatriya, what amount of trouble did Viśvāmitra have to get his spiritual status recognized! To-day in India communalism pays, for worth is measured not in terms of personal merit but in those of birth in a particular community. The Hindu and the Muslim, the Brahmin and the Non-Brahmin—this is how we divide worth. It goes without saying that those who belong to my caste or community come with a weightage of merit to me. No consideration of efficiency of public service, no question of the personal qualification of the individual, will weigh with me when he does not belong to my group. In these dark days of mistrust and misunderstanding we must put our faith in the lessons of history that the right of the individual is an indefeasible right and that all over the world the emancipation of thought is characterized by the extension of democratic institutions and the recognition of personal worth. It is ignorance and fear that prevent the recognition of these basic facts of civilization. When mistrust will have been laid and the main motive in organizing communal solidarity will have disappeared and when intellectual illumination will have dispelled unjustifiable prejudice and unnecessary fear, the necessity of looking upon an individual as a member of this or that class or community will vanish and a man harbouring such a narrow opinion will look positively mean and ridiculous. To-day the bonds of artificial segregation into classes and communities are breaking and cracking all around us. Where orthodox societies refused to move, progressive legislatures stepped in and accelerated the pace of advance. Slavery, disabilities of women, economic bondage of workmen, undue restrictions about food and marriage, religious disadvantages have been all more or less removed from among the most progressive nations of the world and are destined to pass away in course of time. The rear-guard action of ortho-

doxy and obscurantism will not succeed in stemming the tide of liberty, equality and fraternity or the gradual enlightenment of the backward classes and races of the world. Sympathy which is the mainspring of all social progress will see to it that the neglected, the weak, the oppressed and the down-trodden get due justice and opportunities of ameliorating their condition. Here again the cunning of the world-reason may use designing men as tools to achieve its own object. It is not always by the promptings of our better nature that we extend a helping hand to the oppressed and the outcast—very often it proceeds from the ignoble motive of gaining a following to advance the interest of self. The fomenting of strikes, lock-outs, formation of trade-unions, and no-tax campaigns may be due to the intention of an agitator to capture political power or gain personal importance, if not something worse. But rousing a slumbering mass of ill-educated and half-starved people may ultimately mean raising a Frankenstein. You cannot make people conscious of their power without being prepared for their exercising it in their own interest. Tenancy legislation and formation of debt-settlement boards, which are fast transforming the character of the rights of the tillers of the soil in India disadvantageously to the landlord and the money-lender, adult education movement, free and compulsory primary education, mass contact organized by hostile political parties, election campaigns, religious propaganda, women's education, discarding of seclusion and *purdah* by women and all such contemporary liberal movements in India are bound to break down the walls of class separation and hasten the advent of a spirit of democracy, whether they do or do not bring the goal of human equality and brotherhood nearer in view in all cases. Those who pine for the lost respect for authority and the lost privileges of class and caste should do well to remember that inherited rights have shared the same fate in all progressive countries but that this has not necessarily meant the extinction of all spirit of reverence. Where the class faded out of sight the individual loomed large before men's eyes and personal merit determined the depth of respect and devotion. The trappings of wealth, ancestry and caste have invariably fallen off the shoulders of men with the advancement of culture, and with the disappearance of the accidental what has stood out prominently before public eyes is the essential worth of each man. This does not mean that a man may not be to manner born because of his class or caste ; but it does mean that it is only when he is so born that he commands reverence. A close alliance between conduct and caste, which was primarily responsible for the original social stratification, must be re-establish-

ed in individual lives if emancipated thought is to leave us on our former pedestal of social eminence.

What delays the realization of the ideas of political democracy and social equality is the unequal tempo of progress in different countries and communities. The state adjacent to a democratic one may be totalitarian in its ideals and practices, and if it is a hostile one, the democratic state has to abandon partially its principles for the sake of sheer self-existence. It might be argued that the democratic state might end all hostility by allowing itself to be swallowed up by its totalitarian neighbour and thus ensure peace. But this would be the abandonment of a principle and not merely of a principality. It would mean a reversion to that primitive rule in which individuality and freedom found no place. Besides, there is a limit set to the expansibility of a totalitarian state, for not only can it not control effectively and for all times a far-flung empire but sooner or later it comes into conflict with similar totalitarian states. The whole develops at the cost of the parts and this works adversely against those tendencies towards individual liberty which culture and free thought engender in all places and at all times. It is after all a conflict of ideologies, for once you admit that a strong majority has the right of coercing the lives of a weak minority, you give a free charter not only to despotism but also to aggression. Even if it be admitted for argument's sake that a civilized nation has a right and a duty to quicken the pace of culture in a backward country, it does not follow that forcible occupation is the only method of spreading ideas; for many times in the past has the more peaceful method of religious and cultural mission been found successful in achieving this object. The fact is that we are prepared to uplift others if it can be done without patient toil; so we disarm and destroy the more troublesome elements first and then begin to spread our ideals. The test of our *bona fide* motive, again, lies in our relinquishing the temporary charge as soon as the object of our occupation has been achieved; but conquests have been used not for spreading culture but for spreading the empire further and the excuses for indefinite occupation are always transparent. It is not the planting of ideals but the planting of vassal states that has been the main motive in occupying backward tracts. But the future of the world rests with those who recognize the value of personality, the inevitability of the recognition of that value in individual lives, and the final doom of any system of society, religion or government which ignores that value or its recognition. Factors that retard the appreciation of personal worth and the equality of all those who possess culture and intelligence act against the spirit of the world, which is

solicitous for the advancement of all individuals through free association and the co-operation of the spiritually and culturally advanced in the task of uplifting the backward races and individuals. Democracy has failed in many cases because the recognition of the equal right of citizenship has not been accompanied by an organized effort to put all individuals on an approximately equal level of culture. Plato fought for aristocracy because in his opinion the best alone had a right to rule the state, and Aristophanes ridiculed the idea of treating all as equal by picturing the dumb animals as proceeding to the polling station along with men to record their votes. Possibly the training necessary for shouldering the responsibilities of government is not capable of being imparted to all alike on account of a congenital difference in capacities ; still each man is entitled to the utmost development of his abilities irrespective of the accident of birth or social status. We prefer to think that all distinctions of class should disappear in the presence of God, and in our philosophy too we plead for the equality of all things through their common identification with Brahman or the Absolute. But as soon as we descend to secular levels or the practices of our everyday life, we revive the distinctions and deny equal opportunity to all. The vision of an all-inclusive whole, which characterizes the religious or philosophical attitude, is obscured by the mist of nationalism and class-interest. Internationalism and Humanity are still far-off objectives of our national and personal life because we keep our philosophy and our practice in separate compartments.

It is not expected that effective contact would ever be established with the whole world and practical charity would flow in all directions equally in times of distress and danger. The world is too big still in spite of the devices of science to shorten spatial distances. The instincts of men are sometimes partial towards certain objects and justifiably so on many occasions. A mother would not, and should not, leave her own starving baby to its fate and act as a wet-nurse in a foundling hospital—that charity would be unnatural. Similarly, when one's own country is in danger, one should not sympathize with the ambition and greed of the rapacious neighbour and betray the motherland to the invader. What is needed, however, is the cultivation of a capacity and a habit of feeling for humanity at large in all cases of physical catastrophe and bodily ailment ; of wanton aggression upon its life, liberty and possession ; of social, economic and political backwardness ; and of intellectual, moral, aesthetic and spiritual deficiency. It is not the amount of assistance rendered that is always a true index of the depth of feeling. Of course, sanctimonious sentimentalism has no

value as a humanitarian impulse, for we may poetize on human agony and yet do nothing by our practical conduct to remove human suffering. Reference is very often made to the Russian nobleman who weeps over the misfortunes and calamities of the suffering hero on the stage while his footman is being frozen to death outside the opera hall. Similarly, we may draw a doleful picture of the suffering of the poor and make an impassioned appeal to others for their succour in our speeches and writings and yet do nothing practical ourselves to remove this suffering. It is not enough to understand intellectually the existence of suffering or express emotionally our concern about it; it is necessary to act in accordance with what we understand and feel. It is easier to advise others than to act ourselves. In every civilized state, however, we have to-day men and women who are ready to condemn wrong, howsoever exalted might be the position of the wrong-doer and however ineffective might seem their voice of protest. We have also the beginnings of an international assembly to judge the conduct of nations and to pronounce verdict thereon even though a system of effective sanction has not yet been evolved and nations are still unable to think in total disregard of their own interests. The present League of Nations, which is still wedded to the present alignment of national interests and which ignores the subject races of the dominant powers, may fail in its purpose of bringing peace to the world; but the ideal of humanistic attitude is bound to germinate and grow with greater understanding, firmer concerted action and finer moral appreciation among the nations of the world. The world to-day is like an inflated balloon in which pressure in one part brings about a readjustment in other parts.

I have mentioned already that greater social understanding and sympathy seem to be indicated as the objective of human history. Much in which the ancient world gloried has passed away without any chance of return. Theogonic speculations no longer interest us—with the virtual disappearance of paganism and polytheism the genealogy of the gods and their exploits no longer hold our attention. If, as a matter of habit or make-believe, we still read and relish the *Purāṇas*, we do not compose new ones. The virus of monotheism has affected all our religious beliefs, and curiosity about the daily life of the gods is a thing of the past. Even monotheistic beliefs about the composition of the heavenly court, the dimensions of the heavenly kingdom and the materials used in its roads and mansions, the types of heavenly retinue, the occupations of the angels and of just men made perfect, and the suffering of the damned in hell no longer interest us. According to some of the

greatest living religions even Divine revelation through prophets has ceased to function so that that also has ceased to be a matter of experiment with many earnest souls. We no longer consult Divine wishes by demanding miracles or casting lots, and the various taboos hedging in the man of God or the priest of God are no longer matters of cultured belief. Many may take all these as rather disquieting symptoms betokening a general regression in spiritual life. To this pessimistic attitude our reply would be that poetry and imagination might appeal to a child—they ill become a grown-up man. In a famous sentence Macaulay has told us that as civilization advances poetry almost necessarily declines. So far as religious belief is concerned we must admit that this contention is substantially true and that human history discloses a progressive decline in the imaginative aspect of religious life. We wish to add that belief in personal immortality being based on imagination, mankind will one day outgrow rationally this clinging to personal continuity although it is not unlikely that in moments of weakness it would occasionally hug the illusion. Too long has advancement of spirituality been conceived in terms of personal immortality in an eternal heaven. It has been feared that neither as an ideal nor as a fact would impersonal persistence appeal to the human mind. It is a happy sign of the times that people who do not believe in personal immortality can still feel the call of ideals. The individual of the future is indirectly affected by the better world that we are all helping to create. If we are reborn, we reap the benefit ourselves; if transmigration is not true, others do so. We have never in our instinctive lives been able to live only for ourselves. Why should it be impossible in our conscious life to live for others and, instead of benefiting only ourselves, to leave a better universe behind?

The present scriptures of the world were revealed through men with circumscribed knowledge of men and things. There is no reference in them to places and their occupants which were unknown to the prophets themselves. If they are the last revelations of God, His omniscience would be seriously at stake. Many facts of nature were absolutely unknown when these scriptures came into existence and the things and events mentioned therein, which are not in accordance with facts as now known, are not few. We must dissociate from the scriptures all topographical information, whether of heaven or of the earth, and all attempts to teach facts of nature and history. It is with the discovery of moral and spiritual relations that the scriptures are primarily and solely concerned. Certain fundamental relationships and the attitudes and obligations

they imply lie open to the gaze of all earnest minds of all ages ; but the complexities of modern social life and national contact are so great that these outstrip the older relations of societies and tribes and render much of older scriptural revelation inadequate and imperfect. To none has the counsel of God been revealed unto perfection and the intolerance of other creeds, based upon a belief in the completeness and infallibility of one's own scripture, betrays a narrow conception of human history and a scant regard for the immensities of the Absolute. Far more satisfactory is the view that revelation is periodic and that the plan of the world is unfolded progressively to the gaze of the seers and prophets, just as with philosophers the formula of reality changes with every substantial acquisition of new knowledge. If we are unable to understand aright the inner meaning of human history, we can still get an inkling of the increasing purpose that runs through it. We may gradually appreciate our own littleness and the futility of all attempts to upset the eternal verities that in spite of our opposition realize themselves. We need not go to the length of supposing that whether we shine in virtue or sin in profusion, there will be ultimate salvation for all, as some Indian philosophies suppose. It may be or it may not be ; but on pragmatic grounds we would be justified, in a matter about which we have no definite knowledge, to separate the chaff and the grain and to assume that the meed of merit and the doom of demerit are not identical—that evil in individual, social and national life is fundamentally opposed to the spirit of the world and has no chance of thriving in a realm of growing spirituality. We have to live in the hope that the Spirit that has given man greater intelligence day by day and with it greater appreciation of beauty and greater control over the forces of nature has not suspended its beneficent operation and that mankind is slowly moving towards the ideal of universal sympathy and love by learning the costly lessons taught by the horrors of mutual distrust and destruction. Those who fear over-population of the globe need only remember that the human intellect is ever busy devising methods of meeting the needs of a growing national population in all countries and that the destructive natural elements will not cease to take their toll of human lives in spite of human effort and progress. The inscrutable mysteries that nature still holds will perhaps solve some, if not all, of the difficulties of over-population. The indomitable spirit of man has refused to admit defeat in its struggles with the unkind elements of nature. Why should it quail before the unsocial tendencies of nations and individuals? If in our own individual life we can sublimate our instincts and turn our questionable thoughts into beautiful symbols, why should

we not make a collective effort to work up the potentialities of that rational faculty which distinguishes us from mere animals? Once we realize the call of the Infinite within us, we realize at the same time the ultimate spiritual oneness of all creatures and our responsibility in furthering the interests of the whole. This is the quintessence of the Upaniṣadic teaching—*yo vai bhūmā tat sukham nālpe sukhamasti bhūmaiva sukham bhūmā tveva vijijñāsitavyaḥ* (Verily, Infinite Being and Pleasure are identical. There is no real pleasure in the Small. Only the Immense is Pleasure. So enquire after the Plenum).