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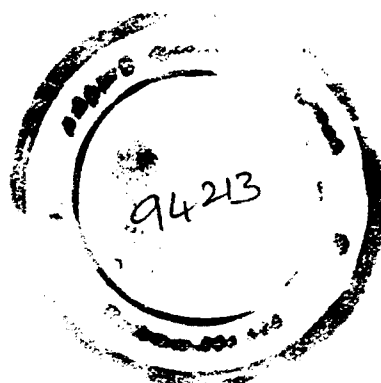
1937



TABLE OF CONTENTS

	PAGE
1. HUMANISM AND INDIAN THOUGHT. By A. CHAKRAVARTI, M.A.	.. 1
2. THE STRUCTURE OF BRITISH MANAGING AGENCY FIRMS IN INDIA. By P. S. LOKANATHAN, M.A., D.SC.	.. 30
3. A CRITIQUE OF NICOLAI HARTMANN'S ETHICS. By P. V. S. NARAYANA, M.A., B.L.	.. 41
4. THE NATIONAL INCOME OF INDIA. By P. J. THOMAS, M.A., B.LITT., D.PHIL.	.. 105
5. THE HISTORY OF THE TAMIL-MALAYALAM ALVEOLAR-PLOSIVE. By L. V. RAMASWAMI AIYAR, M.A., B.L.	.. 116
6. THE NEW BUILDINGS OF THE UNIVERSITY.	.. 167
7. REVIEWS—	.. 173
1. A concise History of Britain. By ROBERT M. RAYNER.	
2. The Story of Indian Civilisation. By C. E. M. JOAD.	
3. A History of Rome Down to the Reign of Constantine. By DR. M. CARY, D.LITT.(OXON).	
4. Higher Algebra. By S. BARNARD, M.A. AND J. M. CHILD, B.A., B.SC.	

32
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HUMANISM AND INDIAN THOUGHT

(Principal Miller Lectures, 1935)

BY

MR. A. CHAKRAVARTI, M.A.

Principal, Government College, Kumbakonam.

To start with, I should like to mention an incident associated with Dr. Miller in whose name this endowment stands. The incident referred to, takes us to a period thirty-five years ago, when Dr. Miller was the Principal of the Christian College. A missionary gentleman by name G. T. Manley, the senior Wrangler of Cambridge University, came to Madras on a lecturing tour. The lecture was arranged in the Satyanathan Memorial Hall with Dr. Millar as the President. The hall was crowded to the full. Mr. Manley had as a text of his lecture "Science versus Religion." It was the fashion of the intellectual world of those days to discuss this burning topic. Persons acquainted with the journalistic world of the later Victorian period would recollect the heated controversy between Huxley and Gladstone about the same topic. Charles Darwin through his book "Origin of Species" presented to the world the theory of Evolution as to the origin and growth of the biological kingdom. This theory of evolution according to natural selection and survival of the fittest, was considered to be incompatible with the religious traditions and hence undermining the very foundations of religion. Religiously-minded people considered it their duty to attack this theory of evolution as inimical to religion. Manley's mission was exactly the same. Hence his lecture was a long and fervent condemnation of Charles Darwin's theory of evolution. The lecture lasted for an hour and a half and we were eagerly expecting the closing speech of the President. He was the most prominent among the missionaries in South India and was certainly one of the most cultured amongst them. When he stood up to offer his presidential remarks we were all agreeably surprised. He began in a different note altogether. He would

not subscribe to the theme that science is incompatible with religion. He said : " If science is search after truth and if God is God of truth there could be no fundamental conflict between the two. Science is of indirect service to religion in as much as it is the search after truth. Hence it is not necessary for the scientists to develop a sort of *religiophobia* nor is it necessary for the religious man to develop an attitude of suspicion against science. One is complementary to the other. Further growth will bring in further rapprochement between the two." With these words declaring the fundamental identity between the two, the presidential speech was closed. I am reminded of this unique instance, and I may frankly confess that I am going to adopt the same attitude, that there is no conflict between science and religion, in my discourse about Humanism and Indian thought.

A candid criticism of human institutions, social and religious need not be taken as antagonistic to religion in general. For I do consider that such a critical attitude is symptomatic of living religion and as such, must be welcomed by every sincere student of religion in preference to unquestioning implicit faith in traditions and customs.

What is Humanism, and what are its implications ? In order to answer this question adequately, we have to go back to the ancient Greek philosophers. Humanism in the west has its source in Hellenic thought. The Greek philosophers, called the Sophists, were the earliest Humanists. They proclaimed to the world the importance of man. Man is the measure of all things. Everything in reality is to be interpreted in relation to human personality. This faith in human personality and its greatness very soon degenerated into a sort of subjectivism according to which each man was his own standard of value. Socrates the greatest of the Sophist philosophers restored the balance of thought by re-stating that humanistic doctrine, " that man occupies the central place of the scheme of things ", is not incompatible with the objective standard of values. Such a restoration of philosophic faith in human personality without at the same time subscribing to the individualism of the early Sophists was the message of Socrates and it would be quite obvious if you remember the famous prison scene where Socrates expounded the fundamental truth about Personality. When the Greek Democracy condemned him to death by drinking a cup of poison, Socrates was not at all perturbed, because he was certain that by destroying his body the Athenian Democracy would

not be able to injure his personality in the slightest degree. The spiritual atmosphere created by the prison scene is almost identical with that of Kurukshetra, when Krishna began to instruct his friend Arjuna about the same topic. The Socratic message, that human personality is the fundamental reality and that all other institutions including the State are but a theatre for human action and an arena for human development, forms the central doctrine of Humanism, as represented by the great thinkers. It is the underlying idea of Plato's ideal Republic. It is the sublime ideal that permeates the whole of Greek art and Greek literature. The best of Greek art, the representation in marble of Venus or Zeus, forms the sublimest representation of human personality. The greatest Greek tragedies depict the struggle of human personality with Fate. Thus Humanism is the leavening force of the whole of Greek culture, and it is the inspiring ideal of Hellenic art, literature and philosophy. In short, the highest achievement of Hellenic civilization and culture may be said to be the representation of this humanistic ideal in art, drama, and philosophy.

CHRISTIANITY AND HUMANISM

We find the same ideal inspiring another movement which had its birth in Palestine. Christianity may be said to be the religion of Humanism. It must be said to the credit of Jesus of Nazareth, founder of Christianity, that he was one of the foremost teachers of the world to emphasise the importance of human personality, and its greatness. He, by this recognition of human worth, courageously proclaimed to the Hebrew world that " Sabbath is intended for man and not man for Sabbath." Human institutions, social and religious, are intended for service of man and man must never be victimised by these institutions. At the time of the appearance of Jesus in Hebrew world, the educated section of the Hebrew society represented by the Pharisees and Scribes attached undue importance to laws and institutions of human society even to the detriment of human spirit. The story is the same all over the world, whether you look to the West or to the East. It is certainly a fundamental truth that the shell of an egg is the *sine qua non* for the development and emergence of the bird. The bird will have no chance of life and of coming out into the world of sun-light and glory had it not been for the protective function of the shell. But when once the bird comes out, of what use is the shell in the scheme of things ? Similarly it is a well-known fact

that at a certain stage of the human history certain institutions serve as the indispensable medium for the development of the spirit. But beyond a certain stage these very same institutions instead of being serviceable, become a hindrance to the spiritual progress. Under such circumstances, the ordinary masses as instructed by Philistines of society generally cling to the castaway shells of human institutions, never being aware of the fact that the spirit has outgrown these shells. Such was the state of things when Christ, one of the greatest of Humanists in the world, proclaimed the noble truth that son of man is the son of God, and that all institutions should subserve his development and that his nature should not be crushed and crumbled to fit in a worn-out shell. This second stream of Humanism together with the former Hellenic one constitute the main course of western civilization which has been intrinsically humanistic in nature.

SUPPRESSION OF HUMANISM BY THE CHRISTIAN CHURCH

When the early Christian Fathers began to build the Christian Church in the ruins of the Roman empire it was unfortunate that this humanistic ideal was almost forgotten. They revived the anti-humanistic ideal of the early Hebrew culture. According to Semetic civilization man is conceived in sin. On account of the original disobedience, his own nature is so much deformed and ugly that there is nothing in man to be proud of. Man's life in this world is but a protracted suffering and pain, the legitimate result of original sin. Man should therefore wait for that day of judgement when he will have the chance of either eternal reward or eternal punishment—Heaven or Hell. Man's period of life here under the sun is therefore a painful period of waiting fully conscious of his own vitiated nature. He must look to the other world if he is to think of beauty and glory of his own nature. Such an anti-humanistic ideal happened to be the ruling force of the early Christian Church, which successfully crushed all expressions of enthusiasm as to the greatness and importance of human personality. This long period in European History is known as the Dark Ages, where there was no chance of intellectual freedom, and of human aspiration of self-development. Man had to wait for several centuries before he could realise his own importance. It was only at the period of Renaissance that man discovered himself, and realised his own importance. It is not necessary for us to detail the causes that

led to the Renaissance. Copernican revolution in Astronomy, Columbus's discovery of the New World, the invention of the printing press, may be mentioned as some of the minor causes which led to the Renaissance in Europe. Perhaps the main cause was political. The capture of Constantinople by the Turks which resulted in the migration of Greek scholars to western Europe which knew nothing beyond Aristotle's logic was a great eye-opener. Man realised as a result of contact with Greek culture that he was in possession of greatness and glory in his own personality, as contrasted with the morbid ideals offered by the Church that man was conceived in sin and was living in shame. The great humanistic revival during the European Renaissance may be taken to be the foundation of modern culture and civilization in the world. Man was once again restored as the centre of values. Human freedom became the ideal of modern nations. Anything that promoted the development of human personality was considered worth acquiring. It was once again proclaimed that man is an End in himself and should on no account be treated as a means to something else. Thus the birth of modern nations is the historic consequence of humanism of the Renaissance in Europe.

During the nineteenth century unfortunately this enthusiastic expression of humanism in Europe was vitiated by the appearance of two antagonistic forces, Naturalism and Absolutism. As a result of the success of science, especially in the field of Physics and Chemistry, there arose a school of scientists in Europe who began to think that forces physical and chemical constituted the whole of reality and that human personality was but an insignificant by-product of the primary forces physical and chemical. As a result of such an intellectual intoxication associated with the triumphs of physical science, human personality was considered as an ephiphenomenon and humanism was once again pushed to the background. Absolutism of the German idealistic type first appeared as a reaction against this naturalism. It was thought to be a very safe defensive weapon against the naturalistic logic. No doubt it was successful as a criticism of the inadequate concepts of Science and Naturalism. But its very success in this field was found to be detrimental to the ideals of Humanism. It was merely a case of from the frying pan into the fire. Absolutism took human personality from the clutches of Naturalism, which reduced it to an ephiphenomenal by-product, merely to convert it into a worthless shadow of

some other reality called the Absolute. Naturalistic by-product contained at least some reality about it whereas human personality under the scheme of absolutism degenerated into an illusory shadow having no place to stand by itself. In either case there is denial of the human personality. In both the cases the hypothesis invented to explain the nature of reality ended by denying that reality itself. A philosophy which starts with the ostensible object of explaining the nature of human personality and the facts of human experience and which ends by dismissing the reality itself as an illusory shadow without substance becomes self-condemned. Naturalism and Absolutism are two such hypotheses in as much as they denied the reality and importance of human personality. Humanism, therefore, steers clear of both Naturalism and Absolutism, and is represented by a firm conviction of the reality of human personality; and values derive their validity only in relation to man and institutions, political, social and religious, are important and inviolate only so long as they are of service to man and promote his development. It is in this sense the term Humanism is used in the following discourse. According to my thesis the development of Indian thought represents the progressive manifestation of human personality and the growth of human freedom which are the fundamental concepts of Humanism; and I propose to describe the development of the same from the earliest stages of Indian thought.

The earliest record of Indian thought is undoubtedly the Rig Veda Samhita. The Rig Veda Mantras consist of various hymns addressed to the different Deities of the Aryans such as Indra, Varuna, Agni and so on. The hymns are associated with various Rishis who are supposed to be the authors of these hymns. The state of civilization as described in these hymns was mainly agricultural. The early Aryans whose life is depicted in Rig Vedic hymns settled down in the Indus valley. They were mainly engaged in cultivating the lands. They had to fight against the aboriginal tribes who were evidently not well-disposed towards the foreign invaders. The hymns therefore were mainly intended to invoke the aid of various Deities so that the Aryans might secure the upper hand over the aboriginal tribes. The main process of invocation consisted in offering animal sacrifice, as well as Soma juice, a sort of intoxicating drink prepared for the occasion. The humanistic ideal in the Rig Vedic hymns centres round man as a worldly individual. The ancient Aryan was frankly utilitarian. He offered the sacrificial victim and the Soma

juice to his Gods with the hope and expectation of receiving in return the aid of the Gods in his struggle against the natural and human foes. The most important deity of the Rig Vedic Aryans was Indra. Very often his aid is sought after with the promise of offering large quantity of meat and drink. One of the hymns offers caskfuls of soma juice to Indra in order that he might be adequately infuriated before he could punish the foes of the Aryans. It was all plainly "human, all too human." Naturally, therefore, the Deities of the Vedic period had in their nature a good deal of human emotions, both good and evil. For example, the chief of the Vedic Deity, Indra, exhibited all the weaknesses pertaining to the ordinary man of the world. Nay, we may even go further than that; the weakness in his nature and character was so much emphasised that he could not be considered even as a decent gentleman especially in his relation to the other sex. The principle "might is right" was the dominant principle of the Vedic culture and even the Deities had their importance according to their power and strength. The only exception to this was God Varuna. Some of the most exalted hymns of the Rig Veda are in praise of Varuna. Varuna with his moral Law *Rita* forms the only exception among the hierarchy of the Vedic Deities, with any sense of ethical value. Varuna is hailed as Omniscient. He knows the heart of every man. None can escape from his view. He, through the operation of his moral law, maintains the world order in the correct path, punishing the evildoer and rewarding the righteous. But it seems clear that, ultimately, Varuna's claim to divine pre-eminence was successfully challenged by Indra who was certainly much inferior to him from the ethical point of view.

There is nothing in the Rig Vedic culture to indicate that the doctrine of transmigration was accepted by the early Aryans. The early Aryan thinker did not care very much to know what happened to the individual after death. His main interest was in the concrete present. He prayed for a plentiful of harvest and increase of his cattle—prosperity and plenty for himself, blighting the harvest and cattle for the enemy. That summed up his main interest in life. Probably there was nothing of such a social differentiation into exclusive castes as appears prominently in the later Hindu society. No doubt in Purusha Sukta in the Rig Veda there is a mystic description of the creation of the four castes from the primeval giant Purusha. It is in this Purusha Sukta hymn there occurs for the first time the term Sudra which includes the slaves

of the fourth caste in Aryan society. But this hymn of Purusha Sukta is considered to be of the latest stratum of the Rig Veda. On the strength of this, therefore, it cannot be definitely maintained that caste system as such was prevalent in the Rig Vedic period. Nevertheless it must be conceded that there existed much of the groundwork upon which the later elaborate social structure was built up. But one thing appears prominently even in this distant, vague past. There was evidently a rivalry between the priests and princes for social domination. The priests by profession and education were the custodians of the sacrificial lore, which was the nucleus of the Vedic religion. Princes were evidently not adequately acquainted with the sacrificial ritualism. Nevertheless because of their position in society as well as their economic status on account of which they easily figured as patrons even of the priests, the princes naturally claimed the highest place in society. This struggle for social supremacy and religious domination which becomes more emphatic in later days must have been present at least in an implicit form even in the early Vedic period. The mythic story of the conflict between Vasishta and Viswamitra may be taken as a symptom of such struggle. In this connection it is worth noticing a strange incident associated with the life of Viswamitra,—the story of Sunakshepa. According to this story, King Harischandra had prayed to God Varuna for the gift of a son making at the same time a silly vow that he would sacrifice the boy in his sixteenth year. God Varuna listened to his prayer and a son was born to him, who grew to the age of sixteen. When the King had to fulfil his vow neither the father nor the son would consent to the sacrifice. His Purohit Vasishta was consulted and he suggested that God Varuna could be easily appeased if a substitute of the same age could be offered in sacrifice. The King sent out messengers to obtain such a substitute and the King's messengers were able to obtain one from a poor brahman family which had three sons. The eldest, the father was not willing to part with, the youngest being the favourite of the mother could not be obtained. Therefore the middle one was purchased for a price as a sacrificial victim to be substituted in place of the promised prince. Elaborate arrangements were made for the sacrifice of this poor brahman youth, under the supervision of the priests, while the boy was kept tied to the sacrificial post. Just in proper time Viswamitra appeared on the scene, entered the sacrificial yard, released the boy from the sacrificial post, scolding the priests and all others in charge of the sacrifice and led away the boy. When

questioned what he was going to do with the boy so unceremoniously released from the sacrificial yard, Viswamitra replied that he would adopt him as his son and offer him a portion of his kingdom, which he did accordingly.

This story of Sunakshepa is highly interesting to us as a landmark of early Humanism in ancient India. Here is one of the most prominent Purohites engaged in sacrificial ritual for the satisfaction of his kingly patron. Here again we find a Kshatriya rival in the person of Viswamitra, probably representing the rival school of thought, which was opposed to sacrificial ritualism, and which stood for some other fundamental concept of religion. Here we trace the beginning of two rival schools of ancient Hindu thought, one strongly in favour of Yaga or sacrifice, and the other supporting Yoga, or thapas, or spiritual development. Appeasing the Gods by the offer of sacrifice and consequently acquaintance with the sacrificial lore was in the interest of priests, whereas the renunciation of the worldly riches in order to engage in thapas or Yoga practice was mainly championed by the Kshatriyas in ancient India.

That such was the state of things is easily borne out by another story relating to the life of Rishabha. Lord Rishabha, who according to Jainas, was the first of the twenty-four Tirthankaras and hence was the founder of Ahimsa Dharma, also figures in Baghavata Purana and Vishnu Purana, the Sacred Literature of the Hindus. The story as narrated in Baghavata Purana is identical with the Jaina account in main outlines. The story as found in the Baghavata Purana is as follows:—In one of the early yugas, long, long before the period of avatars, King Nabi prayed to Narayana, the Supreme Lord, for a son, who in character and ability would be a worthy representative of the royal household. In response to this prayer the Supreme Lord Himself decided to be born as the son of this royal household. So Lord Rishabha was born to King Nabi. From birth, prince Rishabha exhibited unique powers of knowledge and ability. He took upon himself the duty of illustrating to the world the different aspects of the Dharma. Hence he began his career in such a way that each stage of his life had served as a model of Dharma. He inherited the kingdom from his father and, after becoming the king himself, he illustrated for the benefit of the world the Kshatriya Dharma i.e., what a King ought to do as a king in order to protect his subjects and promote their welfare. But this was merely a minor part of his mission in life. When his own son, Barata, became of age, Lord Rishabha handed

the kingdom to him instructing him properly as to the duties of the sovereign. Renouncing his kingdom he voluntarily took upon himself the role of a wandering mendicant devoting his time to the performance of thapas and yogic practices. That a great sovereign should all on a sudden convert himself into a wandering mendicant, who had no robes to cover his nakedness, and who did not know wherefrom he could get a morsel of food to appease his hunger, was certainly mystifying to the ordinary observer. Some of the mystified people thought that Lord Rishabha became mad. But still all had great veneration for him as a great Yogi. Thus Lord Rishabha illustrated for the benefit of the world, himself walking in the path, that Yoga or thapas was the surest means of personal liberation, the realisation of the *summum bonum* in life or Purushartha.

This Lord Rishabha, who figures as the Maha Yogi in Baghavata Purana and Vishnu Purana, also figures in the early Rig Veda Samhita among the Arhats or the great Purushas worthy of worship. It is a well-known fact to students of Vedic literature that the Arhats, Rishabha and Arishtanemi were among the most famous of the Vedic Rishis. Hence it would not be far from the truth to state that the earliest Aryan culture contained in itself two different and mutually incompatible religious ideals of Yaga and Thapas, the former championed mainly by the priests and the latter mainly by Kshatriyas. The rivalry and the struggle which were submerged in the early Samhita period, evidently became open during the next period known as the period of Brahmana literature. Brahmana literature as contrasted with the Samhita consists of prose works elaborately describing sacrificial procedure and minutely instructing the priests what all they had to do in the conduct of sacrificial rituals. This elaborate ritualistic lore was perfected during the so-called Brahmana period and the priests were naturally the leaders in possession of this sacrificial lore. Brahmana literature, since it is mainly an elaborate description of the sacrificial rituals, is devoid of that poetic charm which is associated with the Rig Veda hymns. The preparation of the sacrificial platform, the handling of the sacrificial vessels and the carving out of the sacrificial victims, all these are given in gruesome details, and hence, the sacrificial lore of the second period manifests very little of human interest.

But even from this barren field it is possible for us to glean certain useful facts which will help us to understand the progressive development of the humanistic tendencies even here. The one prominent thing that strikes the reader of the

Brahmana literature is the open struggle for social supremacy between the princes and the priests. Already we hear of the distinction between the orthodox Vedic dharma and a rival heterodox school. The former is confined to the country of Kuru Panchalas, the latter is associated with the Aryans of the eastern countries which comprise of Kasi, Kosala, Videha and Maghada. According to evidence contained in Satapata Brahmana, Aryans living in eastern countries constituted the heterodox section inasmuch as they did not recognise the importance of the sacrificial rituals nor the claims of the priests for social supremacy. The Aryans of the eastern countries were dominated mainly by Kshatriyas who preached that the religious performance of Yaga involving animal sacrifice was not the highest type of religious worship. On the other hand, they maintained that abstaining from animal sacrifice in Yaga rituals was itself meritorious. Instead of accepting dharma as interpreted by the priests according to the Vedic rituals these Kshatriya leaders of thought of the Gangetic valley preached the new dharma enjoining the non-performance of the sacrificial rituals. So much so, the Brahmana literature in general, and Satapata Brahmana in particular, advised the orthodox priests of the Kuru Panchala country not to travel in the eastern countries in the Gangetic valley because it would be inconsistent with their own status in their society. They cannot assert social supremacy in a land where Kshatriyas claim to be the foremost. They cannot command the same amount of respect and veneration from the masses in a land where Kshatriya leaders introduced the famous Rajasuya ceremony whose rituals could be conveniently conducted by Kshatriyas themselves without employing the priests. Hence in the most important ritual the Kshatriya need not seek the aid of any Brahman priests. It is certainly an implicit insult to the priestly class. One other interesting thing mentioned in Satapata Brahmana relates to the language of the eastern countries. The Aryans in the eastern countries practically forgot the pure Sanskrit, and had adopted a corrupt form of Sanskrit dialect, an impure parody of the sacred language. The instances given to illustrate this linguistic degeneration among the Aryans of the eastern countries undoubtedly point to a form of prakrit language as the recognised language of the eastern Aryans. Disputing the social supremacy of the priests, discarding the Vedic dharma based upon sacrificial ritualism, and incapable of mouthing the pure Sanskrit words, the Aryans of the eastern countries were certainly looked down upon by the orthodox priests of the Kuru Panchalas. Thus

Brahmana literature reveals an open conflict between two major classes constituting the Aryan society, which class rivalry was but the outward symptom of the fundamental struggle between the two dominant ideals.

PERIOD OF UPANISHADS

The period of Upanishads is certainly the most glorious period of Indian Humanism. We suddenly enter into a new world altogether. The world of the early Samhitas and Brahmanas vanishes from the view. This new world of Humanism is characterised by an overwhelming enthusiasm for the new ideas and new aspirations. The Aryan settler of the Indus valley prayed for prosperity and plenty, and he adjusted his religious and social ideas to fulfil the realisation of such utilitarian aim. We might almost say that there is transvaluation of all values when we enter Upanishadic world. Here man no more hankers after worldly prosperity and plenty. This transformation is because of the new vision—the vision of Atma. The Upanishadic thinker discovered the spiritual entity behind the physical frame. Even in the case of the human being the activity of his body and sense organs and the other characteristics associated with him are all traced to an inner life principle which is by nature spiritual and non-material though related to the physical body. The Atman is the fundamental active principle on account of which the senses operate, itself being beyond the reach of sense organs. It is on account of the Atman in man that the eyes are able to see, though itself remains unseen. It is on account of the Atman that the ears are able to hear, though itself remains unheard. It is this discovery and the knowledge of the innermost nature of personality that characterised the Upanishadic thought. Not only in man is such an entity present, but also in every living thing. A living being is such because of this active spiritual principle. Even the tiniest seed of a Banyan tree is a living entity capable of sprouting out and growing to a huge tree because of an identical living principle therein. The recognition of such an active principle throughout the living kingdom turns the eyes of all serious people towards the new direction. This new philosophy of the Upanishadic age, technically known as Atma Vidya, is generally associated with Kshatriya leaders. Centre of action has shifted from the sacrificial yard to King's audience hall. Learned priests, well-informed in sacrificial ritualism, were dissatisfied with their own equipment and eagerly tried to obtain the knowledge of this new culture. We see them in the Upanishadic world rush-

ing to the courts of various kings, like Janaka and Ajatasatru, with the object of being initiated into the mysteries of the new cult. There we see the learned scholars vying with each other in instructing and elucidating this new doctrine of Atma Vidya. Here we notice the clear distinction between chetana and achetana realities, the former being the innermost spiritual principle which permeated all living beings and to which the living beings owe their activity as contrasted with ordinary non-living physical entities. When the centre of thought so shifted from ritualism to the knowledge of the Self, many other associated doctrines similarly underwent a change. The social status of an individual depending either on birth or wealth was openly challenged. This new cult, Atma Vidya, therefore recognised no barriers between man and man. A high-born priest as well as a low-born cowboy were equally entitled to learn this new cult and to struggle to realise their respective Selves. Similarly no difference could be recognised between a prince and a peasant. The stick with which a cowherd drove his cattle, and the sceptre, the symbol of sovereignty wielded by the crowned monarch, both appeared to be of the same economic value for one who had the privilege of realising the Atma. If Humanism means candid recognition of the greatness of the human personality as such in spite of man-made limitations due either to birth or wealth, then we must admit that the Upanishadic period of Indian thought is a glorious period of Humanism. To illustrate the principle that birth did not count much it is enough to mention one or two instances of the Upanishadic period. It is not necessary to repeat the well-known fact which is a challenge to birth status that the Upanishadic cult itself was mainly associated with the Kshatriyas. Besides this well-known fact I should like to notice an incident associated with Jabalasatyakama. Jabalasatyakama is an interesting figure of the Upanishadic world. This boy, born of a servant-maid and who did not know his father caught the enthusiasm of the age and wanted to be initiated into the mysteries of the new Upanishadic cult. He went to the teacher Gautama and begged of him to initiate him into the Atma Vidya. The Guru asked the boy who his father was and to what family he belonged. The boy gave a candid answer that he did not know who his father was and that he knew only his mother who was a servant-maid and that even his mother was not able to identify his father. The teacher accepting this candid and honest answer as a mark of noble character admitted the boy as his disciple and initiated him into the Atma Vidya. If

this incident means anything, it is certainly an indication of the noble ideal adopted by the Upanishadic teachers in admitting recruits as disciples from all strata of society irrespective of class distinction, the only condition imposed being that the student should have a good character.

There is another incident narrated in the Upanishadic literature supporting the same principle. This refers to Janasruti seeking knowledge of Atma Vidya under the teacher Raikwa. When Janasruti approaches Raikwa with a similar request to be initiated into Atma Vidya the teacher addresses him "O Sudra Why can't you be satisfied with your wealth and cattle? Why should you worry yourself about the Upanishadic cult?" Here the person is addressed as sudra, though he is finally admitted to be a fitting disciple and initiated into the Upanishadic cult.

Similarly we may mention two other instances to prove that in the Upanishadic period wealth did not count much in the eyes of seekers of truth. Yagnyavalkya, the towering personality of the Upanishadic world, who accumulated an enormous fortune which he obtained through his skill in philosophical debate, when he resolved to retire from the world, offered all his wealth to his wife Maitraye. But Maitraye asked him the reason for his proposed retirement from the world. "What is it that you are going to obtain as more valuable than all our wealth" asked Maitraye. When Yagnyavalkya answered that he was going to retire from the world with the object of knowing and realising the Atma or Self, she curtly replied "What is really valuable to you is also valuable to me and what you cast away as worthless trash is equally trash to me. I don't want your riches. Let me have the privilege of knowing what you consider to be the most valuable truth." So she insisted on getting that information which Yagnyavalkya considered to be the most valuable treasure under the sun. There is another incident narrated in the Upanishadic literature, which refers to a brahman youth, Nachikethas. The boy is offered by Yama, the Lord of the nether world, a further lease of life in the world above and also a powerful sovereignty over a large kingdom. But the boy rejects this offer and insists on obtaining the information as to the nature of the soul and its destiny which certainly forms the greatest truth worth knowing. From these instances it is quite obvious that neither birth nor wealth counted much in the Upanishadic thinkers. Naturally therefore the sacrificial ritualism of the earlier period which rested upon the prestige of the priest

class which depended upon birth and which was mainly directed for the increase of prosperity and riches was at a discount with the Upanishadic thinkers who were greatly responsible for the fearless propaganda in support of Indian humanistic ideal.

Besides this central doctrine of Atma Vidya the Upanishadic thought is associated with other doctrines more or less related to this—the doctrine of karma and the doctrine of transmigration. The doctrine of karma is offered as an explanation of the concrete world of existence with its inter-mixture of good and evil, pleasure and pain, enjoyment and suffering, and various other characteristics associated with life in general. The Upanishadic thinkers who had a vision of the Atma or the pure Self had to invoke the aid of this doctrine of karma in order to render a reasonable philosophical account as to why the pure Atma is dragged down to the quagmire of samsara. Correlated with this doctrine of karma is the doctrine of transmigration. All living beings from the lowest to the highest have their life and conduct determined by their own karma and change their state of existence determined similarly by their own conduct. This cycle of births and deaths determined by the karma or the conduct of each individual is a universal process from which no living being could escape. Not only man, not only the sub-human creation of animals and birds, but even the Devas are subject to this cycle of births and deaths. Even the Lord of Devas, Indra himself, is not exempt from this process. He has his own term of enjoyment in Swarga after which he must inevitably give up his status and become entangled in the universal whirligig of samsara. Here again we see the shifting of values in the Upanishadic thought. The very Gods to whom sacrifices were offered by the early Aryans are now found helpless victims caught in the cycle of births and deaths just like any other insignificant living creature or humble human mortal. This is an important result of the Upanishadic revolution of Humanism. The Swarga and the life of a Deva which were objects of worship of the Aryans of the Rig Vedic period appear to be a pitiable condition of life from which the Upanishadic thinker would instinctively turn away. Swarga is no more of attraction to him. The concentrated happiness of an Indra in Swarga is bound to be succeeded by an equally heavy period of suffering. Of what use is it therefore, to aspire for the happiness of a Deva in Swarga? The Deva enjoyment is as much sensual as human enjoyment of sense pleasures. Both are detrimental to the realisation of Self or Atma; and both cases are to be avoided if true happiness is to be secured by self-realisation.

Thus we find a new ideal proclaimed by the Upanishadic thinker, and a new truth revealed by the Upanishadic thought.

It would not be out of place here to say something about the rise of Buddhism and Jainism which have a good deal in common with the Upanishadic thought. As in the case of the main Upanishadic stream of thought these two movements were originally associated with Kshatriyas. Gautama Buddha born of the Sakya clan of the Ikshvakus was brought up by his father to be a successful ruling chief. Since the King was informed by the soothsayers that the new-born prince would ultimately renounce his kingdom and become a wandering mendicant, the father wanted to avoid such a calamity by providing an artificial environment to the young prince consisting of all happiness and no misery. But in spite of this the prince Siddhartha managed to obtain the truth about the real world and finally renounced the kingdom as a worthless thing and started about that career of obtaining the truth, which would be of use to mankind as a means of escape from the misery of life. It is interesting to note in the life of Gautama Buddha this fact, mentioned very often, that throughout his previous births when he qualified himself for being born as the future Buddha by completing Paramithas, he invariably declared that he did not care to be born as a Lord of the Devas, nay not even as a Brahma ruling over Brahmaloka. Through such an apprenticeship in several previous births as Bodi Satva, building up his qualification bit by bit, he perfected his nature so as to be born as the future Buddha; his main object during the several periods of Bodisatva life was but a desire to be born as the Buddha in Baratakshetra, in Madyadesa, as a scion of a princely house for the benefit of mankind. What does this resolution mean? Why should he qualify himself by several previous lives of Bodisatvahood only to be born as Man in Baratakshetra? Here you have a clear indication of an important truth which becomes later on the central principle associated with the doctrine of Moksha. The great wisdom which is supposed to be the achievement of Buddha and which is offered to the world as a panacea for all the miseries in life is to be obtained only by taking the form of man and by performing Yoga or Thapas. By this process of Yoga or Thapas the much sought after elixir of life, the great salvation could be obtained. The Upanishadic thought not only preached the nature of samsara, the cycle of births and deaths, but also pointed out the way out of this *labrynth* that one should be born as a man before one could qualify himself for the

final liberation. It is this truth of the Upanishads that forms the central doctrine of both Buddhism and Jainism.

I have already said how Buddha himself in his life illustrated this great truth. Similar is the message of Jainism. All the twenty-four Tirthankaras of Jainism, beginning with Lord Rishabha and ending with Lord Mahavira, are said to be ruling sovereigns who cast away their kingdom and glory as worthless trash and became wandering mendicants or sramanas with the object of securing wisdom, the goal of life, not merely for themselves but for the world at large. Both these schools of thought, Buddhism and Jainism together, with the Upanishadic cult preached the same message to mankind, that all living beings including the Lord of Devas are caught in the clutches of the samsaric cycle, the only method of escaping from which consisted in being born as a human being whose body is the proper and fit vehicle for the purpose of thapas and yoga which constituted the only path to salvation. Certainly it will not be an exaggeration to say that these three streams of thought are at one in emphasising the importance of human personality which was considered even superior to that of the Devas. The change in the angle of vision has been so complete that the Devas headed by Indra are now assigned the modest function of attending upon those noble persons who realised their true nature of Self and became the Perfect Ones and revealed the Truth for the benefit of mankind. The Indra with his retinue is expected to be attending upon a Buddha or a Jaina to render them service throughout their life to go about as their bodyguards while they roam about as wandering mendicants performing Thapas or Yoga. Finally when these noble masters attain Moksha the Indra with his Devas are there to offer worship and to praise their glory. The Lord of the Devas considers it a great privilege to be of service to all those great Beings, who though born as mortals attain the status of Sarvagna—a status much more glorious than that of Indra himself, the highest of Devas. For thereafter a Sarvagna is quite free from the cycle of samsara since he realised his own true nature from which he could no more slip down. In this changed scheme of things, not only human personality, but also the human body is given a unique place of importance. It is this human body that is considered to be a very rare acquisition, because that is the only means for the performance of thapas or yoga which is the *sine qua non* of final liberation. Here you have the acme of Humanism in Indian thought.

When we take the general survey of the period in Indian thought which gave birth to these three streams of ideals—the Upanishadic cult, Buddhism and Jainism—we are confronted with a very great intellectual difficulty. These three schools of thought which represented a very important stage in the history of Aryan culture are strangely found associated with doctrines of which no trace could be discovered in the early ritualistic period. The doctrine of Karma and the doctrine of transmigration certainly appeared in the field for the first time. Wherefrom did the Aryans obtain these doctrines which they assimilated and elaborated in their own culture? This question is generally asked, but never adequately answered. If it is not too much of a presumption I may make bold to suggest a solution. In spite of Aryan opposition to the indigenous people of the land and in spite of describing them in the blackest colours the Aryan writers recognised in general that the indigenous people of the land had a culture and civilization of their own of a very high order. Ithihasas and Puranas openly acknowledge such a state of civilization even in the case of the undesirable enemies of the Aryans. Puranas and Ithihasas apart, the archaeological discoveries obtained from excavations at Harappa and Mhenjadaro, are interpreted by Sir John Marshall as pointing to a race of people with a high amount of culture and civilization existing in those regions before the Aryan occupation. Some of the coins and seals discovered in those regions bear marks of yogic figures thereby indicating that the practice of Yoga or thapas was common among these pre-Aryan peoples. If we accept this suggestion of Sir John Marshall we may conjecture with a certain amount of probability that the Upanishadic culture with its emphasis upon thapas or yoga must have been the result of contact between the two cultures that of the Aryans and that of the indigenous population. Probably the political rivalry between the two died out long before the rise of the Upanishadic culture. The Kshatriya leaders of Upanishadic cult as well as of Jainism and Buddhism being connected with the ruling families probably entered into political and matrimonial relationship with the dynasties of indigeonus rulers. Hence they found it inevitable not merely to have a social inter-mixture, but also a cultural inter-mixture which was responsible for the complete change in the intellectual attitude of the thinkers of the Upanishadic period. I offer this only as a suggestion as to the possible explanation of the appearance of strange doctrines in the intellectual horizon of the period. I do not want to assert anything dogmatically on this matter. It is for the research

students of Indian thought to clarify the situation and to obtain an adequate explanation of the problem.

When we enter the next period when the different schools or darsanas are systematised, we notice conflicting tendencies in operation. Some schools with reference to liberal humanistic movement adopted a retrograde step, while some others completely developed further implications of the Upanishadic humanism. Here we meet with one school which is entirely antipathic to any sort of humanistic ideal, the school of the Charvakas. The word Charvaka means "sweet in words." This school openly repudiated all belief in human personality and its survival after death. It accepted only the reality of the present world constituted by material objects. It explained human consciousness as a by-product resulting from the combination of the panchaboothas. This consciousness naturally disappeared with the dissolution of the body. Hence to talk about the future existence for the human personality was but the result of gross ignorance about things. Religion with its corollary of dharma was but the clever invention of selfish people who wanted to trade upon the credulity of the ignorant masses. Instead of being duped by the imagination of these religious quacks people in general must rid themselves of this superstition and derive as much enjoyment as possible at present because they are not sure of the to-morrow. Thus the Charvaka school of ancient India was the prototype of naturalism in the West. Distinctively materialistic in its intellectual outlook, it was opposed not only to all sorts of religious ideals, but was also a challenge to the Indian Humanism. It is strange that such a materialistic school should be associated with Brihaspati, Devaguru. As the name itself suggests probably it was appealing to the masses to a certain extent. But it must have lost its hold on the imagination of the people during the later period because it is mentioned only to be rejected in the later philosophical literature of India.

Leaving this school aside, we notice that the following schools of thought further emphasised the humanistic element of the earlier Upanishadic period; Sankhya and Yoga schools together with Jaina and Buddhist schools of thought were mainly responsible for developing the implications of Upanishadic humanism. Purva Mimamsa School may also be included in this to a certain extent. Though this school did not join hands with the above darsanas in further liberalisation of the ideal still it must be said to the credit of the Purva Mimamsa School that it did not attempt to go back-

wards. Sankhya school of thought since it openly repudiated the sacrificial ritualism of the Vedic period was bound to develop the logical implications of the Upanishadic Humanism. Purusha, the human personality entangled in the mesh of Prakriti got into the cycle of samsara births and deaths. On account of this intrinsic confusion, the individual human personality has to undergo pain and misery in this world until he realises his true nature as distinct from Prakriti. If man is to escape from this misery he must realise his true Self and thus get rid of the contamination of the outside Prakriti. This liberation he can achieve only by self-development leading to self-knowledge. Such a career of discipline is chalked out in the related system of Yoga darsana.

According to Yoga darsana, several sadanas are described as means for the realisation of the Self. Practice of these sadanas is prescribed as important means for the yogic realisation of Samadhi, ultimate goal of man. Before putting into practice these sadanas every man is expected to prepare himself for such a career of the spiritual discipline and development by observing the five vratas, such as non-violence, truth, continence, etc. An unbiassed study of the Yoga Sutras reveal obviously the humanistic foundation of the two darsanas, Sankhya and Yoga. The qualification prescribed for entering the yogic career is but character. Build that character first, shape your conduct according to these principles of Ahimsa, truth-speaking and sexual purity, etc., then you become fit to adopt the various sadanas. Here you find no mention of birth qualification at all. Any person who has the suitable character qualification is entitled to adopt the yogic practice. Further the description of the sadanas themselves leaves no doubt about the humanistic basis. The various sadanas are intended for the human being and could be adopted by the human being. Adoption of these various sadanas leading to the practice of yoga ending finally with the ultimate samadhi, all this is possible only with man. Leave out the human being the whole philosophical superstructure built up by Sankhya and Yoga would crumble into a dust heap. Hence it would not be an exaggeration to suggest that these two schools of thought Sankhya and Yoga carry forward the banner of liberalistic humanism much beyond the limits of the Upanishadic frontiers. Even the message of Baghavat Gita which is based upon Sankhya Yoga ideals must also be taken to be on the side of liberalism.

In the case of Purvamimamsa you have the same emphasis upon human personality. Though Purvamimamsa emphasises, the

importance of ritualism and insists on unquestioning faith in the efficacy of sacrifices, still it is surprising to note that it does not dethrone man from the high pedestal on which he was placed by the earlier Upanishadic thought. The conception of liberation or Moksha according to Purvamimamsa School consists in waiving all types of ritualistic activities intended for the benefit of man. Vedic injunctions are of two different types, not to perform certain acts which are undesirable and to carry out certain ritualistic acts which are enjoined as useful and desirable. The latter is associated with Dharma and the former Adharma or evil. Avoiding evil and adopting good are but means of obtaining the happiness in mundane affairs. But avoiding evil or adopting good is not enough to take you beyond the circle of samsara. Hence you have to give up both Dharma and Adharma and pitch your idea much beyond mundane happiness in order to obtain final liberation. The course prescribed again contemplates man and man alone. It is man that is entitled to attain final liberation because he has in himself, both physically and psychically, the necessary qualification for carrying out the means of reaching the ultimate goal of life. Strange to say the Mimamsic writers frankly repudiate the view that the Devas might also be credited with such powers. The term Deva according to Mimamsa writers stands for a sacrificial efficacy and nothing more. Devas are not even qualified to perform the sacrifice themselves being bodyless and hence being unlike a human being. Much less can they be expected to carry out the spiritual discipline leading to the final liberation or Moksha. By developing the doctrine of Apoorva, the unseen power of sacrificial ritualism, Mimamsa school completely dispenses with the hierarchy of the Vedic Deities. It stops with man as the highest being and with reference to man the Mimamsa school prescribes the course of dharma for his benefit here under the sun and prescribes the path to final liberation transcending good and evil.

Leaving these schools of Indian thought, when you turn to the most influential school of Vedantism you are confronted with a distinctly retrograde step. Vedantic school, which is not tired of emphasising the underlying divinity of whole existence and which enthusiastically propounds the doctrine that all the living things from the lowest to the highest are but the manifestations of the ultimate Supreme Brahman, fights shy of accepting the logical implications of its own doctrine; and not merely this but goes out of its way to defend the various social barriers which are the characteristic outlook of a more primitive and less enlightened social or-

ganisation in India, barriers based upon birth. One is really surprised to find two conflicting doctrines held together under the same banner of Vedantism—one that even the meanest creature under the sun carries in its bosom the ultimate divine principle as much as the highest and the noblest being—and second, in spite of this fact—that among human beings caste differences based upon birth exhibit an important truth which cannot be easily cast away. To a candid student of Vedantism such an attitude appears to be a self-contradiction. On account of such a self-contradiction, in the Vedantic school, the social differences based upon birth are defended with the elaborate arguments which exhibit more a tenacity of prejudice than validity of logic. After propounding the philosophical doctrine that every living thing together with the non-living universe contains in itself the divine spark of the ultimate, the Vedantic thinkers in an extremely inconsistent way proceed to marshal arguments to prove that a member of the fourth class is not authorised to obtain the knowledge of Brahma Vidya with the hope of realising implicit Brahman in him. To maintain that everything contains in its heart the divine spark, that the most insignificant creatures on the surface of the earth—insects and reptiles—are but the manifestations of the divine Brahman and at the same time to maintain that a member of the fourth class caste is not qualified to adopt and to exercise the course prescribed for self-realisation, which is preserved as a closed monopoly by a section of the human society claiming privileges on the basis of birth, appears to be the grossest form of self-contradiction that you can ever meet with in any philosophical literature. And yet there it is. The two instances of Jabalasatyakama and Janasruti mentioned earlier in connection with the Upanishadic liberalism are explained away by the Vedantic writers who invented a convenient logic to suit their purpose. That the boy Satyakama Jabala because he spoke the honest truth must certainly have been born of a brahman father is the inference drawn by the commentators of Vedanta sutras. Thus while trying to explain away the case they hit beyond the mark. The inference, even if it is accepted for the sake of argument gives up the whole case. The boy must have been of a brahman parentage! Why? Because of his noble character. This is a clear case of emphasising the character of an individual as indicative of brahmanhood and not the birth qualification which is certainly unknown and unprovable. This is exactly the point of view adopted by the various other systems carrying the banner of Humanism. Character must be

taken as a standard of social eminence and not birth. Similarly in the case of Janasruti the commentators of the Vedanta sutras perform wonderful logical acrobatics in trying to offer fantastic philological explanation of the term *sudra* in order to explain away the case. Besides these two cases which are marks of the noble liberalism of the Upanishadic period and which the Vedantic writers tried to explain away in order to defend the retrograde social doctrine, they also took up the case of Vithura from Mahabharata. In the case of Vithura the commentators have to accept the fact that he was born a *sudra*. They dare not explain away the further fact mentioned in the Mahabharata itself that Vithura was qualified to have Brahma Vidya and did have it. Here you see the commentators putting forward a very amusing theory. By nature and character Vithura was certainly qualified to have Brahma Vidya. But unfortunately because of certain past karmas he was constrained to be born in a *sudra* family. This argument to explain away the case of Vithura, a *sudra* low-born individual attaining the goal such as any high-born brahman would, frankly exhibits the bankruptcy of logic and may be said to surrender the whole case. What is true of Vithura may be true of any other *sudra*-born. He might also have the necessary qualification for Brahma Vidya, though unfortunately on account of his past karma he is to start his life now in a *sudra* home.

It is a matter for surprise that a leader like Ramanuja who exhibited in his lifetime an extraordinary enthusiasm for liberalism in social and religious matters had to take up the retrograde attitude in defending this doctrine. Probably Ramanuja and Madhwa had to defend the doctrine with a good deal of hesitation and unwillingness, for the defence occurs in the Moola Sutras themselves which they were bound to comment upon. But the stress is all the more emphasised when we turn to Sankara. A philosopher, who, in his enthusiasm for the ultimate reality, dismissed the whole of concrete reality including human society as illusion or *maya*, could at last have recognised equality and fraternity among the human beings who were given by him only an illusory and shadowy existence. Why should there be such a fundamental difference between one shadow and another shadow? It passeth our understanding how such an ultra-rationalism in philosophy emanating from philosophical enlightenment could exist side by side with retrograde conservatism in social matters emanating from indefensible and, certainly, illogical superstition relating to the affairs of human beings. We can very well understand

such an attitude taken by the writers of Purvamimamsa school. They are at least logically consistent. They maintain a view that a member of the fourth caste is not authorised to perform the sacrificial ritualism of the Vedic type. They argue in this way: Performance of yagna depends upon clear knowledge of the procedure. A clear and adequate knowledge of the sacrificial procedure must be acquired by a careful study of the Vedas. A member of the fourth caste is not equipped with such a knowledge and hence he cannot be successful in conducting the sacrificial ritualism. Therefore he is not authorised to perform such a sacrifice. He is not authorised simply because he cannot carry it out. This logic is quite intelligible. But this disqualification mentioned in connection with the performance of sacrificial rituals is not carried beyond this region. The Mimamsa writers did not say anything about the incapacity or lack of qualification, on the part of a sudra to walk the path beyond good and evil and to reach the ultimate goal of final liberation. But in the case of Vedantic writers who boast of the path of knowledge which is claimed to be superior to the path of sacrificial ritualism, it is unfortunate to notice that they go beyond the attitude taken by the Purvamimamsa writers when they uncivilly slam the door against the fourth caste and deny them the privilege of entering into the path of self-realisation though they are also represented to be the genuine manifestation of the ultimate Brahman. Evidently this ultra-conservatism on the part of the Vedantic writers is a result of reaction against the thorough-going liberalistic humanism of Jaina and Buddhist schools. Both the Buddhist and Jaina schools of thought emphasised the full implications of the earlier Upanishadic humanism and demanded a thorough overhauling of the social structure, emphasising individual character and repudiating the social privileges based upon mere birth. To illustrate such an attitude of Buddhism we may cite the following quotation from the Dhammapada, where the teacher describes who is a true Brahman.

He that meditates, he that is incorrupt,
He that has done his duty, he that is free from the evil passions,
He that has reached the supreme goal, that man, I call
a brahman.

By day shines the sun, by night gleams the Moon,
The warrior shines in his armour, the brahman shines in trance,
By all the day and all the night the Buddha shines in
splendour.

Because a man has put away evil, therefore is he called
a brahman ;
Because he walks in righteousness, therefore is he called
a Monk.
Because he has banished his own impurities, therefore is he
called a Monk.
He that offends not by act or speech or thought
He that controls himself in these three respects, that
man I call a brahman.
It is not matted locks or lineage or birth that makes a
brahman ;
But he in whom Truth exists, and the Law, he is blessed,
he is a brahman.
He that has severed all the attachments, he that trembles not,
He that has escaped from every bond and is unshackled
such a man I call a brahman.
He that endures abuse and stripes and bonds without offence,
He whose power is patience, and whose army is power, him
I call a brahman.
He that is free from anger, he that performs his duties
faithfully ;
He that keeps the Precepts, he that is free from lust,
He that has subdued himself, he that wears his last body,
him I call a brahman.
Even as water does not cling to a lotus leaf, nor a grain
of mustard seed to the point of an awl,
Whoso in like manner clings not to the pleasures of sense,
him I call a brahman.
He that realises right in this world, how his suffering
may be ended ;
He whose burden has fallen from him, he who has freed from
the shackles, him I call a brahman.
He that has laid aside the rod and inflicts not punishment
on living things,
He that kills not, nor causes to kill, such a man I call
a brahman.
He that opposes not those by whom he is opposed, he that
is meek among those that have taken the rod,
He that is craving among those that carve, such a man
I call a brahman.
That man from whom lust, and hatred and pride and envy
have been made to fall,

Even as a grain of mustard seed from the point of an awl
that man I call a brahman.
Free from harshness, instructing the hearer, truthful,
such are the words a man should utter ;
Thereby he will offend none, whoso thus, speaks, him I
call a brahman.
He that has no desires, either in this world or in the next,
He that is free from desires, and free from fetters, him
I call a brahman.
Whosoever in this world has escaped from the bonds of
good and evil,
Whosoever is free from sorrow, free from defilement,
free from impurity, him I call a brahman.
He that has cast off the bondage of things of earth,
He that has cast off the bondage of things of heaven,
He that has thrown off every bond, such a man I call a
brahman.
The noble, the eminent, the manly, the wise, the conqueror,
The pure, the sinless, the enlightened, him I call a brahman.

* * * * *

Similarly we may quote from a Tamil classic relating to Jainism expressing the same opinion. When Neelakesi the lady philosopher defending the Jaina doctrine of Ahimsa is insulted by the teacher of the Vedic school who addressed her a *sudra*, she flares up and quotes the following verses taken from the literature of the Vedic school itself.

नर्तकी गर्भसंभूतो वशिष्टोनाम महाऋषिः ।
तपसा ब्राह्मणो जातः तस्मात् जातिर्नकारणम् ॥
चण्डाली गर्भ संभूतः शक्तिर्नाम महामुनिः ।
तपसा ब्राह्मणो जातः तस्मात् जातिर्नकारणम् ॥
श्वपाकी गर्भसंभूतः पराशरो महामुनिः ।
तपसा ब्राह्मणो जातः तस्मात् जातिर्नकारणम् ॥
मत्स्यगन्ध्यास्तु तनयो विद्वान् व्यासो महामुनिः ।
तपसा ब्राह्मणो जातः तस्मात् जातिर्नकारणम् ॥

1. Vasishtha, born of a dancing girl, became a great Rishi ;
Hence, it is Tapas that makes the Brahman, and not
his birth.

2. Sakti, born of the chandala woman, became a great Rishi ;
Hence, it is Tapas that makes the Brahman, and not
his birth.
3. Parasara, born of a Swapaki, became a great Rishi ;
Hence, it is Tapas that makes the Brahman, and not
his birth.
4. Vyasa, born of Matsyagandhi, a fisherwoman, became a
great Rishi ;
Hence, it is Tapas that makes the Brahman, and not
his birth.

* * * * *

According to Jaina school, even an outcast chandala, if he is good in character and is actuated by a truly noble ideal, may ultimately become so pure and great spiritually as to be worshipped even by the Lord of the Devas.

Thus we notice that the history of Indian thought is the history of Humanism with a bias towards spirituality. We may say, in short, that Indian philosophy is a running commentary on the text "Thanks that I am a man." This Indian Humanism, which had its full expression about the period of Upanishad and which found its logical development in Jainism and Buddhism has been pushed to the background by the more dominant school of Vedantists. This dominant but reactionary school of Indian thought has been successful in preventing the re-appearance of the humanistic ideal in modern India, but it is time that leaders of thought in Modern India recognise the necessity of reviving and restoring this ideal in order to bring about a social readjustment consistent with modern conditions.

It is time that we say a word of comparison between Humanism in India and Humanism in the West. The humanistic movement which had its origin with the Greeks and which was revived about the Renaissance period in Europe had been vitiated by two facts—one relating to race prejudice, and the other relating to economic aggrandisement. The former has been associated with it even from the days of the Greek philosophers who were the pioneers of Humanism in Europe. Plato the greatest of Greek thinkers in constructing an ideal Republic, introduced the institution of slavery as an indispensable part of Greek household. When this was criticised by his opponents as a blot on the features of the ideal Republic, Plato's friend and disciple Aristotle, took up the cudgels

in defence of his master. "If the institution of slavery is objected to," asks Aristotle "Why did God create the barbarians at all, if they were not intended to work as slaves in the Greek household?" Modern European nations which inherited the political wisdom of the ancient Greeks are still actuated by the same sense of race superiority and their political activities are controlled and guided by the same old sentiment that the coloured races are intended to be the subjects of the white races. The other fact that has been yoked to the ideal of humanism is the economic theory of *Laissiz faire*. Modern European nations have adopted in recent years the ideal of economic aggrandisement as the primary object of national aspirations. Political alliances leading to conflicting groups have all been dictated by the economic ideal of securing the worlds' market for their manufactured goods. Individual aims and ideals as well as national aspirations have been working along these lines. The last war revealed the obvious truth that such a rabid nationalism actuated by economic scramble for wealth must necessarily end in a terrible conflict ending in mutual destruction endangering the very foundations of civilization. European nations by their pursuit of this ideal of economic aggrandisement became entirely blind to the more refined aspects of humanism relating to art, morality and religion. This mad race for capturing the worlds' markets naturally ended in losing their soul. Even after the war, Europe has not been successful in recovering her lost humanism.

In this respect, the Indian humanism must appear to any impartial observer as distinctly superior to the Western Humanism. While the Western Humanism has remained to this day an economic humanism, the Indian Humanism which has never been dissociated from the finer sentiments must be described as ethical humanism. Two historic facts may be mentioned illustrating the difference between the two. When Alexander of Macedon invaded India and conquered the Indus valley he is said to have shed tears because there were no more kings to be defeated, and no more countries to be conquered. And Alexander was a Greek ruler, and the Greeks were the source of western humanism. The other fact relates to Indian history, and reveals the attitude of an Indian ruler of equal greatness, if not greater. Asoka immediately after ascending the imperial throne, led a military campaign against Kalinga which he conquered and subjugated. But after reviewing the ultimate result of this military campaign and noticing the amount of destruction caused to society, Asoka, it is recorded, made a solemn resolution to have nothing to do with military

campaign thereafter and that he would devote the rest of his time as a sovereign for the promotion of dharma amongst his people, which resolution he strictly carried out till the end of his life. Compare this picture representing Indian humanism with the other one representing western humanism and there will be no doubt as to their comparative merit. The post-war Europe is certainly in search of a new ideal. The ethical humanism of India will not only serve as an ideal for modern India but for the whole world. Hence it is all the more incumbent upon the Indians, especially the Indian youths to make a supreme effort to revive this humanistic ideal for the purpose of reconstructing the Indian society and through it to save the crumbling modern civilisation of the West.

But it must be frankly admitted that this can't be a one-sided bargain. If you offer a higher type of humanism to the West in order to help her to rediscover her soul, India, in return, must borrow from the West the scientific spirit through which the West has benefited so much. The spirit of science is the one thing which is truly of an international type. It is not vitiated by national prejudices and it has been successful in bringing together members of different nations and races on a higher intellectual platform. Science has given mankind not only power over natural forces which no doubt is responsible for making Europe what it is, but it has also created the new ideal of worshipping at the Altar of Truth in scorn of consequence. Such a spirit of Research, worshipping Truth with the courage of convictions India has not yet obtained. And India must certainly endeavour to acquire that spirit of research which is the only means of clearing the cobwebs of superstition which disfigure the edifice of Indian culture and civilisation. A happy combination of the ethical humanism of ancient India and the spirit of science of modern Europe may probably serve as a useful remedy for curing the ills of modern India as well as of modern Europe. And I hope that the younger generation of India would be alive to their rich heritage and would strive to revive their humanistic ideal for the benefit of mankind.

THE STRUCTURE OF BRITISH MANAGING AGENCY FIRMS IN INDIA

By

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I

The aim of this article is to describe the structure and internal organization of British managing agency firms in India with a view to examining how far they are adapted to the task of performing the varied activities pursued by them and in particular, to that of managing the industrial enterprises under their control. It will be shown that the superiority of British managing agency firms over the Indian firms lies in their better organization and in the adoption of sounder principles of internal administration.

The managing agency system of industrial organization is peculiar to India. Its distinctive features arise from the fact that the managing agency firms, whether they be family concerns or partnerships or private limited companies, are business concerns engaged in several trading, commercial, financial and industrial activities, of which the management of industrial companies constitutes only one side. Even the gain from the management of an industrial unit is derived from many sources. Besides their commission based on a percentage of the annual profit and the return which they get from their own capital invested therein, a considerable part comes by way of their acting as agents for the purchase and sale of the goods of the company, as insurance agents and as shipping agents. Thus, as long as an industrial company is actually at work, the managing agent would be able to earn a good income, even though the company might be working without a profit.

The reason for this is that in India management has become legally and functionally separate from the ownership of a joint-stock company. It is true that in the early stages of industrial development in India, when the management of industrial concerns was in the hands of the managing agents, there was in reality no distinction between the owners and managers of the enterprise, for the managing agents were the owner-directors of industry,

although there were even then a few investors who owned a small percentage of the shares. But with the success of each concern, the managing agents got the bulk of their capital back by selling out a large portion of their interests and sought new fields of enterprise. Their rights as owners of the enterprise became less and less. But in parting with their interests they were careful to ensure for themselves not merely a long fixed tenure of management but substantial remuneration for their management which, besides a fixed sum for office expenses, included a definite share in the profits of the company. Management was recognised to be a major factor in business, and the investors were content to vest great powers with and grant substantial remuneration to managing agents in return for a dividend determined annually by the managing agents themselves. This curious position was due to the role of the British managing agents as organisers of Indian industry. The supply of business ability in India being scarce, investors who had any capital to invest in industries had to be content with what they could get from the only class of persons who had sufficient business experience and were prepared to engage the necessary technical men for the internal working of the industrial companies which had been established.

Another reason for the utter passivity of outside capital which flowed into industry managed by managing agency firms is that management in India has a much wider content than in other countries. In India on account of causes into which it is not possible to enter here, the provision of all the financial requirements of an industrial unit has come to be the function of the management at every stage. While initial capital is secured by shares and debentures, working capital and often also capital required for extension are provided either directly by the managing agents out of their own resources or indirectly by their personal guarantee to the banks which provide the necessary capital. While in every case the cost of capital is of course borne entirely by the company, it is only reasonable that the management should expect to be paid for the risks and strain involved in the financing of the companies which they manage. Their financial service becomes very valuable in times of depression when banks are unwilling to aid the industrial companies. At such times the financial resources of the managing agents stand the industries in good stead.

The main function of the managing agents is of course to manage the industrial concerns in their charge efficiently and successfully,

besides finding the necessary credits for them in sufficient quantities and on the proper occasion. Are the managing agents equipped for this double task? To get some idea of the extent to which British managing agents shoulder responsibility of finance and management, it is only necessary to point out that in Calcutta 37 British firms have been in charge of 385 companies quoted in the Calcutta Stock Exchange, made up of jute, tea, coal, transport, paper and other industrial units. Some like Messrs. Andrew Yule and Co., manage as many as 54 companies, while Messrs. Martin and Co., Gillanders Arbuthnot, Shaw Wallace and others manage from 25 to 15 companies each. Besides the management of industrial enterprises, managing agents pursue a considerable number of other activities, such as trade, insurance, shipping, etc. Unless therefore the firms are efficiently organised and properly staffed, there would be a risk of all the enterprises under their control becoming bankrupt. Hence the importance of the structure of managing agency firms.

II

British agency firms.—The essential characteristic of British agency firms as distinguished from most of the Indian firms is that the former are genuine organizations, having fairly long and continuous existence and considerable experience in trade, commerce and industry. Indian firms with a few important exceptions are mostly loose and *ad hoc* bodies brought about temporarily for the management of particular industrial units and have, unlike British firms, each only one or two industrial units under their control. The result of this important difference is that while an industrial unit that is managed by a British firm being one of the several other concerns under common management gets the benefit of centralized management by an experienced managing agency firm, the industrial concerns managed by Indian managing agents being each under separate managing agents get the advantages neither of experienced management nor of centralised control. British agency firms are either family concerns or partnerships in which family members may preponderate, or private limited liability companies with shares held only by a few individuals. Most of them are servants of the corresponding Head office firms in England, although they may appear in different names on account of the necessity imposed by income-tax difficulties and different legal systems in the two countries. Some of the agency firms were the creation of men who had come out as re-

presentatives of British firms and organized them with the help of a few partners. In a few cases, some of the partners that had thus been taken were Indians. The family firms have not continued to be exclusively so for long. They soon grew into partnerships either because the sons of the family were unwilling to spend their time in India and therefore took in as partners abler assistants of the firm or, as more frequently was the case adopted the system of partnership deliberately so as to ensure continuously efficient management. Private limited companies function more or less as partnerships and hence the account given below while strictly applying to partnerships may be considered as typical of most British agency firms.

A British managing agency firm consists of a number of partners varying from three or four to as many as ten, and in the case of a private limited company, the number comes up to even fifteen. Some of the partners stay in India looking after the Indian businesses while the others remain in Great Britain. The view given wide publicity to by the Industrial Commission in their report that the partners were taking their turn of duty sometimes in India and sometimes in Great Britain is not borne out by actual facts. The practice seems to be for some of the partners to serve in India throughout the period of their service and then to retire from India either permanently or with a view to work for the firm in England.

Often all the partners are in Great Britain while the managing agency firm is entirely represented by local managers some of whom starting as assistants in the firm work their way up to their responsible positions. The managers may become partners or retire only as managers, the practice varying with different firms. Speaking generally, where the managerial posts are limited to the members of the family or relatives of the partners, they ultimately become partners. But in all cases the interest of the local managers is always ensured by their being allowed to participate in the profits in a certain proportion. The way in which this is done again varies with the firms. Some grant them a certain percentage share in the profits of the agency firms; others assign to them a certain number of the shares held by the managing agency firms in the companies under their control. When the managers retire, the shares are surrendered back to the firm.

From the point of view of the efficiency of a managing agency firm the methods adopted by British firms to get a continuous supply of fresh talents are in contrast with those adopted by Indian

firms. In both, family influences preponderate. But although the scions of the family are pushed on, the abler assistants in the British firms get their chance and are taken on as partners either for their ability or experience or for their technical equipment. While the family members may serve to maintain continuity of policy and direction in the firm, the outside elements serve to vitalize the firm and prevent it from stagnation. Lest the firm should degenerate into a close preserve for the families of such partners, it is often stipulated that on the retirement or death of one partner, the others would have the right of buying up his interests. It is possible that his place might be taken by the son, or nephew or other near relation, but the choice is entirely in the hands of the remaining partners. Indian firms on the contrary have been mostly hereditary concerns, and as talents cannot always be inherited, the firms come to be in the hands of incompetent men.

The capital of British agency firms cannot be estimated even within a margin of error. It varies from firm to firm, but it is certain that most of the firms have substantial resources at their command. Many of them are independent of outside financial assistance and are fully able to cope with the credit requirements of all their varied activities.

III

Internal Organization.—In the local Head Office of every managing agency firm there are various departments divided according to the products handled, besides certain general departments such as banking, insurance, shipping, etc., intended to serve all. At the head of each department is the Local Manager, with the General Manager at the top of all. Where the partners remain in Calcutta, the seniormost partner is, of course, the Head of the local firm. There are usually about 4 to 6 managers who each get a salary of Rs. 1,000 to Rs. 1,500 with a definite share in the profits. The seniormost manager gets a much higher salary—of about Rs. 2,000 to Rs. 2,500—besides a share in the profits and a free house and other allowances.

The appointment of all European staff and assistants is in the first instance limited to five years and is subject to renewal for further periods of three to five years every time. Almost all the European staff, technical and general, are recruited in England

either directly by the firm or with the assistance of the University Appointments Board. Although the initial salary of an assistant is not high being about Rs. 400, abler men are able to get a rapid rise in their salaries which ultimately reach even Rs. 2,500 or Rs. 3,000 a month with rights of free passage to and fro once in three years. It has been estimated that making due allowance for the cost of living in India and the additional inducement necessary to attract men to serve here, the career offered by managing agency firms in India allowed a high proportion of University entrants obtaining between the ages of 35 and 40 emoluments equivalent to employment in England at rates between £2,000 and £3,000 a year. In the case of one particular firm, the economic equivalents for employment in England at the emoluments drawn by its University entrants were estimated to be as follows¹ :—

Average age.	Average Emoluments
30	£1,000 per annum
39	£1,800 per annum
42	£3,000 per annum

While all the managers have full authority to issue pay orders and sign contracts on behalf of the firm, only a few among the assistants are endowed with this privilege. Sometimes this privilege is granted to officers engaged in special departments and particular kinds of work.

After the assistant starts work, his continuance in the firm is subject to his proving both competence and zest in work. A good few of the number that are recruited have been sent back at the end of the first period, their work being found not up to the required standard. In fact one reason for short engagements is to enable the firm to dispense with the service of assistants if they proved to be either incompetent or undesirable at any time.

Each assistant is in charge of one department and 4 or 5 departments are under the control of one manager, while the General Manager supervises the work of all departments. All work connected with each department including purchase, sale, accounts, etc., is done by that department. Thus in the jute department of a managing agency firm, every indent for purchase of all materials, stores, etc., from all the jute mills under the firm's

1. Sargent Florence, *The Logic of Industrial Organization*, p. 234.

management comes to the department which arranges for purchase either locally or abroad. When the purchase is made abroad it is done through the Head Office firm in London which gets a commission for the work. Being in constant touch with the market, the managing agents are in a better position to buy cheaply than individual companies. It is often laid down in the managing agency agreement that, where the managing agents buy for several companies, the prices charged should be uniform and that in no case they should exceed the market prices.² A surcharge over the purchase rates is fixed for such supplies to companies to cover the cost of the central purchasing department and this surcharge is much less than the saving effected by the department in buying most efficiently.³ Similarly all the sales of the products of all the jute mills are effected by the central jute department, of coal by the coal department, tea by tea department and so on. Here too the centralized selling machinery confers an advantage on all the units in each industry. Some years ago the practice had been to organize a separate department for purchase and another for sale for buying and selling for all the varied concerns under the managing agents. But it was found to be unsatisfactory and the present system was adopted by which purchase and sale are done for each industry in one department. All the accounts of the companies are kept in the central office, which are received daily and entered in the books. The companies are entirely under the direction of the central office department, while the day-to-day and routine management is vested with the local managers of the companies.

There is a very detailed system of apportioning the cost of such Head Office services among the companies. Generally speaking, the apportionment of the cost is based upon the number of individuals employed in each department and within the department according to the amount of turnover for each company. The rent charged to each department is proportionate to the area occupied by the department. Where extra staff are employed specially on behalf of a company, the cost is debited to the company's account. Where an officer gives his time partly to one department and partly to another, his salary is shared by both the departments.

2. Representation of Messrs. Martin & Co. Indian Tariff Board, Vol. III, 1934, p. 244.

3. *Ibid.*

The banking department of a managing agency firm which employs the capital and funds of the managing agents is perhaps the most important of all departments and affords the greatest possible service to the individual companies under the management of the managing agency firm. Each company must open an account with the banking department and all funds required by the companies and all incomings to their credit go into the accounts of each member. The banking department is operated upon exclusively by the companies and businesses of the managing agency firm, and no outsiders are allowed to have any transactions therein. The funds required for each concern are supplied as and when required on terms usually charged by banks for such credits. Although centralized credit is effected through the banking department which is finally responsible for the safe custody of the company's funds, proper and sound investment and so on, no direct transfer of the surplus funds of one company to another is allowed under the system, in contrast to the practice of the Indian managing agents who transfer the surplus funds of one company to themselves or to other companies in their charge. The financial resources of the British agency firms combined with the credit they are able to secure from joint-stock banks in India give great strength to all the industrial companies under their management. managing agents and the shareholders.

In the case of transport companies which work under special agreements with the Secretary of State, all the funds including the reserves and cash must be kept separately and invested as directed by the Government of India and do not go to the banking department. In another respect too they differ from ordinary industrial companies. While in the managing agency agreements with the latter a minimum commission is always provided, in the transport companies, instead of a minimum commission there is the guarantee of a definite rate of dividend on their share-capital.

IV

Although in these and several other ways (e.g. by the employment of expert technical staff for all the collieries or tea companies) administrative integration and rationalised control are secured through the central offices of the managing agents, there are limits to the number of companies which can be entrusted to the management of an agency firm. The financial capacity of the firm sets one kind of limit. The banking department of each agency firm calculates from period to period the amount of finance required

by all the companies under its control and if it be found that it could not finance any more, no new company would be taken up unless it is relieved of the responsibility for one or two existing ones. But apart from this limit, the nature of some of the businesses entrusted to the managing agents is such that in the interests of existing companies themselves, no new ones should be allowed to be established or managed by the same managing agency firm on account of the direct competition inevitable in such cases. Thus in the managing agency agreement with the Hoogly Engineering and Docking Company and again with a cement company which involved long prospecting and investigation, Messrs. Martin and Co. were prohibited from taking over the agency for other companies of similar nature. Tata Iron and Steel Company have similar agreement prohibiting the managing agents from floating and managing any other steel company. In all these instances the question arises as to whether the advantages of common management are outweighed by the disadvantages of competition or of divided interests between the companies under the same managing agents.

A managing agency firm is sometimes induced to extend its activities even when it has reached the limits of safe expansion. The reasons are various. The competition of another company is, if not serious, at least annoying and it is felt that safety lies in bringing it under its own control. Sometimes a company is deliberately brought under its management with the ultimate object of bringing it into liquidation. Cases have occurred in the coal industry in which some coal companies have been acquired with a view to eliminating competition and letting them go bankrupt. More recently many subsidiary companies are floated by managing agents who take in all the shares of such companies with a view to save on income and super-taxes. These companies are entirely owned by the agency firms and the shares are not open to public subscription.

Relation between the British managing agency firms and the directors and shareholders of individual companies.—The managing agents are given an absolutely free hand, although in every case they are supposed to be under the general direction of the Board of Directors. The Directors are given the power to give notice of terminating the agreement if the managing agents fail to observe the terms of agreement. But in practice on account of the fact that Directors are often the business friends of managing

agents and are on the Directorate of a large number of companies and cannot find much time even if willing to take interest in them, their control over managing agents is light and ineffective.⁴ Further, the shareholders of the companies managed by British managing agency firms take no interest whatsoever, and it is said that by itself it affords external evidence of the sound administration of these companies. Whatever be the view taken on this matter, the fact remains that even for the annual meetings of many of the companies, quorum is often difficult to secure and only the pressing calls of the agents to their friends save the meetings from being adjourned for want of a quorum. There is no doubt that the shareholders being only interested in the dividend which comes to them regularly on account of efficient management by the British managing agency firms show signs of activity only if their dividends go down. The fact that investment in the companies managed by British firms is prized as safe and sound shows at once the confidence of the investing public in the management and their willingness to surrender their rights of control in return for a fixed annual dividend.⁵

4. The new Company Act fixes greater responsibility on the Directors.

5. The new Act also prohibits Companies from appointing managing Agents to hold office for more than twenty years at a time, but empowers them to renew the agreement for a further period of not more than twenty years each time.

A CRITIQUE OF NICOLAI HARTMANN'S ETHICS.

By P. V. S. NARAYANA, M.A., B.L.

I

(Continued from page 290 of Vol. VIII, No. 3)

PART III

HARTMANN AND TELEOLOGY

The introduction of the personal subject as the only mediator between value and reality leads us on to the problem of human teleology. How can the ought-to-be be actualised? It can be done only in and through the formation of a finalistic nexus. The dynamic of the whole procedure is the attraction issuing from the final end. 'The finalistic determination inserts itself without opposition into the causal, precisely because, the course of its own actualisation itself is causal' (vol. i, p. 277). As such, finalism, far from presupposing indeterminism, presupposes a causally determined world. The ethical standpoint must be free from the implications of providence and predestination. The finalistic process, once rid of these notions, belongs of right to man as his distinctive mark. Without necessarily denying a providence of the Almighty, we must regard teleology as the peculiarity of human nature (vol. i, p. 282). Now, if teleology is a distinctively human affair, it follows that an all-embracing teleology is anthropomorphic. Its all-inclusive cosmic bearing only resembles the character of man. Further, it will make man a part of the teleological framework and thus reduce his worth and dignity as an ethical being. A thorough-going cosmic teleology cancels ethics and amounts to a theory of predestination. Then, fatalism becomes the only standpoint for man (vol. i, p. 288). Moral consciousness and teleological metaphysics are thus incompatible. As ethics is bent upon not being 'corrupted by philosophy', the whole of cosmic finalism must be cast aside.

This is only one part of the argument. The basic contention against teleology is founded upon the law of categories. This is a peculiar law regarding the gradation of structures. Every higher category unifies the lower in a new way. It is a higher formation which rises over the lower making it its

material (Cf. L. Morgan's *Emergent Evolution*). The lower categories are more independent and unconditioned, whereas the higher are dependent upon the lower and conditioned by them. The new and higher formation can become active only within the range which the lower categories leave undetermined. The higher cannot suspend the action of the lower though it can form a higher structure only upon it. 'In short, the lower categories are the stronger, the higher are the weaker' (vol. i, p. 289). But dependence and superiority are not antagonistic. In the graded realm of principles, it is precisely the dependent which is superior and the independent which is stronger. The higher principle is necessarily more complex and more conditioned and the lower more unconditioned and elemental. Though the lower is stronger in quantity it is poorer in quality. As such, the higher can do nothing by defying the lower; but upon the same as the basis it can create a finer grade of life in which alone lies its superiority. Teleological metaphysics subordinates the causal nexus to the finalistic. The law of categories makes the causal nexus a condition precedent to the finalistic one. Finalism can thrive only on the stable structure of a causally determined world. Thus the law of categories restores to man his special right of teleology. To give it cosmic scope and extend its range of validity is to negate the part of man. And with that ethics vanishes. A cosmic teleology with the absolute at the head of it, belittles the glory of man and leaves the world a theatre for predestination. But the causal nexus refuses to be drawn into this perspective. It is at the disposal of any power which is in a position to use it for its own willed purposes. Man can guide it by his powers of foresight and self-determination, though they are limited. These limits mark the intrusion of the accidental into experience. The opposite of the accidental is not the caused, but the unforeseen. Accident is an exclusively teleological concept. 'It exists only for the teleology of man. . . . Ontologically, he is just as thoroughly determined as everything else' (vol. i, p. 294). Human teleology is limited on the one side by man's limited power of prevision, and on the other by the great causal stream of cosmic events. The insoluble dilemmas into which moral values themselves fall, also put a limit to his teleology. 'They would set a limit to the harmony even of a divinely

perfect, of a world-ruling providence and fore-ordination' (vol. i, p. 302).

CRITICISM

(1) 'The restriction of teleology to man gives rise to some difficulties. In the first place it introduces an abrupt element into the cosmic process to explain moral phenomena. If it is true, it must carry with it the ultimate dissolution of ethics. If our life is ethical, our environment cannot be unsuited to it. There is no need for an ethical life, nor is it conceivable that it can arise, in an environment which is directly indifferent to it. The principles of its organisation must be already spiritual to help the ethical life of its inhabitants. The ultimate spiritual foundation of the universe is a postulate needed to give meaning to valuational pursuits. If the ethical being is not a product of the cosmic process, wherefrom does he hail? It is impossible to believe that matter in its automatic adventures, has, at last, produced a creature with an insight into values. A theory of ethics needs a theory of moral government which will eventually right all wrongs and save all souls. Nature may be anything, but if there is no one looking after the moral order of the world, pessimism is the only consistent standpoint. The belief in an irrevocable moral order existing in a nature that includes and transcends both is the very basis of any valuable life. Mere agnosticism about everything beyond the narrow world of man is next door to pessimism. It corrupts ethics with a fundamental doubt about its ultimate worth in a world where everything is apparently indifferent. In the long run, it ends in cynicism, because, if moral life is not strongly rooted in reality, it has a tendency to be self-defeated. Ethical life must be somehow of a piece with that which pervades the universe 'in and out'. Otherwise, our whole ethical existence is simply 'a riddle, an enigma, an inexplicable mystery'. Thus, unless human teleology bears some inherent relation to the cosmic, it cannot be understood rationally. To confine it only to man is to shut our eyes to its possibilities elsewhere. Why not the cosmic process be presumed as a part of the ethical which again issues from the spiritual nature of the real? From atom to divinity every slab of existence is spiritual. An

ethics which does not recognise this fundamental truth contains a disintegrating element within its own structure.

(2) The second part of the argument contains a fallacy. Hartmann's law of categories makes the lower produce the higher which is impossible. It is a principle inherent in the nature of things, and one which no example has disproved, that the lower cannot by itself produce the higher. All evolution implies the orderly unfoldment on the plane of manifestation, of potentialities already inherent in the formative principle of that which is said to evolve. The cosmic and the human factors should have subsisted from all eternity as spiritual principles in the thought of God. Some form of teleology or other cannot be avoided in the comprehension of the nature of life. The world itself, strictly from the human standpoint, is working out a mighty teleology of which our finite minds can know only the rudiments. Life spells purpose. And such purpose is everywhere, not in man alone. If we reverse the law of categories, we understand ethical life aright. The lower must be explained in terms of the higher rather than the higher in terms of the lower. The complex can explain the simple but not the simple the complex. In the higher and the more complex gradation of categories, we see the unfolding of the essential nature of the lower and simpler forms of being. The oak explains the acorn, even more truly than the acorn the oak. There is no break or gap in the divine plan from end to end. The organic contains the *raison d'être* of the inorganic. In the rational soul of man one has to discover that for which his body is intended. With man the movement has changed. The course of progress seems to be steered inward. There is truth in the saying 'on earth there is nothing great but man : in man there is nothing great but mind'. Man is the microcosm, the focal point of the universe in whom are fused different grades of reality. But, on this account, teleology is not confined to him alone. Beings lower still in the scale evidence it. All activity, mental or physical, is a sort of conative striving. Purposiveness is co-extensive with life, implying a comprehension of objectives and ends. In addition to a simple reaction to the stress of environment, each organism shows up a purpose which seems to keep it going. The impulse is called conation which is at work in the desire to maintain the species

by providing food or seeking a mate. It is an overmastering force goading the creature to its goals. Until the accomplishment of the end, the experience is one of tension and restless elbowing out through trial and error. The salmon proceeding upstream leaping over rocks and breasting the current, in order to deposit her spawn in a particular place, is only working out its special urges. In all living creatures with a will to live, it is impossible to exaggerate the personal aspects of the facts. Wherever there is life, creatures are animated by the need to fulfil purposes and fill up wants. Foresight, expectation, restlessness are the marks of teleology in the human scale also. The universe is like an army of volunteers working together for a common destiny. We are no more separate than the leaves of a tree. Each leaf has a sufficient speck of consciousness to believe that it is an entirely separate pack of existence trading with time and dying in it in due course. But all the time, in this line of thought, it does not realise that it is being fed by the sap which flows from the trunk of the tree. Our peculiar self is similarly related to the self of the whole. Once we understand ourselves, we shall see that we are indissolubly connected with the self of the whole. There is no trivial puff of existence, no loose and disjointed member not held together in solemn kinship by the force of this universal organism. A shake in the divine nature, somewhere in the far off interior, throws the whole range of the immediate present into an agitation, which may precipitate the fall of empires that are deemed bullet-proof. Human teleology, by the very limitations Hartmann admits, demands a teleology beyond itself. Human purpose itself is a product of a higher purpose which man is reflecting. If there is a fundamental organising and regulating activity of the universe, how can anybody deny purpose to it? Thus, teleology is, from top to bottom, a principle of the universe in which we find ourselves. It is no evolute from the stratification of lower categories. If we give up the spiritual direction of the universe, we can make nothing out of anything.

II

ETHICS AND RELIGION

For a long time ethics drew its material from religion by setting forth its values. Hartmann assures us that the age

of such dependence is passing away. But religion is still a treasure-trove of ethical contents. Mythology also supplies a fine stock of ethical axioms dressed in more concrete forms. Religion has had an imposing career in the past. It appealed straight to the heart of man and spoke to him in the language of intuition, picture, symbol and even of artistic creation. Hartmann does not see the need for any religious back-ground to his ethics and refuses to draw God into his account. The whole prestige of religion is a matter of indifference to ethics. Behind moral theology, theological morality peeps forth. But in the full sense, man alone is the moral being and not the absolute or any other entity in the whole world. The first part of his work closes with a characteristic human note (vol. i, p. 341). Hartmann's chief objections to religion are given in more detail in the third volume (vol. iii, chapt. xxi, p. 260). The essence of morality is not a religious reward but a valuational feeling. The religious man makes God everything and fails to appreciate the autonomous character of ethics. Ethics is a cent per cent humanistic affair and has no need for a God. The essence of religion, as understood by Hartmann is laying up of treasures in heaven mortifying the flesh here. To ethics, thought of reward is trivial. Moreover, all religions do not happen to be the bearers of ethical good. The transference of guilt implied in the notion of 'Sacrifice' is repugnant to ethics. While religion regards values as commands of God, ethics regards them as self-subsistent entities capable of living on their own resources. Constant divine dictates militate against the foresight of man and abrogate his self-determination. Divine dominance leaves man fatally helpless. When all initiative and setting up of ends is transferred to the hands of God, ethics ceases forthwith. To this, he adds that the surrender of the ethos of man to God is at bottom due to fear. His most formidable objection to religion consists in its other-worldliness. He holds that religion makes this world worthless and seeks the values of the world to come. The consequence is the depreciation of our present existence and a turning away from it. Ethics celebrates this world, settles disputes in it and fulfils itself in the world around. The whole idea of salvation is a degradation from the ethical point of view. Hence religion and ethics are irreconcilable.

CRITICISM

(1) This is a piece of incisive indictment. The phenomena of the moral consciousness are incompatible with cosmic teleology. From this follow, according to Hartmann, a series of consequences which ultimately end in the removal of ethics from any religious leaning. The only point about it is, that an ethics which plays second-fiddle to religion is bound to pass out of its own sphere and thus lose its individuality in due course. Ethics is likely to be left without an independent prop sooner or later. Then, it will have to transcend itself into a higher synthesis which can no longer be called ethics, or declare itself still autonomous even in the face of this need. Hartmann chooses to hold the brief for the autonomy of ethics at the cost of its final fulfilment. He treated the science all through, as if it were an independent one completely indifferent to all other questions regarding the ultimate nature of the universe. A simple scrutiny of the nature and content of our moral consciousness cannot stand on a scientific footing without going deep into its primal foundations. It is impossible to know ethics fully without knowing metaphysics and theology. An ethics put on its own legs will have the same status as sociology or economics. The one question that should be directly put to a moralist is: Can a man logically believe in moral obligation who regards the world as the resultant of some senseless clashings of atoms without end or aim? If a man's morality, after all, depends on his philosophy, there is no point in denying it. Ethics, as a science, must hark back to its metaphysical foundations and draw out its appeal from that source. A man who doubts or denies this may still be moral, but, with him, ethics does not carry the same meaning that it does to the man who regards it as an expression of the spiritual nature of reality.

(2) Hartmann is only following the entire argument of contemporary agnosticism and positivism in dealing with ethics as a self-complete science with its gaze firmly fixed on the phenomenal alone. His view of human nature is broad and deep as is shown in his analysis of values, but what it wants is logical clearness and coherence. No one can deny that there is a moral as well as an intellectual reality. That moral life

as such is independent of any theoretical understanding of it is also practically seen. But what we cannot believe is that this independence is absolute and ultimate. If the good is not also the true, the fabric of man's ethical life collapses with its inside fittings. One cannot permanently live on ethical insights that do not hold good beyond the grave. If in living the ethical life, one feels the conviction that he is touching the depths of the spiritual nature of life itself, his ethics cannot be easily undermined. An ethics kept in strict check by agnosticism as to the ultimates can never rise higher than secular utility. The ethical and intellectual man cannot long be kept apart. The battle between good and evil cannot be eternal. Ultimately, we demand an intellectual justification of our ethical life, a theory of it in relation to a metaphysics which demonstrates its need. If we deny the spiritual directions and constitution of the universe, there is no need for ethics. With it, it goes down to the level of a social science. If we do not see in the good man the image of God, we have missed the essence of morality. The roots of reverence and hope are deep in the absolute goodness which is reflected in evolved human beings with a greater degree of clarity. If the human goodness is the original and not a copy of the divine goodness, its power of appeal is feeble and its final worth is a matter of opinion. The moral structure of our life rests upon its ultimate spiritual constitution. It should be a definite postulate of ethics. Without this assumption, moral life becomes a life based on empirical claims. The objectivity of moral judgments can never be established. The real knowledge that our yearning ideals are the everlasting real is a persuasion necessary for the soul to behold its own grandeur. The secret of the moral life lies in its appeal to supreme reality. As Martineau put it: 'The rule of right, the symmetries of character, the requirements of perfection, are no provincialisms of this planet, they are known among the stars; they are signs beyond Orion and the Southern cross, they are whatever the universal spirit is' (*Study of Religion*, vol. i, p. 26). The ideal is no mere fancy of the 'Winged imagination' but the gleaming face of the real. Behind the 'ought' lies the 'is'. Behind our restless 'ought-to be' lies the eternal pulse-beat of the divine harmony in which nothing is unfulfilled. Its human side is morality. No one can

bear the full vision of the absolute. Without a touch of this transcendental beauty, ethics degenerates in the long run into first-rate secularism.

(3) It is a simple mistake to attribute religion to fear. A glance at the history of the world will show that the men who ever exhibited super-human courage are those that never lacked a faith in the ultimate goodness of God. Even a staunch exponent of ethical autonomy will not deny that Buddha and Christ stand out as the best ethical exemplars of the human race. A prince that left his empire in search of Truth through all its ascetic disciplines and the son of a carpenter who bore with divine dignity the cross for a purpose he believed right, are not expected to suffer from the 'fear complex'. It is decisively false to hold that religion is based on fear; the proper view is to regard it as an expression of hope. No truly religious man experiences fear and all history is a witness to it.

(4) It is a pity that Hartmann could not find in religion anything more than an indecent concern for the treasures of heaven. This only re-opens the problem of rewards. The question is, are all the prizes of the moral life blanks? This is a vital issue which a consistent theory of ethics cannot escape. If the just man is unhappy, ethics is a fool's game. That is why, even a strict stoic like Kant made a characteristic statement on the matter. The ultimate issue of goodness, as all must admit, must be happiness. The outward and inward fortunes of the soul must be proportionate. This is the Kantian argument for the existence of God as the moral ruler of the world. The distribution of rewards must be guided by the principle of individual deserts. There must be a final equation of virtue and happiness. A disinterested ethics is a fiction. For Kant, the equation of virtue and happiness is a postulate of morality. There are gaps in the ethical theory of Hartmann which can be filled up only by some such suggestion of the Kantian sort. If the rulers of the universe prefer the unjust man to the just man, it is better to die in the act of vindicating justice than live and be convinced that justice is everywhere defeated. The greatest tragedy of the soul is when it loses faith in God and goodness and yet lives in a desolate world, for fear of dying before death actually occurs. As Sidgwick

points out: 'when a man passionately refuses to believe that the wages of virtue can be dust, it is often less from any private reckoning of his own wages than from a disinterested aversion to a universe so fundamentally irrational, that good for the individual is not ultimately identified with universal good'. As such, a religious hypothesis of ultimate fulfilment for one and all, according to merits, is logically needed to prevent a contradiction in one of the fundamental branches of human thought. Nobody is wise in serving anything or anybody without a hope of reward. Nor is life so constituted as to permit such folly. It is a way of deceiving ourselves if we think that we are doing anything without a hope of return. Honesty will compel us to admit that we are loving God because it is the only proof against foolery. Even in the so-called disinterested search for truth, there is already a consciousness that truth is more valuable than falsehood. 'Morality for morality's sake' is as ineffective as the cry 'art for art's sake' which became a fashion with the Victorian aesthetes. Considering moral life on all sides, there is a need for adjourning to a future to achieve the harmony of virtue and happiness. If the sole reward of man's moral life consists in a noble bearing of adversity, we can forthwith declare that the Good is the biggest irony of life. On Hartmann's view, moral life would be a life lived in the pursuit of ideals which we are going to embody for a short time, to be handed over at the gates of exit without a tear. Such stoicism is entirely outside the pale of human achievement. If each man is not destined to get his due in the end, the moral life turns into an injustice to oneself and a sentimental reverence of the moving ironies in the guise of values.

(5) It is unsound to hold that ethics is self-complete. To fence ethical phenomena all round, it is not necessary to put back religion in a wrong place. God is no enemy of man even as man is no rebel against God. Hartmann is wrong in thinking that religion is chiefly given to the depreciation of this life and ethics to its affirmation. The fact is, religion looks to this life as a part of the beyond. It is committed to a life that is not merely temporal but eternal also. The other-worldliness implied in religion is a motive present in all higher pursuits. This 'solid seeming earth' is a ridiculous piece of

caricature before the glory and promise of the ideal. We are all living in counter worlds by the special equipments we possess. Where we rise to real levels of excellence we impose on the crude inchoate world a form more worthy of the dignity of man. The ideal is a call from eternity, a faint anamnesis of the perfection that timelessly is. Neither ethics nor religion is complete if confined to a fragmentary life that does not go beyond time and space. Religion is a more restless idealism than ethics and its quest is deeper and wider. Ethical life has no motive beyond the adjustment of claims and counter-claims and the holding of their balance rightly. Once a humanistic Utopia is realised, ethics must needs transcend itself into a higher aesthetic experience. If value and existence are correlated, its pursuit must somewhere lead us to God. No philosopher could ever dismiss the notion of God though he could destroy all false Gods. A secular view of life fails on many points. A little reflection on the transitoriness of finite life and its inequalities and uncertainties, together with the antinomies involved in all that is relative, cannot help putting us on the path of God-seeking. An ethics that is confined to the here and now cannot rise above the level of worldliness. We must have stronger anchor-holds for meeting the profounder needs of the human spirit. The merely fluctuating claims of a changing world can be met by changing morals. This life is actually nothing when the spirit is fully touched with the glory of the finest issues. To live under the spell of the vision splendid is itself blessedness. Happiness is based on the firm anchorage of thought and conduct beyond time and change. It is religion that gives us the hope to stand at our posts even when everything goes wrong in the world of ceaseless change. It is easy to put aside the eternal as childish, but the most difficult thing is to understand anything without the hypothesis of God. The human mind cannot cling long to the vice of departmentalisation. Sooner or later it bursts bounds and expands into a grasp of life as a whole. The other-worldliness of religion has never been to the detriment of this world and it is only the fruit of its great skill and patience for deep mining. Far from being an escape from the evils of this world, it is a message of hope and redemption. A worthy religion must also be a creative and spiritual energy that works in social life

backed up by an inward peace and a divine sense of justice. The heart of creative religion is ethical and aesthetic mysticism. Religion is communion with all that is divine. It incarnates and stabilises value. It captures the peace and beauty that characterise the 'free man'. Efforts at the overthrow of religion only changed its outer garb without touching its inner essence. Buddha laughed at all the Gods with the result that the Buddhists made him a God. The stuff of all true religion is indestructible. Life is mostly dull prose and hard routine and its meaning must be found in religion. If it cannot play the lute, lull our world weariness and compose for us the ballad of a Pilgrim's Progress, our acute sufferings and cruel tensions lose all their significance. An enlightened religion intuitively feels the imperishable oneness of all life. With the intuition of this oneness, the moral man would participate in the valuational wealth of this world. Our passage through the temporal is temporary. We feel the sense of a grand happening here and now because our destiny is grander than its minor struggles. A life simply trivial in itself takes on the grandeur of an epic with the ingression of a religious feeling. An ethics without this colour and strength of conviction is a poor Science that appeals to human mercy and earns its living in a stern world by exploiting the soft moods of man.

(6) An ethics that has no vision beyond the phenomenal is a failure. An all too mundane view of life without any appreciation of its ultimate destiny is bound to end in secular hedonism and, consequent on its failure, in pessimism. The drama of salvation is an esoteric motive in the kernel of the human heart and specially in the unlocked depths of its pains. In the wealth of moods that are scattered over modern life, there is the evidence of a great psychological breakdown. The modern intellect is caught up in a tug between man's primal need for salvation and the pride of his learning which has never matured into wisdom. A redemption up from the depths into a profound illumination becomes increasingly evident as we go on living. The nature of life is such that at no stage is it satisfied with its previous achievement. A feeling for 'eternal blessedness' touches the finest portions of the spirit through our major and minor tragedies. The craving for salvation into a state of immortal blessedness squares more with the findings of the

intellect and the logic of the heart than the notion that it is ethically degrading. The need for divine grace is everywhere manifest throughout creation. He who never felt that he was in bondage and that he should get rid of it sooner or later is leagues away from the supreme truth of life. On the principle of the higher explaining the lower, it is only the religious that can explain the ethical life. An ethics which keeps its distance from religion is for ever incomplete, because it can never overcome its antinomies from its own standpoint. Since ethics can never be an end in itself, and can never go beyond the notion of good and evil, its very limitations bar it from self-completion. There must be universal restoration as the final goal of human endeavour. Everyone must ultimately find his way to his true home for 'they also serve who only stand and wait'. There can be no eternal discord in the music of the spheres. There can be no unfulfilled work. Our life on earth can be nothing more than an incidental background to a higher drama of salvation under the presidency of God. If only all this tragedy, loss of life, decay of old hopes appeals to us to seek for a fineness beyond this faded earth, each of our personal tragedies can be cheerfully borne as a persuasive agent of the divine hand towards the 'peace and beauty that passeth understanding'. In the words of the Poet Browning:

'There shall never be one lost good!

What was shall live as before;
The evil is null, is nought, is
Silence implying sound.
What was good shall be good,
With, for evil, so much good more;
On the earth the broken arcs;
In heaven a perfect round.'

PART IV

MORAL VALUES IN GENERAL

I

INTRODUCTION

The first part of Hartmann's work is a prolegomena strictly metaphysical in character. The second part is a concrete and comprehensive unfoldment of the content of moral values. It is an endeavour to express a way of understanding human virtues and their place in the formation of moral personality. Perhaps, it is the most important book ever published in this branch of study. The great power of analysis he displays, his broad purview and subtle insight into the heart of human nature, and the aptitude of his specially coined terminology, are all overwhelmingly brilliant. The three volumes are not necessarily connected and each can be studied on its own account, though, doubtless, a conjoint study of the three furnishes us with an up-to-date posting in the great tradition of Ethical Realism. Though the first and last part may be proved to be of no permanent value in course of time, even those who do not agree with Hartmann's standpoint will have no hesitation in pronouncing that the second part is a masterpiece of Ethical workmanship, which no advanced student of the subject can afford to neglect. Starting from moral values as being nearest and best-known, he assigns their scales and gradings in a systematic scheme. After defining ethical values and marking them off from goods and situational values generally, he gives us in a series of sections, an exquisite study of ancient and modern virtues. There lies behind the whole effort, a generous taste unwarped by freaks or fads which gives it a value that transcends its more restricted aim.

THE PLACE OF MORAL VALUES

The term value is conspicuous in economics. In a broad sense, it is true to say that all existence falls under the category of values and that in the perspective of ethics everything has some worth or other. Moral values are different from goods values or situational values. Material goods have a goods-value.

The possession of them is a situational value (vol. ii, p. 24). Moral values are attached to the acts of persons. 'Only acts of persons can be morally good or bad' (vol. ii, p. 24). Moral acts show the motivated intentions of persons to persons. Though the intentions miscarry, it is only the intention and the disposition or personal attitude that goes with it that are judged to be good or bad. Though Hartmann criticises Kant's subjectivism, formalism, and intellectualism, on this point, he is at one with him. The good which confronts us in every situation is never single or complete. Clinging to each possible resolution is a group of goods, each having the same claim to be realised in one and the same place. Moral conflict is a peculiar happening. If it were between good and bad simply, the problem is already settled, because moral life would be the following of a given rule. Every situation in life happens to be the balance between good and good. Values are ceaselessly pitted against values. We are forced into the conflict and invited to do violence to one member of the opposition, as both cannot be, at the same time and in the same place. This is the height of ethical tragedy; to see the good and yet be compelled to sacrifice the same for another good. In every situation, a variety of values participate. There is a consciousness which weighs value against value. The nature of moral values is closely connected with their grading. To know values apart from value-relations is not possible. Without knowledge of their relation to one another, all knowledge of values remains abstract. The concrete sense of value is only a sense of its rank in a finite value-scheme. Immediately with the feeling for the value, a feeling for its place in the value scale is also experienced. When Socrates said that no one does evil for its own sake, he only meant that one always does only a good which hovers before his vision. Christian ethics places man under the spell of a lower power which robs him of all moral determination (vol. ii, p. 46). But this swerving, as a matter of fact, does not exist in man, though he is often overborne by the insistent strength of the lower values. In every concrete situation, through the mere juxtaposition of persons interested in the same goods, a condition is so given that every act, even every inner attitude, falls at the same time under moral points of view (vol. ii, p. 47). The consciousness of higher and

lower is utterly decisive. The morally selective consciousness of value is necessarily a consciousness of the scale of values. 'Immediately with the feeling for the value, there must be a feeling for its place in the scale' (vol. ii, p. 46). The value sensibility is primal and constitutes the corner-stone of moral discriminations. The quality tones of values constitute a complex scale with the middle reaches alone accessible to ethical discernment at present. The realm of values being an organised one, the task of ethics is to discover by empirical scrutiny the specific relations that specific values bear to one another.

THE CRITERIA OF VALUES

Five characteristics given by Scheler are examined by Hartmann in this connection as affording some guidance in the gradation of values.

(1) One value is higher than another in so far as it is more enduring. The super-temporality, timelessness of the value quality itself is what is meant. Moral qualities do not stand or fall with the act in which they inhere. For example, love has meaning only 'sub specie quadam aeterni'.

(2) That value is higher which is less subject to losing its distinctive quality by being shared. Thus, while material goods divide men who share them, spiritual goods unite them in the same act. Moral forces tend to unite all and scorn strife. The mode of their being is one for all.

(3) Though the basic moral value is stronger, the value dependent upon it is superior (vol. i, p. 251). Superiority and dependence are not antagonistic. The lower values are more basic and fundamental while the higher values are qualitatively superior.

(4) A value which gives greater depth of satisfaction is higher. A solid material satisfaction is superficial when compared to the elusive touch of art. The stoic indifference to outer fortunes is only the inward concentration on the imperturbable life in the depth of feeling for the highest value. Indifference to lower values is the reverse side of this strong attitude.

(5) An indication of worth-level consists in the degree of relativity to some specific value sense. Moral values are self-subsistent personal qualities with no relativity to the value sense of anybody. They are absolute. In the feeling for values

there exists an immediate consciousness of this absoluteness, in which the higher autonomy of these manifests itself. They are superior to goods values or to material values. The superior character of moral values is a matter of direct experience. The realm of values is unique with its own structures. The superiority of the moral values over the economic or biological ones is definitely sensed in the feeling itself which is the organ of valuational intuition (vol. ii, chap. iv, pp. 54, 64).

Hartmann observes that these distinguishing marks do not take us beyond a general outline. These no doubt enable us to distinguish between the more obvious classes of values, but they are not fine enough to decide differences of grade within the same class. For this purpose, these tests are too crude and the indication of the value-level too summary. Ethics is only concerned with finer discriminations. Super-temporality, indivisibility, dependence and axiological absoluteness are common to all the moral values proper. These four features evidently constitute marks common to the whole class. Depth of satisfaction is a great help. In honesty, truthfulness, goodwill or self-sacrifice etc., an increasing depth of inner assent seems to follow the review. But the kind of satisfaction varies qualitatively. By way of qualitative discrimination, a much finer perception of gradation can be attained. In the Nicomachean ethics, the valuational predicates are graduated according to rank in a moral scale. 'Not bad', 'worthy of praise', 'beautiful', 'worthy of honour', 'lovable', 'admirable', 'superb', form a series. The corresponding negatives are 'defective', 'not beautiful', 'blameworthy', 'disgraceful', and 'hateful'. Each series is further differentiated by an abundance of finer shades. Though the table of Aristotle is by no means perfect or exhaustive, it is a model for us (vol. ii, pp. 56, 57). There must be a primal feeling of difference of rank which corresponds to the type of response. This must be as original as the feeling itself which discriminates qualitatively (vol. ii, p. 59). The feeling of relation of height among values adheres to the primal feeling for value in such a way, that in any given case, the height of different values is easily sensed. Every concrete sense of value is primarily related to a scale of values. All living valuational feeling comes under laws of preference which are embedded in the order of valuational essences. This relationality

of feeling resolves itself precisely into the relation of 'higher' and 'lower'. This is called 'the axiological perception of height' (vol. ii, p. 63). It is the perception of an ideal scale *sui generis*. Pascal's phrase 'ordre du coeur' expresses the same. The phenomenon of preference is not apprehensible without a momentary deepening of devotion and a more attentive listening. As a fleeting phenomenon, it must be carefully hearkened to in its faintest whispers. Otherwise, it can be injured by rough handling. No human need of unity or a philosophical need of a system can change this circumstance. As such, the scale of values must remain a mere fragmentary work as compared to the philosophical knowledge of values (vol. ii, p. 64).

NO SUPREME VALUE

In Volume I, a number of historical ethical systems have been examined. They are shown to err through a one-sided emphasis on some values at the expense of others. Attention has been drawn to the error involved in the view that man possesses a knowledge of good and evil. Nietzsche was the first to explode this ancient myth. Man has not become as God, knowing good and evil. 'To this day he does not know what good and evil are. More accurately, he knows only little about them, only fragments.' For 'the good' is not as most philosophical theories hold 'the absolute unit of the morally valued'. Values are many. 'Their realm is a manifoldness, and we know neither the entire manifoldness nor its unity' (vol. i, pp. 83-4). Then, if there is a unity of good, it cannot be the unity of a single principle. It must only be a unity of system. But, even this assumption is a difficult matter, as there is no empirical evidence for it. The values of experience cannot be ordered in a linear scheme. We cannot even actually discriminate a more complexly articulated system, but only the inter-dependence and gradations of certain groups of value. As many of the values stand in antinomic relation to each other, it seems to preclude all possibility of a higher synthesis. But as system is a postulate of all coherent thinking, we can find it in ethics, in our recognition of the categorical character of obligation and in our ethical judgments. This presupposition should not be taken as setting aside the conflict in concrete situations. A monism of ethics must allow for a pluralism of morals. Its

principle of unity can have no more than the regulative function of an idea (vol. ii, ch. v).

Ethics always tended to assume a supreme value. It sometimes sought it in the strongest and the most elemental and sometimes in the highest of values. The ethics of pleasure, happiness, self-preservation and the Kantian ethics of universality have upheld the supremacy of the elemental. The ethics of Justice, neighbour love, universal love, have all stressed the supremacy of the axiologically highest value. But they are wrong. Ethics must always allow for an incurable pluralism as regards contents. The Platonic 'idea of the good' is an ethical idea devoid of definite content and lacking in distinctive marks. The idea of supreme value remains empty and affords no ethical insight. Even if it is agreed that the good is the centre of ethical values, nothing is settled thereby. It was Plotinus who said that the Good is 'beyond the power of human thought'. The question has relevancy for practical purposes, if it means that a plurality of values is self-contradictory. Obviously, it is not the case. A systematic co-ordination of diverse values can exist without culminating in one supreme point. Unity of the system is in no way dependent on the focal unity or the supreme value sought for. Even in the domain of existential categories, the ultimate which can be discovered is not a single ruling principle but a whole stratum of principles. All monisms are of a purely constructive nature. They issue out of a logical craving for unity. Again, the desired unity of values need not be a value itself. The principle of motion need not be motion itself, of life, life, and of knowledge, knowledge itself. Similarly, the universally ruling principle of the realm of value can very well be something else than value (vol. ii, pp. 66-72). There is no reason, why the supreme value, in the sense of giving the values their inner unity, should itself be value. On the whole, ethics should leave this problem unsolved, keeping all possibilities open. A desired unity should not commit itself to a monism of value, in the given multiplicity of morals. But, it can surely hold by a monism of ethics, in the variety of values. 'Nothing in the realm of values is more concealed than just this central principle (the good) which is assumed by all morality as self-evident, but which in truth is everywhere differently understood' (vol. ii, p. 67).

CRITICISM

In holding fast by a pluralism of values, Hartmann provides a counter-point to one-value morality. A one-value morality often degrades into fanaticism and easily forgets its own purposes. But is not a supreme value, at the same time, a fundamental postulate of ethics? If there is a higher and lower, there must be the highest and the lowest also, otherwise, the phrase 'axiological perception of height' has no meaning. Again, a man cannot walk in two directions or serve two masters. In the pursuit of all that is valuable, one is only realising the unity of the supreme value which alone is giving meaning to all other values. For example, supreme in Plato's Metaphysical hierarchy of forms is 'the form of the Good' transcending knowledge and being. He himself admitted that there is no writing of his on this subject since it is not capable of being expressed like the other branches of knowledge. The good formed the goal of all Plato's intellectual endeavour. There must be a supreme value to give unity and system to the whole domain of values, harmonising their antinomies in one sovereign and universal purpose. Otherwise striving disintegrates itself in a variety of antithetical pursuits. Our many pursuits can have significance, only when we realise that their initial frictions are bound to be transcended ultimately in the supreme value. Otherwise, plainly, none of our pursuits has any intrinsic worth. If we are unable to fill up the picture of the supreme value, it is because we have not transcended the sphere of valuational conflict. Our inability to outline the supreme good need not mean its non-existence. Every value has value, only because it finally carries us beyond the conflict and kindles in us the yearning for the supreme value. Though he has not looked at this problem in this light, Hartmann incidentally brings out the need for appreciating the variety and richness of moral life. Most moralities have an aggressive tendency to usurp power and set up valuational dictatorship. A man pledged to one and only one ideal, without knowing its relations to other ideals, is blind to the multidimensional richness of moral life. Every faddist is a strange case of pathology. Most of those who think that they are leading moral lives overlook the number of possibilities that bloom by the wayside.

Idealism without understanding and realism without capacity are sources of all mischief in the world. An appreciation of the abundant wealth of life adds more tolerance and goodwill to it out of its own fulness.

II

VALUES AS ANTINOMIC

Just as categories involve one another, so do values, though the nature of their implication is different. Some sort of correlation runs throughout the entire domain. Negative values are specially more closely related than the positive ones. Vices go hand in hand more than virtues. Ethical opposition, being a more complex one than the Ontological, is on a different footing. In dealing with this aspect of the question, the author once again brings to bear afresh, the insight of Aristotelian ethics. In every value, at some point, there is a catch which brings about a unique qualitative transformation. What originally was the condition of a good life becomes the basis of a bad one. The values of health, courage, etc., good in themselves, may pave the way for a fall. Any virtue set full speed ends in vice. Even truthfulness, a highly praised virtue, if adopted absolutely, only causes irreparable losses to those around. A good turns out to be a bad in so far as it disregards its complementary good. There is again an unavoidable opposition between complementary goods, as these claims conflict at some point or other. At the same time, in so far as a claim has a significant ethical stamp, it must bear essential reference to a complementary claim. This antinomic relation is evident in the case of justice and love. Justice is impersonal, mechanical and cold. Love is personal, spontaneous and warm. We do not like to be judged by those whom we love or love those who judge us. Lovers are proverbially blind and judges are proverbially strict. They are genuine contraries, if not polar opposites. Yet, they are also complementary, because, justice without love is itself injustice. By a fetish of principles, it is easy to forget the great motives of life. Love without justice terminates in a fateful attachment that sees no other's point. If it is open to one value, it is dead to ten others. It places faith in the place of reason and reigns reckless of results. Valuational opposites constitute a system of possible diversity

with more than one dimension. Each contrast is in itself a dimension and indeed a completely positive continuum. The dimensions interpenetrate and cross each other constituting a dimensional system. 'Thus in the realm of values there is something like an ideal positional system of possible values a sort of intelligible space' (vol. ii, p. 78). The dimensional system of opposites is an ideal 'valuational space'. A real antinomy is struck when it is beyond synthesis. When we find an irresolvable antinomy we have finally come upon the ultimately irrational and tragic in ethical life. The case of purity versus maturity is a typical example. There can be no genuine synthesis here as the movement from the one to the other is irreversible. A sophisticated man's desire to regain the lost paradise of a child's nature is doomed to be a sad longing. There is an antinomy between activity and inertia, simplicity and complexity, universality and singularity etc. On the 'further side' of moral values, there is antinomy between ethics and Religion. Hartmann regards the conflict between them as so fundamental that ethics must postulate atheism. But here again, one must avoid the error of treating as ultimate the thesis of an antinomy, which as its status indicates may be no more than a half truth (vol. iii, pp. 273-74). Values sometimes present such a tragic conflict, that the agent cannot escape from the taint of guilt, for, a greater guilt is incurred by fighting shy of the issue, than by facing it out straightforwardly (vol. ii, p. 208). But though such antinomies are insoluble at our present stage of experience, it does not follow that the antithetical values are necessarily on a par of complete equality. Though he denies the possibility of discovering a principle of synthesis, he cannot resist the temptation to speculate on the direction in which it should be sought. With this he refers us back to the Aristotelian Doctrine of the 'Golden mean'. The Golden mean does not represent the Good as merely the commonplace average. Each of Aristotle's antithetical disvalues stand in opposition to a distinct value. The Aristotelian virtue is a synthesis of two valuable, but in themselves one sided qualities. Thus *σωφροσύνη* (Sophrosyne) is in opposition to licentiousness, self-control; as against apathy, it is the normal ability to react emotionally. The virtue opposed to irascibility is mildness; but against the extreme of spiritlessness,

it becomes the capacity to feel righteous indignation. But all this is only a possible speculation (vol. ii, pp. 414, 432).

CRITICISM

An ideal synthesis of values is an ever receding impracticability in actual experience. The whole of moral life is based upon a basic contradiction. Moral values, so long as they do not transcend their antinomies have no claim to finality. To solve these antinomies the golden mean is no clue, since in the very ideal synthesis it seeks, it is again pitted against an equally strong synthesis of disvalues. Take the case of moderation. Is it not always opposed to excess? To resolve the antinomies you must transcend the antinomy. In the sphere of antinomy if not this, the other one takes its place. For the fulfilment of the moral life, speculative minds must turn to a different quarter. A strictly philosophical mind must run over the moral life quickly and lose itself in a higher harmony to escape logical contradictions. Though Bradley's central thesis is correct, he went wrong in speaking of the moral life as based upon the two incompatible ideals of self-sacrifice and self-assertion (*Appearance and Reality*, pp. 414 and 415). No one follows either; moral life is based upon the pursuit of the Ideal only. Self-sacrifice and self-assertion are not the points at issue, though they form a formidable pair of antinomies. The Ideal must be a finished and faultless sample of perfection. We pursue neither our self-seeking nor our self-sacrifice but the Ideal itself. The Ideal should not contain any contradiction; otherwise, it lacks perfection. The Spinozistic phrase 'Amor Dei intellectualis' expresses this. Applying the principle of non-contradiction and perfection, moral values are seen to lack still something. The conflict between Good and Good is itself the first contradiction implied in moral life. Ethical tragedy is the deliberate turning down of one good in favour of another as if it were no good but evil itself. As such, every good is also an evil on the sly. If this is a fact, where is finality in this preference? All moral values lose their worth at a certain point. The so-called Goods and Virtues, on a wider view, can never be conceived without a complementary train of vices and evils. Ethics is only a valuable preface to the grasp of the ideal. The antinomic structure of values always presses ethics

forward into a higher phase of critical enquiry. When we pay off our obligations, our moral doing and undoing coincide. The end of moral life is *Nirvāṇa*. Ethics is not rendered farcical, because, it cannot hold its sway for ever. There are more permanent concerns of the soul, more abiding goals that lure it away from its false tangles. In the end, all phases of life are drawn into an eternal moment of *Nirvāṇa* filled with beauty and peace. The drawbacks in the merely moral life must be set right in the finale of human destiny.

III

ECONOMIC FOUNDATIONS OF ETHICS

The realm of ethical values is an organised material continuum or more correctly a series of continua. The task of ethics is to discover their inter-relations. The values pursued, as distinguished from the values of the intention or disposition, are not themselves moral values. 'The end of straightforwardness is not to be straightforward for oneself, but that the man to whom one speaks may learn the truth' (vol. ii, p. 31). The values which in our ethical life we aim at realising are not moral but situational values. We induce a moral order into the relations of Goods to persons in social contexts. Moral values proper presuppose, as a requisite for their actualisation, these Goods and situational values. Thus, honesty presupposes things worth stealing and persons who suffer on that account. If property has no value, there would be no temptation to steal it or own it at another's expense. If Goods have no value the occasion for honesty and dishonesty also ceases. Situations can exist on their own account independently of moral values, but moral values cannot exist in their own value independently of situations. From the standpoint of intrinsic worth, of course, moral value is completely independent of any external reference. But, from the standpoint of its actualisation, it presupposes the actuality of existing situations possessing a value of some kind or other (vol. ii, p. 24). We have already noticed the inter-relation and stratification of the axiological realm by a comparison with the ontological structures of categories (vol. i, p. 251). Any graded system of *a priori* principles must present a definite categorical formation. In Hartmann's system, dependence and superiority are not antagonistic to each

other. It is rather the categorical law upon which his whole system of values is based. The higher principle is always the more complex, more conditioned and as such weaker. The lower is always the more unconditioned and more general, and as such stronger (vol. i, p. 251). Material and situational values are the simplest and most unconditioned, immediate and essential. That is why the most grievous transgressions are those against the lowest values, though the greatest moral deserts attach to the highest values. In the sphere of goods values, it is clear that a loss of material goods is in general a more serious matter than a loss of spiritual goods. A threat to life and limb is grave though mere life on that account is not the highest Good. The fulfilment of the lower takes unconditional precedence, because, with its violation, the higher also is put under risk. There is a universal condemnation of the violation of such values as life and property, respect for which is unconditional. Moral and spiritual values being finer and more complicated in pattern, are more dependent. As such, they present only a weaker claim. A mere failure in friendship and untrustworthiness, though moral defects, are not crimes. Nevertheless, their qualitative superiority is sensed in the feeling of approbation that they generally bring. The realisation of the lower is the bare minimum, upon which the higher can thrive (vol. ii, p. 53). Moral values are all through dependent upon the non-moral values of the material goods or human situations. The distinction between the moral and the non-moral values is, of course, fundamental, as drawing the line between ethics and economics. Apart from economic values, morality has no basis to work upon. The connection of the non-moral values (goods values, economic, situational, etc.) with the moral values is not merely an outward one, but is 'essential, inward and material' (vol. ii, p. 24). 'It is an unequivocal irreversible dependence of the higher upon the lower' (vol. ii, p. 25). Where the lower value is weak, the higher has no place. Bodily hunger means the loss of manly pride and spiritual dignity also. But we do not, of course, regard a person as specially worthy because he respects property or attends regularly to his bodily needs. Here, the elementary value is the stronger and the value dependent upon it is the superior.

CRITICISM

The utter dependence of the moral on the non-moral values for actualisation is one of the solid points of the new ethics. In the law of Categories, Hartmann supplies the key to the ethics of socialism. Hitherto, it is only socialism that has realised that bodily weakness means the weakness of the spirit also and that poverty means the loss of pride and with that all the noble vanity in the human being. One can afford to neglect music and painting until the whole of society is safe on its most elementary side. An ethics without economics, though theoretically possible, is a practical tragedy. Hartmann has moved into the centre of his thesis this critical note of socialism. As such, he must admit that the pursuit of a higher value, when a lower value is unsatisfied, is a sin against morality. The study of economics through ethics, and ethics through economics, is a fresh field of research which contemporary social sciences must undertake, to reconstruct the ethico-economic basis of civilised life. The truth is, everyone is in a false position in a society until his possibilities are realised. We are all ready to do the other man down at the slightest provocation. For the most part we drift with the society into which we are born. The worst of us are the wise in our generation, who make the best of its accidents without changing its morals. Intellectualism can never get on on easy terms with plutocracy and snobbery. We are badly brought up without love for each other and spoiled by economic causes. In all ages there have been selfish pleas for economic inequality which is the source of all unjust delight. A drastic spring-clearance of the businessman's civilisation, with a pervasive human sympathy and a shrewd insight into the realities of economic and political life is the need of the hour. The Victorian era of self-complacency has drawn to a close. The present depression is too keen and its implications for the future of our race too vast. The efforts of our modern industry and of the financial arrangements associated with it are ruinous to a considerable portion of society. In this great century of gloom, we have to seek with vision and courage the technique by which the good life may be made possible on this earth, once again. The dividing up of our wealth on ethical lines is the first condition of organised society. It needs

nobody to convince us today that our system of distribution is wildly wrong. We have million-dollar-fops side by side with paupers worn out by unrewarded drudgery. The problem of all civilised countries today is only the problem of distribution of wealth. If God is the ultimate Maker of everything, all we have a right to do with our production is to feed his sacred limbs. The question is only ethical. We have to produce enough for all of us on one side and prevent the theft of this produce by a few on the other. Fortunately, the problem of production has been solved for us by science. It is now for the social sciences, under the Captaincy of Ethics, to solve the problem of distribution. Intelligence is soon bound to revolt against every form of waste, taking the badge of power in the long run, to bear down the bars that lie in its way. The ethical world does not arise until the economic world is already born. In a life in which the best draw a blank and stand aghast at the ways of man, ethics is only a mask and a decoy. The life that lacks material success can have no other virtue left in it, except a secret envy of the more fortunate and a vague dread of the days ahead. Defeatism and dissolutionment are not wisdom though we pass from pain to profundity. The move towards the new social order must be rapid, otherwise the moral man will perish in an immoral society. At the same time, we have to note that the higher values should not be surrendered to the claims of the commonplace. Dialectic materialism fails to appreciate the beauties of the higher life. Life has no meaning so long as it is a competitive struggle. The vainest of us elevate a simple desire for social success into a gripping elemental passion and spoil the beauty of a really good life. Marxism made a crude appeal to the economic interests of man and failed in its faith in him. A true ethico-economic philosophy should never lose sense of the depth and dignity of human nature. Life is nerve-racking and distracting until the conditions of its survival are secured. Economic materialism must be discarded with good grace once its part is over. Man is an eternal dreamer who does not 'live by bread alone'. History is nothing but the poignant record of man's moral struggles at self-creation in the line of his ideals. Our duty at present is not so much before God as before our own fellow human beings. When we take a bird's-eye view of the way

humanity has travelled up till now, its many side turnings and meanderings, we become a little sad about the probable destiny of a race that has produced the Buddha and the Christ. If we are wiser for this sadness, there is hope for man and hope in the future.

PART V

SPECIFIC MORAL VALUES

(1) THE GOOD

The differentia of Moral values lies in its connection with freedom. Individuals assume responsibility in their regard and are held accountable for actions flowing from them. They also experience a sense of guilt over lapses and satisfaction over fulfilments. The specific quality called 'Goodness' is not, of course, by any means the whole of moral value, nor even its last unit in the scale. It is, on the other hand, at the very basis of moral life and contains the bare minimum of morality. Though the loftier achievements of personality, heroism and moral greatness are not meant for all, it is expected of everyone that he will be good. The orientation of our personal life according to the scale of values is the objective ideal of goodness. As such, it forms a fundamental moral claim made on everybody. Though moral grandeur is not expected of everybody, it is expected, that one and all will be good within the scope of each one's ethos. The chief mark of goodness is the preference of a higher value to one lower in the scale. The mark of disvalue, of badness, is the preference of the lower value to the higher. Here is contained the open suggestion, that every voluntary act is directed only to the realisation of a good of some kind. The Socratic dictum that nobody does evil for its own sake contains the clue. A Satanic being, making evil as such his good, is an axiological impossibility. Since the primary feeling of value is a feeling not of a single value alone, but of values, as partially related and roughly graded, it is possible to pursue values and yet not escape guilt. To be moral, one need not aim at the highest alone. As each act refers to a specific situation, the moral demand relates only to the highest within the scope of the same. Moral goodness

is realised in man, only as the value of rightly directed behaviour (vol. ii, pp. 171-91).

(2) LIFE AS A VALUE

All higher development of spiritual and moral life is conditioned by the development of the life which carries it. The footing of the natural being in the form of vitality and strength is man's hold on existence, without which he would only float in the air. Here is the earthly weight which holds him down and which he must overcome at every step upward. But here also is the source which sustains spiritual life, over against which stands death as a disvalue. It puts an end not only to the body but also to the spirit and personality. The unique grievousness of this disvalue becomes evident, from the seriousness of murder, the moral guilt against life. Injury to life and every weakness of it bear the stamp of elemental anti-value, of death, of the vital downfall. All excessive sufferings herald that disintegrating pessimism of those who are sicklied over and made unfit for life. The value of life that is sound at the core is that it approves of everything natural. This ethical attitude found its classical expression in the ancient view, that everything natural is beautiful and innocent. Where the biological soil is barren, man is doomed with all his values. Ethical anti-naturalism is an error. Asceticism is hostile to the natural and regards it as evil. Life is not created by man but is given to him or laid into his hands as it were. He can lead it to great heights and in this tendency, natural value passes over into moral value (vol. ii, p. 131).

REFLECTIONS

The recognition of the rights of elemental values in the ethical life is one of the outstanding contributions of the new ethics. Existence is the basic value. The ancient Hindus expressed a similar view in the Aphorism 'Śarīramādyam khalu dharmasādhanaṁ'. They regarded the body as the very vehicle of the good life and kept it in form for the higher life of the spirit. As the higher life is based on the lower, it is the moral duty of every citizen to insist upon his economic minimum. We are still glossing over this dark chapter of human life which sent its noblest sons begging at the doors of prosperous fools.

The mute millions seem to be slaving all through life, only to make a few crafty men safe on this side of existence. Half the pathology of the times is the direct outcome of economic maladjustment. Christ was the first great communist of the world, though the ethics of Christianity was a gradual turning away from the teachings of Christ to the 'Survival of the fittest' scandal of Darwin. The time has come for a corporate effort at full self-direction in human life, through a lightning revolution in the ethos of man. Economic mishaps are no longer acts of God but relics of the old barbarity which still believes in gold as the solvent of human ills. Through a thorough overhauling of the Ethico-economic groundwork of civilized human life, the technique must be sought out, to organise the means for the great ends that the moral race is destined to follow. The tragedy of the present order of civilisation is that it sinned against elemental values and missed the significance of its whole pursuit.

(3) SUFFERING AS A VALUE

Suffering has a value. It has the effect of liberating a deeply inward and mysterious power. The incapacity to suffer, the impossibility of bearing grief and misfortune are anti-values. 'When a dire misfortune has passed away, it leaves the man, that is incapable of suffering, broken, morally warped, disfigured, weakened: he can no longer stand up, he has been damaged in his fundamental worth.' Suffering is the energy test of moral being, the load test of elasticity. 'Within the limit . . . the nearer to it so much the more—suffering means the awakening of his innermost moral nature, the unlocking of the depths of his being, the liberation of his noblest energies.' Whoever has been tested in suffering 'is tempered steel.' Moral capacity is stored up in him. He is like a 'steel spring which returns to its original strength' or to use the analogy of Nietzsche, he is 'like the strung bow which waits for the arrow'. 'Great pain opens the deep places in a way the untrained person does not dream of. And not only the depths of one's own heart but the heart of others, even the depths of the general life with its inexhaustible richness of opportunity. One's whole attitude towards life is changed.' The gaze of the unburdened man falls upon the sparkling surfaces. The man matured in suffering sees the

same situations and conflicts, the same aspirations and struggles, but he sees also below the surface. He can share the life of others and his outlook is broadened and sharpened. 'In suffering for a person there is a puzzling and unmistakable depth of participation, a communication with him, which for inward depth has no equal.' 'A mother loves her child not the less on account of the suffering which it brings her, but the more; and for nothing in the world would she allow herself to be robbed of this.' In this way, 'to suffer for his name's sake' hovered before the first Christians as the highest participation in the person of Jesus. With suffering the appreciation of happiness also deepens. 'The moral greatness of a tested character is far removed from all anxiety to flee from pain and hardship, from petty fear and worry. The quiet firm nature of the tried soul does not crave for pleasure and happiness.' And just for that reason, according to the law of happiness, it comes to him (vol. ii, p. 138).

REFLECTIONS

That suffering is a value is not an easily acceptable proposition. Though all suffering does not come to injure, three-quarters of our intelligent effort is only directed against the invitation of the same. If suffering is a value, we must be capable of wishing it for others without moral stultification. But, can we, with a clear conscience, wish the loss of another's wife or property? If we wish for the fall of the man that caused us suffering, it is only the outcome of the agitations of the moment that cause a partial blindness. In truth, we can never wish suffering for another without an element of self-degradation. And if we cannot wish suffering for anybody, how can it be a value? The truer view would be to regard suffering as a necessary evil with which all living creation seems to be confronted. Compassion and courage are two monumental virtues that minimise the force of this evil; courage in our own adversity and compassion in those of others. A great ship asks only deep waters; a trained soul in the school of suffering is always lavish of his compassion and is no longer duped by the gay cynical world which passes over the deepest sorrows of its neighbours with an air of self-complacency. While much that Hartmann puts in on behalf of suffering

is true, the opposite also is the case with people who have gone through prolonged suffering. While some men, who have suffered, want to prevent it for others, some are interested in assiduously procuring it for those who have not yet known what it is to suffer. While suffering makes a wise man wiser, it makes the less wise a regular disciple of the devil and a colleague of the darkest gods in nature. Every cynic is a hardened romanticist and every romanticist contains the rude germs of cynicism. The chief cause of all suffering is 'attachment' and the only way out of it is 'detachment'. Ignorance is the cause of the same and knowledge is the cure of it. In the state of highest virtue there can be no shade of suffering. Epicurus held the virtuous state to be a 'tranquil, undisturbed, innocuous and non-competitive fruition, which approached most nearly the perfect happiness of the Gods, who neither suffered vexation nor caused vexation to others'. Generally, the man well poised in all the humours gets the greatest fun out of life paying the smallest bill. To seek suffering is a masochistic perversion, when it can be helped; while, to avoid it, always and at all costs, is not a sign of noble behaviour. But in no case can it be regarded as a value to be wished for. A suffering object is a sacred thing thrown as the first charge on the conscience of the moral world. The only occasion suffering is permissible is, when, by undergoing a smaller suffering, a greater suffering can be avoided. What is valuable to us is discontent and moral indignation, but not pain and suffering that make of life 'A vale of tears'. We can idealise suffering only when we have not suffered enough; for, there is nothing particularly elevating in the sum of pains that life holds in trust for most of its unlucky members; while, in the flashes of beauty it throws, there is a craving for immortality, for closing up with the beatific moment. The first and the last act of a noble mind will be to put an end to all suffering.

(4) HAPPINESS AS A VALUE

Happiness includes pleasure, satisfaction, joy, blessedness—and between these an extremely varied scale of spiritual states in the manner of participation in values. A man can bear only a limited measure of happiness without sinking morally. Man cannot bear both extremes. Those that are spoiled by happiness

become shallow. Our nature cannot, without damage, suffer the exclusive cultivation of one value only. Precisely what happiness lacks, suffering furnishes. It deepens and tempers the man and sharpens his perception of values. But all happiness cannot be called superficial. There is a deep and level happiness which does not exist without a tinge of suffering. An exclusive ethics of duty is blind to the value of happiness (vol. ii, p. 160).

REFLECTIONS

Though Hartmann is no Hedonist, he recognises the value of Happiness. The Hedonists are right in their fundamental philosophy of happiness. What else can be the aim of life but happiness, and more of it? Hartmann is not a thorough-going Hedonist, though the trend of all ethical life is towards the supremest state of virtue. If all the satisfaction that culture and courage bring can be taken away from life, all that remains is the cruel fun of knowing that we die. It is a form of cultural snobbery to hold that it is not happiness that we follow directly or indirectly, consciously or unconsciously. Historically, the Philosophy of happiness defeated itself, because, it was unlucky in the selection of its means. Happiness is not a thing to be sought outside the self. If a man cannot find happiness in himself, he can find it nowhere else.¹ The difference between the Hedonist, and for example, a Vedantist (who may be regarded as professing Eudæmonism) lies in the fact that the latter looks on happiness as not external, but as rooted in and identical with the self. The pursuit of happiness is nothing but self-realisation. While pursuit of pleasures has no doubt to be condemned as being the pursuit of the lowly, impermanent and degrading, the pursuit of the happiness which is the self is not merely praiseworthy but the only intelligible one, since all other goals derive their worth only as fragmentation of that supreme goal. The Indian Sruti declares (tarati śokam ātmanavit) the knowledge of the true self to be the only authentic means of gaining happiness that is unalloyed. There is no other conceivable way of reaching that level happiness which is not marred by secular strains. New creeds open new

¹ Sarvam paravaśam duḥkham sarvamātmavaśam sukham.

avenues of comfort and new religions new paradises, but the inside of man is full of punctures needing the knowledge of the self to make it whole. Some seek eternal truth and others eternal beauty only for the sake of the highest spiritual happiness. Mankind thinks that happiness is innocent while it is the very bloom of a beautiful soul versed in the art of the self. Without self-knowledge there is no genuine happiness and without genuine happiness our short life is a prolonged tragic joke set in the worst of tastes. The goal of life is real happiness and the ground of this is the knowledge of reality. Even a Dante, Milton or Kant could not conceive of a heaven without a balance of happiness on the side of virtue.

(5) JUSTICE

The primary significance of justice is in its tendency to encounter the egoism of the individual. However unlike men may be in character, disposition or social position, there exists a court of appeal before which they are equal. The tendency of justice is conservative. The communal, cultural and higher spiritual values can flourish only where life, property and personal freedom are secure. The richer and more varied patterns of moral life cannot begin until the simpler circumstances of their evolution are furnished. Justice is the moral tendency to provide these conditions, and is the minimum of morality. 'If we bear in mind that the state together with the legal institutions is a structure continually undergoing an inner revolution and never attaining finality . . . the revision of the existing law appears as an inevitable consequence of the universal legislative trusteeship. . . . We have a share in the guilt of each individual. All of us are called upon to think about the transformation of things which is required by the sense of justice. 'Through solidarity man outgrows himself by devotion to his perpetual task as the architect of the community and the creator of law' (vol. ii, p. 228).

REFLECTIONS

The glaring problem of the age is the reconciliation of economic socialism with political liberty. There can be no civilisation without security, freedom, and legitimate self-expression through the individual ethos. Political liberty

dwindles into a zero if it is not backed up by economic justice. The critical hour has arrived in the history of our race, and in the solution we offer to this problem with the sense of justice at our command lies the future of humanity. Our whole fabric of the modern order is going to be smashed on the one grim paradox of poverty in the midst of plenty, if the ethical experts fail to play their part with a divine sense of justice.

(6) WISDOM

'This is fundamentally different from knowledge, insight, foresight, or inspection. It is the penetration of the valuational sense into life, into all discriminations, into every reaction and action, even down to the spontaneous valuational responses which accompany every experience; it is the fulfilment of one's own ethical being with its points of view, the fixed and basic attitude of the practical consciousness towards values. In a strictly anti-intellectualistic sense one might indeed call it ethical spirituality, the attitude of the ethos as the ultimate spiritual factor in humanity dominating the whole life.' 'It is a kind of ethical divination, a foreboding presentiment of the wider perspective.' Ethical divination is at bottom the living sense of life. With a thousand tentacles the wise man reaches out beyond himself and his own limited understanding. He does not live in what he already knows of himself but always 'a span beyond' (vol. ii, p. 238).

REFLECTIONS

'Viveka', 'Antahkaranaparipakva' and 'Samyagdarśana' are the cognate values set forth by the Indian thinkers as the outfit of the moral man. Ethical divination must be carried into profounder depths by illumination born out of 'Samyagdarśana'. The finest point of ethical elevation is sensed in the maturity of the 'Antahkaraṇa', the 'ordre du coeur' of Pascal.

(7) COURAGE

'Wisdom is a value which stirs man on to the choice of ends, bravery to the execution of them.' 'The most conspicuous form in which this virtue manifests itself is the outward bravery, the ability to stake one's life, the spontaneous facing of extreme danger, the standing at one's post or manliness as

the ancients called it.' 'It inheres in all decisive effort. . . . wherever there is an element of adventure in a situation which requires personal commitment and demands sacrifice.' A brave act may be worthy of a better cause. Moral life is a venture and requires courage at every turn. 'Along with the courageous deed must be classified the courageous word, conviction in opinion, bravery in truth, confession and thought; and not less courage to oneself and one's feeling, one's personality, the courage of great emotions, of fateful passion (the special field of false shame, fear of public opinion, a cowardly hiding of oneself). Indeed there is such a thing as the courage to live, to undergo experience, to see things through and know their quality, not less than the courage to be happy' (vol. ii, pp. 245, 246).

REFLECTIONS

Neither Aristotle nor Hartmann gives us a complete insight into courage as a value. Aristotle makes courage the golden mean between rashness and cowardice. But courage is neither a golden mean nor a simple quality but a mass of components held together by fulness of understanding. There is no courage without knowledge and all genuine heroism is based only on this foundation. To meet life on one's own terms, one needs courage. All things serve a brave soul and the world is just what he makes of it. The ancient civilisations fostered the ethos of bravery through a dignified literature of the actions of great men. The ancient Romans placed the statues of heroes in their houses in order to inspire their children with grand models. Today, they are replaced by the photos of Greta Garbo and Maurice Chevalier. A critical analysis of life on all fronts gives us the key of it in the word 'courage'. In fearlessness begins a new life. The Upaniṣadic seers laid great stress on strength as the great virtue needed for the spiritual adventure. (Nāyamātmā balahinena labhyaḥ.) Success, joy, satisfaction, freedom from anxiety, exemption from meanness, and all those finer graces which glorify our little day here are the royal vestiges of courage. If courage is gone from a man's life, all the rest of it is a reaction to fears. But, even the bravest are afraid of doing that which is mean. A great portion of the courage that is needed in the world is not of a 'Rājasic'

kind. The commonplaces of everyday life need courage to be honest, courage to resist temptation, courage to speak the truth, courage to be what we really are, and not to pretend to be what we are not, and sometimes, perhaps, a courage even to pose to put down injustice. There is again strong courage needed to live honestly within our own means and not dishonestly on the proceeds of fraud protected by law. A great deal of the misery and vice of the world is due to the lack of 'Sāttvic' courage. It is worth while writing on our doors the wise and old saying 'Be bold!'—'Be bold! Be not too bold.' The highest occasions for courage arise in our minor struggles. There are great and unknown heroes and saints who carried on an inch to inch fight with the fatal invasions of want, calamity, turpitude and even physical break-down through bad nourishment, to whose memory the trumpets do not sound. Life, misfortune, isolation, abandonment, poverty, illness, disappointment, failure, and worst of all, that sinister sense of a ruined life are the gladiatorial halls where the finest men of this earth waited their hour of judgment without regrets, fears or hopes. The conversion of knowledge into power is the work of courage and the elevation of power into purity is the work of knowledge. In the ethos of the 'Sthitaprajña' enunciated by the Gītā, the morally perfect man of Spinoza and the super-man of Nietzsche, the solid ingredient is courage born out of understanding.

(8) SELF-CONTROL

Our instincts and impulses constitute an inner world waiting to be exploited. 'The negative side of self-control is directed exclusively against excess, lack of balance.' With the ancients, so far as they did not lose their balance through the excess of asceticism, self-control culminated in the 'inward reconciling beauty of the man whose character is completed and become steadfast'. Nothing is so radically contrary to this ideal as the stoic 'blunting and coarsening' of emotion simply for the sake of serenity and the ability to endure everything. Far more akin to it is the epicurean refinement, the enrichment, the 'rounding-out' of the emotional life leading ultimately to the enhancement of the capacity for enjoyment in the sense of ethical good taste (vol. ii, pp. 249-51).

REFLECTIONS

Hartmann should have chosen this place to estimate the ethos of asceticism and aestheticism. The significance of these two remarkable ideals cannot be passed over in a comprehensive thesis on ethics. The stoic represents the renunciant, impassive and serene attitude towards life. The aesthete represents the attitude of gratefulness to life with a cyrenaic eagerness to taste, to see, to touch and to live in high-pitched sensations. The stoic is above regret, fear and hope. The aesthete finds beauty even in the mad ravings of King Lear, in the tragic horrors of the *Oedipus Tyrannus* or the *Ghosts* of Ibsen. Stoicism is erroneously regarded as a coarse and obscene outlook on life. But, the stoicism of the imperial type, perfected by Janaka and Marcus Aurelius, was no rude and unkempt thing, but a refined and delicate discipline in the grand style of life. Aesthetic culture aims at an artistic ordering of life through a many-sided expression of the ethos. Both ideals are a lesson in the skilled cultivation of existence. In its extreme form, the ascetic ideal throbs with the spirit of inner revolt, a proud dissidence with the lies and follies of the world. Nevertheless, there is a lurid flash of beauty in the morality of renunciation, in its wanton wreckage of all the spurious values which are sacred to mediocrity. But both ideals are one-sided; the one suffers from a surfeit of pleasure and the other from an excess of humour. The aesthete seeks sensations only to miss them the more he seeks them. The highly coloured moments of life are few. And when the great moment arrives, it falls flat on the aesthete because, he was on the tip-toe of anticipation which already exhausted his capacity to enjoy. The epicurean, bent upon 'living in the full stream of sensations', in the phrase of Walter Pater, requires a stoic probation. The mere ascetic and the mere aesthete alike lack the secret of genuine cheerfulness born out of understanding. All the same, both are equally fascinating ideals, equally fundamental reactions to an equally accommodating life. If the stoic turns away from society, it is only from the crowd of vulgar snobs who lower the valuational standards of life; if he develops the skin of a rhinoceros, it is only to screen his inner compassion for a race which has cajoled itself into an acceptance of the burden of the flesh and

foists hopes on it. The ascetic ideal lacks all-roundness, and carries its regard for one value to the extremes of forcing away the others. Though the ideal of the aesthete aims at wholeness, symmetry and harmony, it lacks the masculine grip over the treacherous emergencies of life. Here, the ethics of the golden mean breaks down. There is a crisis even in the cosmic rhythms. The superb grandeur of the death-dance of Siva over his worlds in ruin symbolises the ethos of perfect strength. Real moral beauty is attained when the ethos is alive to the fulness of life with a splendid strength of detachment. A stoic dignity of spirit and an epicurean refinement of taste are called for, to express thankfulness to life. The pattern ethos is a harmony of moods, a balance of humours, with a spice of elemental strength, leading to the gracefulness of personal poise; a masterpiece of invulnerability, in peace, power and beauty. The Greek ideal of beauty and the Hindu ideal of detachment blend into a sterling formula of the higher ethos, giving its owner the proud secret of the dignified handling of life.

(9) PURITY

As a value purity is more akin to goodness. He is pure whom no desire leads astray and no temptation allures. His ethos consists of an inner tendency turned away from disvalues. The man of experience has passed through conflicts and his eyes have been opened at the price of innocence. Ignorance, simplicity and childishness are all worthy in the eyes of purity. They constitute 'Sancta Simplicitas'. The morally complex character is uncertain and does not easily walk on the straight path. 'The simplicity, straightforwardness, guilelessness of the pure possesses for the man standing in the midst of his diversified experiences and burdened by them, something convincing and redemptive.' 'Purity of heart is the primal Christian value. Blessedness is the ethos of the child. Aristotle denied to the child all capacity for happiness though in happiness he saw all moral fulfilment. But like goodness and nobleness, purity also is the basis of a series of well-known values. Sincerity, frankness, openness lie in the same direction. The pure have nothing to conceal as the shame of guilt is lacking in them. They hate the mask and their nudity is not nakedness. The pure lack the worldly wisdom for subterfuge. To the man of the

world, he is, in his ultimate nature, incomprehensible. The worldly man is incapable of being straightforward and clear-sighted. The pure can understand the pure. The pure mind has the influence for good. In his obliviousness to evil, he becomes a symbol and attracts the fallen and the morally prostrate. In his presence the worldly wise man finds a charm which is the education of the grown-ups through the child. Perfect purity edges on holiness. Purity is irrecoverable when it is lost, and is antinomic to maturity (vol. ii, pp. 211-21).

REFLECTIONS

Purity and maturity are not insoluble antinomies as understood by Hartmann. These are simply two different values that can co-exist in the same person without contradiction. Purity if it is the virtue only of a child, is anterior to all ethical circumstance. Then, how can it be a virtue? As the German dramatist Schiller expresses it 'Happy child! the cradle is still to thee a vast space; but when thou art a man, the boundless world will be too small for thee'. Here, 'the boundless world is too small for thee', because, you are reacting to an infinity waiting to engulf you. He who does not dare and dream cannot fare well in the moral adventure. It is, after all, circumstances that reveal men in their true colours. Life is full of insidious plots for the overthrow of the soul. Wisdom consists in keeping a stiff rein and moving gently on. The greatest art is the art of moderating haste. It is always best to be at a safe distance from vice and sin and avoid the need for recovery. But, because a man has seen 'a bit of life', he need not be refused admission into heaven. The craving for a return to a child-like innocence and simplicity is never found in the line of higher thinking. Why should we fall back on the ethos of the child which we have discarded when we passed into higher thinking. Why should we fall back on the ethos of mere mortals when we have passed into the ethos of the superman? There is no limit to this range of transcendence, except the limits put by fear and despair. The value of purity, as a moral virtue, consists in its being proof against corruption. The ethos of the 'Karma Yogin' set forth in the *Gītā* is one of the finest ideals that combines purity and maturity into a higher synthesis. One can be 'in it' and yet 'out of it'. Stand-

ing still in the midst of motion and keeping pure in the midst of all the temptations of the under-world is a feat of ethical strength. But, without this trial, a supposed pure man does not possess the valid pass-port. It is a mistake to suppose that all change is corruption. Man is not born white to be coloured black by life. Change is the nature of the non-self. The spirit is unchanging. In the midst of a full and many-sided life, without being a child or a recluse, one can remain chemically pure, by keeping a psychic distance from all that is objective. The celebrated poet Kalidasa gives us the most beautiful concept of detachment in his description of *Īśvara*, the Lord of the worlds united with his consort, supporting with his eight forms the entire universe, yet, himself remaining free from the tumults of the ego. The man of great insight, even in his most enthusiastic participations in the ways of this little world, is still, essentially, a spectator. How can a looker-on be polluted by a strange performance going on without an end or beginning. To be pure is to be detached in the midst of the flow.

(10) NOBILITY

A mind is noble which is directed to the high, the ideal, and is detached from everything trivial and secondary. By its very nature, the noble is not the concern of everybody. It is exclusive and chooses special values. In this sense, it is 'aristocratic', in contrast, both to the mass of people and the multitude of values. It sets itself against the tendency to flock like sheep, and against all mass-production. Differences of level in the individual ethos are essential to nobility. From amongst good people, it picks out those who from its point of view are best. The noble thus restores the discrimination which the good discards. It is not interested in rulership but only in selection and moral being itself. The tendency of the noble is first to create the axiologically superior type, the ideal of man. In nobility, man possesses the power to determine himself according to foresight. It is a clairvoyant discernment, a conscious emotional rapport with the transcendent powers of the genuine self-subsisting ideal. The moral ascent of man never proceeds historically from the multitude but always through a select group of pioneers. This pioneering is the path-finding

role of the noble in the life and creation of the common-wealth. Once it is strengthened and matured, it moves the heaviest mass. 'Herein lies the law of nobility and at the same time its right to segregation and selection.' In the history of the ethos, nobility takes the shape of a revolutionary tendency born out of the fulness and progressive readiness for change in the outlook of values. The noble is always seeking, grasping and laying hold upon the untried, the uncommon and the adventurous. The noble man is averse to compromise and his salvation lies in the exclusive fostering of special values. To the noble, all half-measures are despicable. Native to nobility is a wide outlook, the grand style in the inner life and work, even under outwardly narrow circumstances. He responds to everything great and for its own sake, without a thought of reward. The noble man is the sworn foe of all pettiness and vulgarity. He lives above the commonplace and ethically insignificant. He does not strike back where he cannot respect his opponent. His bearing and intensified sensitiveness proceed from an inner immunity from all that is mean. 'The free unburdened devotion to what is great accords with a capacity for genuine enthusiasm, for real absorption in an enterprise, not only an ability to make sacrifices but even a delight in doing so. The joy of devotion is the knightly virtue of the morally strong. And on that again rests the strong man's power over others, the ability to carry them with him, to make them capable of nobility. It is the power of his ethos itself, the kindling example of the pioneer.'

The magnanimity of the noble penetrates everything, even the most trifling. It selects both ends and means alike. 'The noble man spurns low means which do not seem to him justified by the end, but which drag it down and dishonour it.' His only drawback is his defencelessness against baser forces which shrink from nothing. Against the peculiar strength of the common, he has no armour. He can battle only with his peers and contend only in great things and not in small. He succumbs where the base fall on him by stealth and has more in common with a noble enemy than a mean ally. 'Where this ethos arrives at self-consciousness, it becomes noble pride. The noble man must rely on himself. His conception of honour is severe, elevated and wholly inconceivable by commonplace

men. Yet he is not absorbed in self-respect and self-esteem, his attention is not turned upon himself.' With him, 'good taste' in intercourse is no 'conventional form', but his own sensitiveness for the nobleness in every one. He keeps his distance, is not pushing, but modest in pride. Obtrusiveness and boastfulness seem to him equally absurd. Even in sympathy and love, he is sensitive in approach from regard for others' individuality. His respect for others is thus a pure, happy and even joyful recognition. He is capable of unenvious reverence for the morally superior and of admiration without jealousy. 'He admires only what is above him. From what is below him he looks away—not intentionally nor out of disdain, but because his purview is occupied with other things. The noble man lives in what he can admire. If he wishes to drag it down and tread upon it as the envious do, he would need it to drag himself down' (vol. i, pp. 192-203).

REFLECTIONS

The noble man is nature's royal breed, and God's sublime work in the midst of much that is ridiculous. Aristotle's high-minded man and Nietzsche's super-man are parallels to this standard. There are other elements in this ethos which can be set forth here. He who is nobler than his calling and superior to his fate is a puny God whom life cannot blacken. The essence of nobility is the pursuit of the ideal, in total disregard of its conditioning factors. This fearless man is high-toned and lofty in vision with a contempt for the costs of its achievement. The ethos of nobility is the birth-right of the aristocratic race of nature's great Lords, a fine sample of the morality of the masters. The noble race is the elite which lives in close intimacy with the gods of Olympus. It is not given to all to bend the bow of Ulysses and nobility is an ethos that the gods give without man's asking. The noble man can only have a large compassion towards the human race but its companionship is exceptional. The ancient 'Rājārṣis' of India and the 'Philosopher Kings' of Plato are the high-priests of the ethos of nobility to follow whom is the everlasting privilege of the average whose values do not go beyond economic goods and secular guarantees.

(11) PLATONIC EROS (LOVE)

Dreary idealism and dull absorption in the present are alike worthless from the ethical point of view. In both, earnestness and completeness of effort are lacking. To combine a life viewed in the light of ideals with a cool eye for the actual and the possible requires an ethos much above the average. A noble synthesis of this type gives to the bearer a dignity which grows with the greatness of the ends he pursues. In such a life the real destiny of man is fulfilled in the participation of the creation of the world. Plato has done the abiding service of seeing in the 'Eros' the unique value of that kind of striving which leaves behind it not only all personal ends but even those of one's own social environment and of one's own contemporaries. Animal nature survives in what it produces. Its care for its young, its capacity to die for them, the concern about the future life of the species is symbolical of the immortality in the mortal. Man has his spiritual procreation whereby he passes the imperishable by participation in virtue. The Platonic love is the deeper absorption in the Idea, great passion for it and personal commitment to it which transforms man altogether. There is an ethos which encompasses this transcendence with the emotional strength of the Platonic 'Eros'. It is an ethos of love but love for the man who is to be and he is conceivable in idea. It is a love which knows no return, which radiates and gives only. Thus, the love of the remote is a caressing of the future, disdain and indifference to which is a sin. In all this, the moving principle is the ethical ideal, the ideal of the man as he ought to be. 'And because it reaches beyond the limits of an individual life, it naturally reduces the individual to a link in a chain of life, which connects the past with the future. Man sees himself caught into a larger providence which looks beyond him and yet is his own.' The formation of the ideal is a passing beyond recognised values, a regular revolution in ethical consciousness. It avenges itself on the daring doer, the prophet or the thinker by the wrath of a whole nation. The prophets destroy the solidarity of their own times (vol. ii, p. 314).

REFLECTIONS

The Platonic 'Eros' is the ethos of the race of intellectuals since Plato. It is an elevated expression of the poetical feeling

embedded in the human pathos of imagination, the daring expression of the lyric quality of our highest aspirations. Its devotion to the lofty ideal is nothing but the inarticulate search for the highest truth. In this virtue, man is no longer a thing of clay, but is 'caught up in a larger providence' and is transmuted and divinised by the force of the ideal he holds. When the actual is discrepant with the ideal, it evokes the moral protest of the prophet and the path-finder. Human history is built on the blood of martyrs who died in the cause of truth tried by untruth. The work of a Christ was finished on the Cross and the work of a Gandhi is done only from within the prison-bars. What does it indicate but the fact that truth demands a sacrifice? And for what is the sacrifice done? It is not for the actual which may or may not continue to be in conflict with the ideal, but the ideal itself which expresses the highest poetry of the human ethos. This love of the ideal will some day lead to the intellectual love of God, if we should love at all.

(12) PERSONAL LOVE

'Every one who does not lead a shadow-like existence amidst generalities and principles is well aware that besides universal love of one's neighbour and of the far distant, and besides the love which dispenses spiritual gifts, there is another, closer and richer, an intimate love directed exclusively to one individual person' (vol. ii, p. 368). The other types, being **im-personal**, do not participate in the innermost nature of any one, nor seek after it in its entirety and fulness. Personal love aims at personality as such, and for its own sake. It is a human intimacy far greater than that between neighbours. Indeed, all love aims at values, all 'Eros', in one way or other, looks to the ideal. Whatever in itself is of worth finds its fulfilment only by becoming a value for 'someone'. Personality needs this; otherwise, its blossoming is overlooked. 'Only another personality can satisfy this yearning and be the counter pole in the fulfilment of its meaning. And the mystery of love is that it satisfies this deepest and least understood craving' (vol. ii, p. 369). One who loves gives this unique gift to the person he loves. He gives a new dimension to the being of the loved one, enabling him to be for himself what otherwise is not possible. Personal love is the value complimentary to

personality, a communication to it of its own meaning. It provides what a personality cannot acquire for itself in the shape of a mirror which reflects the same. Love looks exclusively to the ideal value that is embodied in the empirical person. 'It lives in him what inheres in his essential tendency, the axiological idiosyncrasy of his ideal, yet, not as an ideal, but as a trend towards actuality, just as if it were already actualised in him' (vol. ii, p. 369). Personal love lives by faith in this highest within the loved one. Love senses the ideal, in the apparent inefficiency and imperfection of the empirical person prophetically. Such love is the ethical divination of the ideal of a particular individual. 'It sees the perfect in the imperfect, infinitude in the finite' (vol. ii, p. 370). It widens the sphere of personality raising it to a higher power by including within its compass and counting as its own, the personal being of the loved one. The relationship consists not simply in the union of the two empirical personalities, but also in the higher union of the two kinds of ideal ethos. 'And this is the distinctive power of all love which enters deeply in one's personal life; it brings to light the otherwise hidden and neglected essence of one's individuality' (vol. ii, p. 371). Love no more allows itself to be forced than willed. In all personal love there is a desire to place oneself at the service of the beloved, with kindness and devotion. It is a tendency quite opposed to the possessive attitude. Even in renunciation, this can continue undiminished. Genuine deeply felt love has the power to transform one's morality. In love the highest sense of participation in the eternal is experienced with an elevation beyond pleasure and pain. 'That precisely this feeling can on the one hand become a passion (and by no means merely on a sex basis) and on the other can flood a whole human life with vast serenity, is due to the fact that deep below the threshold of consciousness it touches like a soft light the primal source of spiritual life' (vol. ii, p. 377). Personal love unites innermost depths to innermost depths overleaping the surfaces. The language of the lovers is not tied to words alone. They revel in a thousand symbols and revelations. 'Body and soul must serve it with all their capacities. It makes for itself organs of insight, its resources are inexhaustible.' From it issues an understanding of which a man who does not love knows nothing,

a life of inward and profound communion. Sometimes, one's love may outgrow his strength. 'In that case from the unlocking of his nature ensues a painful uprooting, a desolation. Even love as a value manifests here something like a danger-point' (vol. ii, p. 378). The lover looks only to the ideal. 'The whole art of love consists in retaining the highest point of vision as perspective and remaining under its spell. A life of love is a life spent in the knowledge of what is best worth knowing, a life of participation in the highest that is in man' (vol. ii, p. 381). Personal love like radiant virtue gives an ultimate meaning to life. It is useless like every genuine self-subsistent value, 'but a splendour shed upon our path' (vol. ii, chap. xxxii, pp. 368-81).

REFLECTIONS

If we hold the whole domain of values in the philosopher's scales, the balance may lean towards personal love as the acme of valuational fulfilment. If we divine life in all its phases, we feel the subtlest point when we touch the portion of personal love. It is at once the tragedy and triumph of our earthly existence. A life that is ennobled by its spell burns with ecstasy even in its most trying circumstances. A loving child rebelling against the cast-iron conventions of an unfeeling society is the favourite theme of artists from the Greeks to Galsworthy. Love holds death at bay, rounds our concrete sense of beauty into a personal experience in the most recondite parts of consciousness. Most people are vain because they do not believe in the reality of personal love. All of us are in need of somebody to bear with us, to put up with our weakness and celebrate the little triumphs of our life together. The institution of marriage is an expression of this primal need of the human heart. Ultimately the concept of personal love ennobles us to that degree of perfection as to make us long for 'the eternal companion'.

(13) PERSONALITY

Every man is by nature a personality having a certain human attribute which does not reappear outside himself. It is distinct from individuality and only an individual person is a personality. The fact of personality is distinct from its

valuational character, though they are never separate. Like all values this is an independent ideal self-existence. But, as value, it cannot coincide with the actual personality. The value of it is something over and above the empirical being. Personality, not being a universal, differs radically from all others. As such, it cannot be decisively fixed for all persons and its claim as an 'ought' is applicable only to one special person. Only one person ought to be so. 'For this reason one may describe personalities as individual values; each individual has his own for itself' (vol. ii, p. 243). This does not mean that the specific complex is actualised in the real personality. It only expresses the axiological ideal and is its ideal ethos. The empirical man falls short of his ideal to the extent to which he falls short of the claim of the general values which the ought makes. In this regard personality is also like other universal values. It has a strictly ideal self-existence quite independent of the question of its actualisation. It is a norm like other values. But it must be noted, it is not a universal one. One may fail to achieve this value also. Where a man lapses into the imitation of another's personal ethos, there is a failure of his own. By a surrender to the host of lower powers that hold us, we may miss the same. By a tyrannical domination of one universal value, the repression of personality may occur. 'The moral value of a personality could then be described unequivocally as the fulfilment of the intelligible character, (the Kantian phrase) in the empirical person' (vol. ii, p. 344). A man bears guilt for the failure of his own moral being, and the fulfilment of it is, in the true sense of the word, his virtue. Personality being a highly complex value, its constituent elements are universal values. 'According to their genus personalities are not in absolute opposition to universal values. They are the extreme case of the concretion and individualisation of valuational matter. But, not only is personality different in every single individual, but, it also "ought" to be different, to make precisely through this difference the morally evolved man unique and irreplaceable. In him the individual ethos entrenches itself upon the universal ethos.' 'The moral, ought to be in man is not spent in that of the general moral values. It is not fulfilled until it reaches a culminating point, the special moral value of 'This' particular person. Thus arises

an opposition of values, indeed, an antinomy between personal value that is universal and value of personality (vol. ii, p. 349). The majority of men have but 'little personality'. What we call 'a great personality' is by no means always a highly individualised ethos. The historically productive, efficient stimulating man, the hero, the intercessor, the pioneer in a common cause is only a powerful representative of a general ethos. It is not in this sense that personality is used here. It is used in the sense of individuation of the ethos itself and of its impress on the actual man. Historical greatness is by no means involved in it. 'The brave man, the wise, the just, the loving, the faithful or the truthful, can also possess moral greatness' (vol. ii, p. 353). In a strict sense personality applies solely to the uniqueness and differentiation of that valuational complex which constitutes, in a man's ethos, the preferential trend of his inner disposition. Only through such a trend or unique assimilation of such trends into a unity of an ethos does one rise above the average. 'Personality, in the strict sense, is not to be found among famous persons—the moral significance of the hero is precisely his super-individual quality, but away from the noisy streets of great ends and services.' 'The greatness of personality is much more a purely inner greatness; it has scope in the most narrow spheres of life, for it is nothing else than uniqueness of commitment for values and, indirectly uniqueness of the valuational perspectives with which a man permeates his sphere in life' (vol. ii, p. 354). A marked personality carries his standards in himself and is loyal only to himself in following them. 'He sees the world in a light of his own, as no one else sees it, in the light of his preferred values: and lives in accord with them. He is a world for himself, in the true sense of the word' (vol. ii, p. 354). 'This is the reason that genuine personality, possesses such attraction for others. Participation in it is a second life in a second world. Who sees the personal element in a man and lovingly comprehends it—and only to the appreciative glance is it visible—lives amidst abounding values of another order from those of one who is blind to personality. His world is infinitely richer, fuller and higher, diversified in values and vast' (vol. ii, p. 354). A personality which does not fulfil the commandments of justice, truthfulness, fidelity and brotherly-love, carries an

inner displacement. A spurious personality is a chaotic and false morality without any ethical foundation. A vain cloak of personality is a downright moral swindle. Universal values constitute the basis of all morality claiming unconditional precedence. Only on their material basis can the more highly differentiated form of personal values rest. Any imitation of another's personality is ridiculous. In this we have a proof of the individual 'ought to be' and of the genuineness of personality as a moral value. In ethical life, following an example is something altogether different from copying an individual. There can be discipline in brotherly-love, justice, truthfulness and the like, but not in personality. Such imitation is essentially limited to general values and if applied to personality it becomes mere copying and brings about a counterfeit of the same. An imitator is a positive destroyer and falsifier of his own true personal essence. A deliberate effort at the construction of personality results in a pose covering an ethos stunted through adulteration. 'A genuine personality is cast in one mould, is solid, a moral entity which, as it were, has grown naturally. It can never be found where there has been deliberate effort to become a personality. It is not a thing willed; over against the will it is autonomous; it has its law in itself and follows its law without deliberating' (vol. ii, p. 364; chap. xxxii, pp. 344-67).

REFLECTIONS

Personality is the foe of mediocrity and axiological commonplaceness. It is the specific amalgam of values that constitutes the stuff of this virtue. The seer, the poet, the philosopher and the artist are the men who really possess personality. They aim at unique individual self-expression by valuational divination. The Great Alexanders and Napoleons of History are only the champions of the crowd. Even in ordinary life, we come across here and there rare examples of personalities that have scaled the heights and look at the pageant of humanity from the peak. Why most people are dull and boring is, they lack this unique blend of values; and what they so lack, they fill up with power and foolishness. Personality of the highest type seeks isolation from the crowd and craves for the fellowship of similar minds; and its tragedy is the tragedy of the heights,

the primordial aloofness of the man of vision, intensely seeking the company of God, because, the company of men has left him with a large pity for their all-too-human woes by wickedness and taste for blood.

CRITICAL NOTES

1. Hartmann has arbitrarily restricted the range and extent of the analysis of values. There are whole spheres of values which are not brought into the picture. But, as his view of values raises, by implication, the relation of moral values to the aesthetic and the religious, this keeping down of the disclosure, at an interesting stage renders his results incomplete. He leads us, after dealing with situational and goods-values, and their relation to moral values and their inner gradations, to a sphere of cognate material. He should have given us an idea of their connections with these adjacent domains, because, the whole kingdom of values, on Hartmann's view is a well-regulated objective moral cosmos. Then, again, we are left in the dark as to the real status of moral values. 'Are they supreme values?' is the question. He has not answered it.

2. Hartmann has left out a consideration of the bearings of aesthetic culture on ethics. Is a real and permanent ethics possible without a concrete sense of beauty? Aesthetic experience is itself an expression of the subtler sense of value. What is the quality of the ethos of the Artist who looks at a city in flames and gets the feeling of the lines: 'One moment in annihilation's waste'? The study of aesthetics is the best avenue of approach to the ethics of values. A course of training in the philosophy of beauty gives the insight necessary for appreciating the contents of ethics with a higher vision.

3. To the list of virtues sampled in the work, a set of passive virtues should have been added to give a more comprehensive idea of the field. 'Compassion', 'resignation', 'fortitude', 'cheerfulness', 'disinterestedness', 'non-violence', 'Satyā-graha', are a few of the passive virtues in which the ethos of the East expresses itself. In the fully-shaped ethos, activistic and passivistic virtues find a noble balance. Generally speaking, the West has specialised in aggressive, militaristic and worldly-wise virtues, while the East developed the peaceful, meditative and contemplative values. The ethos of the West

is 'Rajasic' and that of the East is 'Sattvic'. Even the momentous political struggle for freedom in India under the guidance of Gandhiji has taken on the grandeur of an ethical movement towards the purification of the contemporary ethos. Today, even in the West, the pride of power, and achievement are giving way to a new despair. Christendom lived for two thousand years with full faith in the reality of social and political life. The result was the great war and a preparation for another. There is a poignant historical irony in the phenomenon, that in a civilization which made 'neighbour-love' its major premise, all the inhuman Wars known to man have originated. The triumph of Christianity over the pagan world has only brought into play the ruder and more violent sections of life to oust the subtler, the more intellectual and graceful cultures of humanity. The 'White man's burden' is the biggest hoax ever invented to exploit the physically peaceful races of the earth under a cloak of decency. The spirit of the East is awakened and its final emancipation lies in living like its great ancients under the banner of contemplative virtues. The nemesis of the machine-civilization is creeping apace. The West has played a game with social life and dealt with human nature in the drawing-room of masked men and women. It has passed over the violent crashes, the deep wounds that beset its inner world. Western science and brute power have gone in deliberate search for the Faustian infinite. The command which science has given is only used for domination and destruction of the value of life. The spread and development of knowledge for which many devout spirits paid their lives, is slowly passing away into a dreadful disillusionment. The times are literally out of joint. What can the East say to the crisis brooding over our destiny? Can we get out of a sort of 'beyond recovery' feeling? The ailment must be met by a return to the nobler life of contemplation. The sages of the Upanishads, the Buddha and Confucius were all champions of the meditative mode of life. Modern science is no foe to it; but the ethos that guides it needs a new turning point. With every advance of secular knowledge, we have only come to feel the void places in materialism. The sense of values is the hallmark of any civilisation. Judged by a scale of values, the present order has an increasingly disastrous trend towards the

derogation of man into the level of a means. The task of the new savants is to recreate the ethos of the future and make the world safe for human beings. Love of beauty, love of truth, liberal culture, freedom, justice, are all the title-deeds of a superior civilization. Economic security, political freedom, and leisure are the three conditions that hold the seeds of true civilization. Without them, civilization is the triumph of the beast over beauty. Dogmatism, excessive espionage, aggressive nationalism and the gospel of money-making are its enemies. Passive virtues are the stable foundations for any enduring order of higher life. The finer values of truth, beauty, goodness, knowledge, reasonableness, love, and all those major and minor graces of life can flourish only on a soil of security and freedom. Hartmann has made this point remarkably clear. The erudite must evolve the technique of the new ethos that is to transmute the machine-man of to-day into the God of to-morrow. In the highest form of civilization, the contemplative life carries off the laurels and the active life feels thankful to take the second place. The 'Jivanmukta' and 'Bodhisattva' ideals of the East give us a glimpse into the heights of the civilized life. We hear of the ancients doing 'Tapas' for the sake of the beautiful life. The ethos of the contemplative life has a meditative beauty filling its gliding movements with the sense of peace and fulfilment. Civilization is not possible without some form of economic and political security. Under the modern conditions, a form of economic socialism is a condition precedent for the possibility of the good life. That being inevitable, the next step is to make it thoroughly consistent with liberty. Athens under Pericles and India under kings like Asoka or Bhoja are examples of highly civilized countries. But they are lucky accidents of a process which has degenerated rapidly without a plan. To-day, the world is a paradise for the few and a purgatory to the many without a sense of justice at the heart of economic, social, and political life. The modern man is a broken reed unable to adjust his secondary needs. We have lost our bearings and are drifting into a second crop of barbarity. To dignify human relationships and transmute them under the spell of a higher vision is the task of the new savants. The ideal world, the kingdom of God, must be established here and now, by the revolution of the inner man. Perhaps, even in an ideal

society based on the new ethos there is bound to be inequality, but we are sure, it can neither be oppressive nor appalling. The only type of inequality that would still continue to exist in the humanistic Utopia would be the one between a man like Gandhi or Tagore and an under-graduate who prefers Shaw to Shakespeare. Superiority disarms envy and admiration creates love. The wisdom of the East and the science of the West are close by our side in this hour of crisis. To build the kingdom of God on earth by their aid, through a lightning revolution in the ethos of man is the next great adventure of the human race; a disillusioned world in search of its soul. Through the conversion of the contemporary ethos on a grand scale, a new generation of nobler beings may arise, who will deliver the 'Coup de grace' to all the scandals of its preceding eras. With a higher vision of values, we have to arrange our breast-work for a more human civilization. And, in any historic effort in the line of the good life, the decisive role will be played by the virtues that the sages of India taught long before the advent of the Buddha or the Christ. It is a pity that Hartmann has completely omitted a discussion of the contemplative and practical modes of life. What Hartmann has done for the Christian and the Greek ethics, somebody must do for the Ethics of the East, with its great emphasis on the meditative life. The key to the whole of Eastern ethics may be summed up in its great maxims 'Production without Possession' and 'Development without Domination'. Can we seize hold of this secret and steer the course of civilization through its epochal danger-zones?

PART VI

FREEDOM OF THE WILL

The question of freedom extends along the frontier line of ethical investigation. The final third of Hartmann's work is devoted to the subject which he regards as foundational to ethics. We have already noticed that he denies Providence and universal teleology to safeguard the rights of man. Cosmic teleology and human teleology are contradictory and mutually exclusive. The craving for salvation through grace is ethically degrading as it involves the surrender of man's freedom. He who has power must bear the burden, because, only the morally

free are capable of right and wrong. A divine teleology dominating the world for its own inscrutable ends rules out the moral distinctiveness of man and makes him a simple natural entity. Apart from freedom, values lose their specific moral significance and coincide with goods values. They fail to evoke moral approval and disapproval. That is why Hartmann took great pains to show that values require an ought that does not realise itself, and an agent who helps or hinders its realisation. Man is the only mediator between values and reality. But he is under no obligation to realise them. If it so pleases him, he can as well choose to give up his moral task and remain neutral. In other words, he is a moral agent, only because he is an imperfect mediator. Were he to be a perfect mediator, he would only be a moral automaton guaranteed to do no wrong. Perfection as a mediator entails the loss of his moral office by virtue of which alone he can do good or evil.

These considerations lead Hartmann to a re-study of the free-will problem. Many of the ancient systems assumed freedom, or, if they attempted to analyse it, falsified it. It was Kant, who in his statement of the third antinomy, first set forth the whole problem in clear outlines. On the one hand, he extricated freedom from the ambiguities of pantheism or any other divine teleology, and on the other, he made it quite consistent with the causal determination of nature. Freedom, as he maintained, involves simply the addition of a new determinant not contained in the original chain of events. Both teleology and mechanism imply a monism of determination and shut the doors against freedom. He demonstrated a dualism of determination through the double stratification of the world, in which a teleological determinant is added to the uniform mechanism of nature. This is possible, as he argued, because, the totality of effects produced by a system of causal threads is never a closed one, as is that of a teleological system with all the ends fore-ordained. It is always open and admits the addition of a new determinant without causing a break or suspension in the causal course (vol. iii, ch. iv, pp. 53-9). This addition only diverts the causal nexus for some willed ends without creating a breach. Kant was right so far, but was wrong in interpreting this positive freedom as determination by 'reason'. Man is free in the sense of being his own

law-giver. This would mean that his freedom is only 'freedom under law', for, in disobedience to the moral imperative man is then always unfree. Again, Kant located the source of this rational freedom in a transcendental self that is super-individual. All the acts of the empirical self which alone are individual are heteronomous. Then, he failed to distinguish between reason as law-giver and reason as deciding for or against the law. That which issues and accepts the command being identical, man has no real autonomy. Hartmann seeks to set right these defects by his conception of value and personality.

Value is something more than reason and can by no means be identified with it. It is a wholly independent determinant which man as a rational or emotional being may accept or reject. This is not to say that freedom is simply the negative freedom of indeterminism. A man can be free neither from his inner nor from his outer circumstances. But because he is so, it does not follow, that he must be so, or he must be a faithful slave. The balance may be altered by throwing other determinants into the scales. Fortunately for Hartmann, he could find no evidence of an all-inclusive oneness of cosmic determinism. He insists only on two conditions: (1) the order of nature and (2) the order of values. Freedom is possible for a free being only when there is a conflict between them. Kant no doubt solved the causal antinomy and made man free, but, he got involved in a second antinomy, which Hartmann calls 'ought antinomy' (pp. 130-213). Though Kant admitted that the law does not compel but merely commands, he saw autonomy only in obedience to it. A will that acted in direct conflict with the law was constrained by natural forces (vol. iii, ch. viii, pp. 102, 110). To prove this autonomy, Hartmann introduces a third determinant. The ought, whether a law of reason or an independent principle of value, is in itself powerless. It can only incline the balance but cannot determine it unless an actual 'volitional constituent' is added. But this fact, namely that the ought can operate only through the third, need not mean that it should inevitably embody the second. A will contrary to value is not, as such, determined by the ought, because it can add its own plus of determination. It is no use objecting that the will that chooses the lower value is always, as Kant said, 'determined by nature', because, a typical moral antinomy dis-

proves this. A typical moral antinomy is a case in which values of equal claim compete. In merging the autonomy of the person in that of the principle, Kant simply overlooked this possibility. In such a case, man needs a plus of determination not only over the determination of nature but also over against the claim of the ought. When faced with a crisis of the kind, he cannot wait and watch. He can only take a decision between antithetical values by the addition of an autonomous determinant distinct both from natural and moral laws. In this way, on Hartmann's view, the very irreconcilability of values that is the despair of the student of ethics, affords a possible solution of the metaphysical problem of freedom (vol. iii, p. 137). Then, Hartmann has not overthrown the causal theory but only drawn it into his service by positing over against the phenomenal world of nature a higher principle of personality. The higher entity is the person who adds his determination to the causal course of nature and the moral order of values. A purposeful being can never exist in an utterly indeterministic and lawless world in which all is chance and change. Causal connections may be put to use for desired ends only because the addition of a free factor does not cut off its sequence. Kant's ethical freedom was ultimately the freedom of the impersonal practical reason as such. It is only the autonomy of an abstract ethical principle over against the non-ethical laws of nature. But Hartmann's person is not only free as against the causal law, but even as against the moral law itself. It is not the fact of determination that is challenged but a monism of determination. On Hartmann's view there are three kinds of determinations:

- (1) Causal determination, conditioned by fact.
- (2) Final determination guided by value.
- (3) Personal determination conditioned by fact and guided by value.

Kant freed the will from the causal determination and handed it over to the tyranny of the second. Hartmann, by his conception of value and personality, simply supplied a third determinant, to free man from the Kantian antinomy. Personal determination is conditioned by fact, guided by values and is finally expressed in a free act of choice with the seal of personal commitment.

Of course, Hartmann does not say that this affords a complete demonstration of freedom. Indeed he admits that such a demonstration is impossible. Freedom is not a datum and is only a meta-physical object reached by inferences from data. Of such objects complete proof is lacking. We can attain such a proof only if we can show that it is ontologically necessary. But what we can actually show is that it is 'axiologically necessary' and 'ontologically possible'. The whole substance of the first two books is sufficient argument for its axiological necessity. We witness its axiological necessity in the many outstanding ethical facts which cannot be explained away as an illusion. Of course, 'consciousness of freedom' need not by itself mean 'freedom of consciousness'. Consciousness of freedom may be a deception, but, in that case, the burden falls on the ethical sceptic to show the possibility of the existence of that deception. On this view, ethics would become a part of the problem of error. The fact is, such beliefs involve more assumptions than the natural belief that consciousness of freedom involves to some degree freedom of consciousness (vol. ii, ch. xiv, p. 172).

To these arguments is annexed a metaphysical demonstration of the ontological possibility of freedom, although it is by no means necessary. A subject can exist which obeys the causal determination of fact on the one side and the final determination of value on the other, and is yet capable of choosing his own goals and creating his own ethical destiny. This demonstration is made by a reference to his categorical laws of dependence. The dualism of determination through the causal sequence and the final nexus resulting from human volition is not complete. As its metaphysical basis, behind it, opens out the whole perspective of categories. It is a plurality but nevertheless presents a unitary structure. The causal and the axiological structures appear more opposed than they actually are, because, there are several intervening strata of whose determinational types we have no knowledge. But their presence is undoubted. There are also a number of strata below the causal and above the finalistic, though our knowledge of them is inadequate. Below the causal we recognise the mathematical type of determination penetrating all relations of quantity and the still more general logical determination of the relations of being as such. Above the causal sequence of the physical world, lie the strata

of organic life and of consciousness. Obviously, we do not know the nature of their determinations nor the mode of their transition from one to the other. It is quite evident that they form the basis of the higher stratum of human personality, which is the domain of freedom. The categorical laws of stratification apply to all these strata. The higher category or stratum in each case is the weaker and is dependent on the lower which constitutes its nature, but it has its own special types of organisation set round its own laws. The biological laws that govern organic life are different from those of physics, as also from the psychological laws of consciousness. Each higher stratum presents something novel and qualitatively superior. Though it is weaker than the lower, it is free as against it. In this way, the specific type of determination characteristic of the human stratum also can be explained. As the law of the higher stratum, it launches something new. Though the human stratum cannot be defined, it forms no exception to the general principles of categorical relations. The structure of autonomy is fundamentally the same at every stage. Hence the analogy is decisive for the freedom of the will also (vol. iii, pp. 240-6). It must be noted that the analogy is meant only for the possibility of free-will. Its necessity cannot be proved since the complete set of its conditions cannot be assigned. For actuality, one has only to turn to ethical phenomena. This, of course does not prove absolute freedom even as a possibility. In the end he admits that no will is more than partially free (vol. iii, p. 252).

CRITICISM

1. The whole question of freedom can be wiped off the boards without prejudice to ethics. It has no more bearing on it than it has on physics or poetry. The poet is psychologically determined when he wrote his *Ode to a Grecian Urn*. But does this invalidate the piece as such, because, it is only the outcome of certain molecular vibrations? The beauty, the grace and charm of the creation, or the credit of the poet is in no way affected by the fact that he could not have created it otherwise. When one is proficient in philosophy and another in mathematics, who are you to appropriate the credit? Something is expressing itself in and through you by the spontaneous necessity of its

own nature which you and I are claiming as our own. When we realise that we have chosen neither the moment of our arrival nor of departure from here, and what remains, in between life and death, is a short span conditioned by the sum-total of the whole cosmic history up-to-date, the substance of the free-will problem is gone, leaving aside a residue of inconsequence. From a logical point of view, the victory is always with the determinist, though it falls short of moral conviction which assumes freedom without ever being able to prove it. To quote Spinoza, 'In the mind there is no absolute or free will; but the mind is determined to wish this or that by a cause which has also been determined by another cause, and this last by another cause and so on to infinity' (*Ethics*, xviii, 48). All our thoughts and perceptions are only consequences of our precedent thoughts and perceptions. An omniscient intellect, grasping the world in its totality as a single fact, finds it determined from top to bottom. If this is denied science is impossible. The theory of free-will is not consistent with the law of causation which is not defeated anywhere. If ethics is to be regarded as a science, no irrational surd should be introduced in the shape of free-will. In the interests of theory, some critics have propounded an illogical antithesis between 'truth of life' (free-will) and 'truth of science' (determination). But it is a mistaken distinction, since the function of philosophical science is to comprehend the facts of life under ideal schemes. If freedom is regarded as a postulate in the moral sphere, even then, its claim to be an ultimate category of reality is not established. A methodological assumption is strictly relative to its explanatory value. Once it fulfils that, it has no claim beyond. As such, freedom of the will is only a practical postulate, a working hypothesis and does not bear the stamp of final irrefutability. On this view, freedom may be admitted as a practical postulate without assuming its ultimate validity. All this difficulty is due to the fact that most ethical writers regard freedom as the very basis of ethics, while in fact, real freedom is above all determinations. There is no point in talking of partial freedom since it is only an expression that marks the limits of our knowledge of the necessity implied in any case. Either man is free or he is not. If he is free, he is absolutely free. If he is not, he is thoroughly determined. The empirical man can never be free.

The transcendental is always free and has no need for such concepts. Since freedom is practically useful and socially needed, the consciousness of freedom settled down in the human race. Its final solution is a wager on the side of ethics. All views of freedom are steeped in ego-centricism. Human beings cannot create anything including themselves, their thoughts and goals. They only select out of a total that has already been given or combine elements in such a way, that powers beyond their control will create something new. This we mistake to be freedom, while in fact, the world is sliding on its own keel from eternity to eternity. The Persian Poet is right when he sang 'The first dawn of creation saw the last day of reckoning'. If any one can say what set the first atom in motion, he knows all about freedom. That first act was a free act and the rest followed it simply through the compelling force of its own eternal nature.

2. To reinforce the type of argument he is upholding, Hartmann appeals to the consciousness of freedom and the sense of guilt as witnesses to the freedom of will. But, neither consciousness of freedom nor sense of guilt establishes this alleged freedom. Side by side with the consciousness of freedom there is a consciousness of inevitability in human affairs. Fatalism is as natural a mood of the mind as the free-will mood. It is as easy to believe that I have spoiled myself, as to believe that all through my life I have been resisting in vain a force that was constantly making me a fool. 'Luck', 'destiny' and 'fate' are some of the expressions that confess a failure to know in full the mysteries of the Divine nature. The need for grace is everywhere manifest. How many of us have not felt that in the most fundamental events of our life, we took but little part? We often feel that there is a 'divinity that shapes our ends'. This is as real a feeling as the feeling of personal responsibility. Hartmann has failed to notice it. It is a well-known fact that some people do not have the sense of guilt, though they deserve to have it, while others who do not deserve it, have it and suffer from it. Thus a novice stepping into a crime club for the first time sees the judgment of heaven directly brooding over him, while an expert in the line knows how to evade these feelings. While most Christians break down under the sense of sin, most philosophers sin their way to Jesus. The fact is, sense of guilt

94213

is only a fear of vengeance, the tremour at the thought of the day of doom. The more keenly we are afflicted with it, the more irrevocable it appears. It is one of the agents of righteous retribution which is writ large throughout the moral cosmos. We are certainly never out of the shadow of destiny. The words of an Æschylus or Sophocles ring true even to this day when we begin to realise the conflicts into which most of us are drawn without our consent. A fine philosopher will have no regrets. And as far as it is within his reach he does always the best under the circumstances and keeps good cheer, by resigning himself to the master power, which no wisdom can displace or doubt deny. Hartmann makes the sense of guilt the ethical equivalent of Sin. It is perfectly possible to imagine a man without the sense of guilt though he may do guilty things. If in this case his freedom from sense of guilt does not disprove freedom of the will, sense of guilt too cannot prove the freedom of the will. Cases can be easily cited from abnormal psychology which clearly show that there is no necessary connection between an act and the sort of consciousness that precedes or follows that act.

3. Hartmann throws the final burden of proof for freedom on personality. Moral life cannot be reduced to the life of God or nature. Intellectualism sacrifices the freedom of the will for the completeness of its speculative view. The denial of individual freedom is a logical necessity of thought. But to the moralist, personality is the highest concept. In Hartmann's view, Kant committed a mistake by making absolute the distinction between the noumenal and the phenomenal self. By so doing he gave us only an empty and unreal freedom. He saw no case for freedom, except by removing the ethical self out of the empirical sphere in which there is only necessity. Since knowledge is only of the phenomenal and not of the noumenal or essential, it can never solve such an ultimate problem as that of freedom. On the Kantian view man is noumenally free and empirically determined. 'This is, as one critic aptly remarked, 'freedom outside the prison house'. Such freedom is illusory. Man is free only in so far as he acts rationally. Good alone, thus, can be the product of freedom and evil of necessity. But as Hartmann has pointed out, freedom, to have moral significance, must be freedom in choosing the evil equally with the

good. Freedom as he says is the very power which makes evil evil and good good. By the removal of freedom from the domain of nature and mechanism to a rational realm of its own, he has reduced it to a transcendental abstraction. Hartmann upholds the integrity of personality to cover the rifts in the Kantian system. In a word, he merged the empirical and the transcendental selves in his own concept of ethical personality and asserted that freedom belongs to it. His line of argument falls away when once we prove personality has no ultimate value or validity. Logically, personality has no scope as an ultimate principle. If all things follow from the necessity of the divine nature, the empirical ego as an empirical ego has no metaphysical truth about it and as such must be regarded only as an appearance. 'In the words of Bradley, ultimate reality is impersonal. 'But then the soul, I must repeat, is itself not an ultimate fact. It is appearance, and any description of it must contain inconsistency' (*Appearance and Reality*, pp. 414-5). As moral life is governed by two incompatible ideas (see my note on moral antinomies) that of self-assertion and self-sacrifice, the individual never can in himself become an harmonious system. 'Now that this divergence ceases and is brought together in the end is most certain. For nothing is outside the Absolute.' Morality is no finality as the moral experience is never free from final antinomies. Moral life as Bradley put it is governed by two 'incompatible ideals' that of 'self-assertion' and 'self-sacrifice'. 'To reduce the raw material of one's nature to the higher degree of system and to use every element from whatever source as a subordinate means to this object, is certainly one genuine view of goodness. On the other hand to widen as far as possible the end to be pursued and to realise this through this distraction or dissipation of one's individuality is certainly also good. An individual system aimed at in one's self, and again the subordination of one's own development to a wide embracing end are each an aspect of the moral principle. . . And however much these must diverge, each is morally good; and taken in the abstract you cannot say that one is better than the other' (pp. 114-415). 'Now that this divergence ceases, and is brought together in the end is most certain. For nothing is outside the absolute, and in the absolute there is nothing imperfect. . . In the absolute everything finite attains the

satisfaction which it seeks but upon the other hand, it cannot gain perfection precisely as it seeks it. For . . . the finest is more or less transcended and as such, disappears in being accomplished. The common destiny is assured by the end of the good. The ends suggested by self-assertion and self-sacrifice are, each alike unattainable. The individual never can in himself become an harmonious system. And in the wider ideal to which he directs himself no matter how thoroughly, he can never find complete self-realisation. . . And, in the complete gift and dissipation of his personality he, as such, must vanish, and with that the good is, as such transcended and submerged' (p. 419). Then free-will also which is a mask of human personality, *ipso facto* falls away. This higher necessity of logical thought is the only freedom left to man and he is free in so far as he is identical with God and the realisation he has of this fact. Goodness and badness alike are appearances and, being phenomenal, are self-contradictory. Such distinctions are 'entia Imaginationis' as Spinoza expresses it. They are the results of partial knowledge and have no meaning from a strictly metaphysical point of view. This is not, as Hartmann may object, depersonalising or demoralising man. We are only pressing the need for transcending inadequate categories. Since moral personality is not ultimate, the freedom which is its prop must go down along with it. Thereby, one need not fear that moral life is annulled. On the other hand, it takes on a higher significance in an experience which dissolves its discords and transcends all values as the supremest value.

THE NATIONAL INCOME OF INDIA

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1 THE NATURE AND VALUE OF NATIONAL INCOME ESTIMATES

Marshall defines national dividend as "the net sum total of things and services produced." It includes only goods and services that can be measured in money, and thus many important items in economic welfare are excluded. Various anomalies arise by this mode of computing national income. Most valuable services like those rendered by mothers and wives are excluded from national income, but those of maid-servants are included; therefore if many persons married their maid-servants, national income would immediately show a decrease. Similarly, when the British M.P.'s came to be paid, the national income rose by £250,000. Valuable philanthropic services are not taken account of in national income, but the most ordinary (even anti-social) services come into it if they are paid for. Such difficulties have persuaded some economists (notably the Hungarian, Fellner) to exclude services from estimates of national income, but this would make such estimates of little real value. As civilization advances, a smaller proportion of people in a country will be engaged in producing material goods, while a growing proportion will be engaged in providing immaterial enjoyment as singers, preachers, artists, lecturers, etc. The increase in the flow of enjoyable things makes a country richer and to exclude them from computation would make national income a poor indication of the nation's economic welfare.¹

A proper estimate of national income must enable us to measure the goods and services available for the community and for the different economic groups composing it, but this is not possible, as national income takes into account only such goods and services as are exchanged. In advanced industrial countries, where free goods and services are of little account, national income estimates may be useful; this may also be so where large-scale agriculture is carried

1. Sir Josiah Stamp, in the *Journal of the Royal Statistical Society*, 1934, p. 425.

on, as in Australia and Canada. But in lands of small farming (as in India) where a large part of the goods do not come into exchange, and services are largely customary, estimates of national income must have serious limitations. In the sunny tropics, the requirements of heat and light and house-room are limited; and many of the goods needed—water, fuel, building material—are comparatively free, at any rate in rural parts. In a peasant culture, the bulk of the crops are for consumption in the peasant's family, and only a small part of the produce (except in 'money' crop areas) go to the market. The Indian social system also contributes to the same result. Can any one estimate the free services rendered in this country by one's family and caste in connection with birth, marriage, illness, funeral, apprenticeship of children, building and repairing of houses, and a host of other items which in other countries have to be paid for? This largely detracts from the value of national income estimates in the case of countries like India which are still dominated by a rural culture of a fairly self-sufficing nature. It does not give any indication of the real measure of goods and services, and the income figures of such countries cannot be compared with those of lands more advanced economically.²

The true measure of a country's economic welfare cannot be known by the sum total of goods and services available; we must know the quantity actually available to people of various economic groups. At present this is indicated by figures of per capita income, but these are mere abstractions and do not give any clear indication of income distribution.³ The per capita income of a country like England may be high, and yet a large proportion of the people may be poor and ill-fed. On the other hand, in a country like Denmark or Switzerland, the per capita income may be comparatively low, but economic welfare may be more evenly distributed. Therefore, carefully drawn-up family budgets of different economic groups in the community will give a more accurate indication of economic welfare than mere per capita incomes. At any rate, what can be the value of per capita income figures estimated for the whole of India?

A good part of the difficulty arises from the use of the money measure in estimating national income. With every rise and fall of the price-level, the national income estimate will also rise and

2. The error of making international comparison of incomes has been emphasised by Sir Robert Giffen (*Economic Enquiries and Studies*).

3. For the theoretical shortcomings of the per capita estimate, see Bowley, *The Nature and Purpose of the Measurement of Social Phenomena*.

fall, but this may give no true indication of the effect on economic welfare. This is particularly true of India where the bulk of the agricultural product is for consumption by the producer. Between 1928-29 and 1933-34, the total value of the principal crops of British India fell by about 53 per cent., but this does not indicate a *pro tanto* fall in national welfare.

On all these grounds, the present estimates of national income are a poor index of a country's economic welfare and this is specially true of agricultural countries like India. Thus, comparisons between the national incomes of different countries are deprived of any great usefulness. The income estimates of the different countries are not comparable, and no safe conclusions can be drawn from them. The whole conception of national income is so vague and its measurement necessarily so inexact that many economists have discarded it as unsuitable for use in any accurate theoretical analysis.⁴ However, estimates of national income may be of some use for watching the general trend of economic welfare in a country from year to year, and even for this purpose the estimates must be carefully made.

2. INCOME ESTIMATES IN INDIA

The two principal methods of measuring national income are: (1) a summation of individual incomes and (2) an aggregation of goods and services. In countries where income and wage statistics are fairly complete, the income-summation method may be used with advantage, but where such statistics do not exist, we have to depend chiefly on an evaluation of goods and services. That is to say, we must add up the net products of agriculture, live-stock, industries, mining, fisheries, forests, etc., and must evaluate the net incomes derived from trade, transport, the professions, public services and domestic service. In Great Britain both methods have been employed and the results tallied fairly well. A census of production was taken in 1907 and it was repeated in 1912 and 1924. But in the case of India statistics of income and wages are not available except to a very limited extent. Those assessed to income-tax are much fewer in India than in Western countries,⁵ and we have no means

4. Keynes (J.M.), *The General Theory of Employment, Interest and Money*, pp. 37-38.

5. The assesses to income-tax in British India number only about 300,000. Even when the taxable minimum was Rs. 1,000, the number came to only about 700,000. Thus only one person in a thousand pays income-tax in India.

of estimating the incomes of the great majority. Accurate information on wages is also lacking. In these circumstances, we have to depend chiefly on an aggregation of goods and services.

For such an aggregation, we have some materials at present, although all of them are not of the best quality. For estimating agricultural production, we have a system of crop statistics which in some ways is unique. Since 1934, we have also statistics of production of many organised industries;⁶ but on unorganised industries which employ more than six-seventh of the industrial population, and on other important parts of national income—live-stock, fisheries, mines, forests, trade, transport and the professions—no reliable data exist in India.

We have indeed some statistics of agricultural production in India, but they comprise only the larger crops and even in regard to those crops, the production figures published cannot be entirely depended upon. They are based on certain crop forecasts made by Government. These forecasts were originally started for revenue purposes (especially in temporarily settled tracts) and for giving indications about famine and distress. For such purposes, these statistics are helpful, and they may be of some use for commercial purposes, although with many limitations, but as material for estimating national income, they are of little use. The forecasts are based on (1) the area under cultivation, (2) the standard yield or normal outturn per acre and (3) the 'condition factor' or annavari estimates. By multiplying these three factors, total outturn is estimated for about seventeen crops; and a rough census method is in use for the plantation crops of tea, coffee and rubber. An examination of the three basic factors just mentioned will bring out the weakness of these statistics. The area figures are supplied by the Revenue Department and are fairly correct, except in the case of permanently settled tracts (Bengal, Behar and parts of U.P. and Madras). The standard yields were originally based on crop-cutting experiments, but in many provinces the standard yield has not been revised for a long time in spite of the steady improvements in agricultural methods especially in the case of crops like sugar-cane. In Madras, for instance, the figures made in 1919 are still in use. Since then, the acreage under improved

6. These figures are collected by the Statistical Branch of the Department of Commercial Intelligence and are published in the *Monthly Survey of Business Conditions*.

crops has increased largely and thus the official standard yields have become too low. The 'condition factor' is the weakest link in the chain; it is based on mere guess-work, generally by persons who are ill-fitted to make correct estimates. Consequently, the crop outturn statistics published annually are far from accurate, and in the case especially of commercial crops like jute, cotton and sugar, they have been found to be under-estimates. This has been repeatedly demonstrated by post-mortem examinations. The annual average production of raw cotton (for ten year ending 1932-33) was 5,380,060 bales, according to final forecasts; but the actual production was found to be 838,000 bales more, the difference being 17 per cent.⁷ In the case of jute, the difference between the final forecast and actual outturn was 18 per cent. The purpose of issuing several forecasts for cotton and jute is to avoid price fluctuations, but if the forecasts are not fairly accurate, they may, instead of being helpful, "mislead the market, causing violent fluctuations and wild speculation."⁸

Attempts are being made to improve these forecasts in two directions—prospective and retrospective. The latter (the post-mortem method) consists in an accumulation of all available data like export figures, purchase by mills and extra-factory consumption. The other method is the slow one of educating the data-collecting agencies to do their work more accurately.

If such improvements are diligently carried out, the outturn figures of these crops may become more accurate, but what about the numerous crops not included in the crop statistics? For commercial purposes, information on a few leading crops may perhaps suffice, but for income estimates we require statistics of all the produce raised on land, including straw and subsidiary produce. There are several minor crops all over India which are important locally, and these must also be included. Timber, fruits and vegetables must not be left out. And in the case of all these, not the wholesale prices at ports but the actual prices received in the village must be entered, as otherwise there will be double-counting at various points.

The national income estimates made in India since 1900 have used these agricultural statistics, supplemented by estimates of

7. *Journal of the Royal Statistical Society*, 1934, Part III, pp.404-5 (Paper by Sir H. A. F. Lindsay).

8. *Report of the Bengal Jute Enquiry Committee*, (1934), pp 108-09.

various items not comprised in them.* It was by utilizing these statistics that the Indian Central Banking Enquiry Committee estimated the agricultural income of India at Rs. 1,200 crores in 1928; and by adding 20 per cent. for subsidiary occupations, they arrived at a per capita agricultural income of Rs. 42.⁹ Although they considered this only as a rough estimate, it would have been proper to emphasise the inadequacy and unreliability of the data used. There are numerous pitfalls in the path of those who use these statistics. A Special Officer of the Madras Government lately estimated the per capita agricultural income of the Presidency at Rs. 11-12-0, by adding up the outturn figures of the principal crops and by subtracting 40 per cent. from the total for cultivation expenses. It is not necessary to recount here the many mistakes of fact and accounting involved in this computation. As shown above, statistics of production are very incomplete and take no account of important items like live-stock. For converting gross income into net, the officer deducted cultivation expenses, but he thereby excluded the important item of wages which constitutes the income of more than a third of the agricultural population. No doubt he was justified in excluding land revenue, seed, manure, interest on capital, etc., but by excluding such a large item of agricultural income as wages, his estimate of income has become unduly attenuated. Yet he considered his estimate an optimistic one.¹⁰

Allied to agriculture are live-stock, fish, forest products, and the various unorganised industries pursued by the rural population. On all these we have very little reliable information. Perhaps the most important of these is live-stock. In several agricultural countries, live-stock is even more important than crops. It includes such large items as milk, butter, curds, hides and skins. In 1924, Dr. Gilbert Slater estimated the live-stock income of Madras Presidency at Rs. 27.60 crores for the year 1919-20, or 9 per cent. of the total income.¹¹ Colonel Oliver, Animal Husbandry Expert to the Imperial Council of Agricultural Research, has estimated the

*Of the estimates made in the past—Dadabai Navroji (1870), Lord Cromer (1882) Digby (1899) Lord Curzon (1900) Wadia and Joshi (1913-14), Shah and Khambata (1921-22), and Findlay Shirras (1920-21, 1926-27)—only the last few had the advantage of even such statistics.

9. Report, Vol. I, p. 39.

10. *Report on Agricultural Indebtedness*, para. 15, (Government Press Madras, 1935).

11. *Madras Year Book*, 1923, pp. 788-91.

annual contribution of live-stock in India for 1929 at Rs. 1,900 crores, made up as follows¹² :—

	Crores of Rupees.
Cattle labour in agriculture	.. 612
Labour for purposes other than agriculture	.. 161
Dairy products	.. 810
Manures	.. 270
Other products	.. 45.20
Living animals exported	.. 0.36
Total	.. 1898.56

Colonel Oliver does not claim any high degree of accuracy for his computation, and one is inclined to consider it an over-estimate, even as Dr. Slater's was an under-estimate. We have at present no adequate material for estimating the value of cattle labour, dairy products, manures, etc. Colonel Oliver's estimate of milk and dairy products was based on the assumption that 24 gallons of milk was consumed (in the form of milk and products thereof) in India per head per annum—i.e., about 10 oz. per day per person. This is certainly an over-estimate for the Madras Presidency and perhaps for several other provinces. The estimated total consumption thus amounts to 39 million tons, which, valued at 1½ annas per pound, works out at Rs. 810 crores. Findlay Shirras's estimate for milk for 1926-27 came to only 297,928 maunds valued at Rs. 223.44 crores. According to him, the total national income of India in 1926-27 was Rs. 2,804 crores and this has been regarded as a liberal estimate. It is therefore difficult to imagine that the total income from live-stock alone would have amounted to Rs. 1,900 crores in 1929.

3. AN ECONOMIC CENSUS

It is clear from the foregoing that the existing data for income estimates are faulty and altogether inadequate. In Great Britain, Australia and several other countries, total production has been computed by the census method. But unfortunately in the peculiar conditions of India, it is not possible to collect figures by means of a census of the kind in use in those countries. Except in the case of organised industries and plantations, it is practically impossible to obtain schedules filled by the producers. The average ryot and artisan cannot be expected to fill such schedules. A census of a

12. Note published by the I.C.A.R.

different kind will have to be attempted in the case of agriculture and handicrafts which form the mainstay of the Indian population.

The census undertaken must be primarily on the basis of production but it must be supplemented by a summation of incomes in the case of services and those occupations whose income cannot be recorded in terms of produce. The unorganised industries of India are so intimately connected with agriculture that a survey of the two will have to be made together. Nor is the difference between rural and urban life so great in India as in most Western countries. A simultaneous census must therefore be taken both in villages and in towns. Every village and town cannot be surveyed; nor is it necessary, seeing that a survey of a fairly large number of them selected on the random sampling basis will give us as accurate an estimate as is necessary.

The two British economists who visited India in 1934 on the invitation of the Government of India (Dr. Bowley and Mr. Robertson) have made a fairly comprehensive scheme for an economic census.¹³ It consists of the following parts:—

1. A rural survey of 1650 out of the 422,000 villages of British India selected on the random sampling basis, each village being surveyed by a full-time investigator for a whole year.
2. An urban survey of about 30 to 40 out of the 1,603 cities and towns of India classed under that category by the census of 1931. This would represent about 8 millions out of the 28 million urban dwellers in British India.
3. An intermediate urban census of population.
4. A census of production in the case of factories using power, mines and some other industries.

The cost of the whole survey was estimated at Rs. 30 lakhs made up as follows:—

	Lakhs of rupees.
Census of production	.. 2
Rural survey	.. 22
Urban survey	.. 3
Urban census	.. 2
Report	.. 1
Total	.. 30

13. *A Scheme for an Economic Census (1934).*

It is here proposed to deal with only the rural survey which will necessarily be the largest of the various undertakings. The experts' scheme is based on excellent principles, but its excessive cost has alarmed many persons. According to Dr. Bowley's note, "the annual net income of each family in the village" must be drawn up.¹⁴ It means working out a balance-sheet of each of the 300 or 400 families in a village, but this will be too difficult even for the most diligent investigator.

For the purpose we have in view, such a summation of individual incomes is not necessary. The method we have adopted is not income-summation, but an aggregation of goods and services. This can be done without drawing up a balance-sheet for each family. We can add up the total production of the village before the produce goes to the houses. In the case of cereals, which comprise about 85 per cent. of the total sown area, the harvesting seasons are generally two in most parts, and as threshing is done on a few large common threshing floors in most villages, and as the produce is generally measured or weighed before it leaves the floor, especially where (as in the *batai* tenure) produce is shared between landlord and tenant, the actual produce from each field can be ascertained at the threshing floor without any great difficulty. In many parts of the country, weighing and measuring of produce is done by one man (or a few men) for the whole village, and such men could estimate produce accurately even before the crops are harvested. Some of the leading men of the village will also be able to tell soon after the harvest how much produce was raised from each holding.

The advantage of counting up produce in this way is clear. Cultivation may be regarded as a joint undertaking by landlords, tenants and labourers. The shares of all these partners in the business are in the grain-heap. Once it is distributed between the partners, it will be extremely difficult to obtain correct totals. Most people are unwilling to disclose such facts, and as for labourers, they are unable to say how much they receive in a year. Therefore a house-to-house survey will yield poor results. But if we count the produce at the source, these difficulties can be minimized and the work of the investigator will become comparatively easy. The village grain-heap is the fund from which the whole agricultural population draws its income and if it is correctly measured we get the essential data for income estimates.

14. *Op. cit.*, pp. 70-7.

By a procedure more or less similar, we may also estimate the gross outturn under pulses, oil-seeds, cotton, jute, sugar-cane, and other crops. The traders and the professional weighing men in the village must be utilized for verifying the estimates. They are the best statistical hands in the village and their services are invaluable in a rural survey.

Next we may convert the gross outturn into net by making certain deductions, the first of which is land revenue. Wages need not be deducted, as it forms the income of the labouring classes. Seed and interest on capital may be deducted, as they represent the income of a previous year, but if they are deducted the income of seed merchants and moneylenders must be estimated and added. A practical solution will be not to deduct them unless they go out of the village. The produce going out of the village as rent or wages must also be deducted and the corresponding incomings into the village must be added to the total. The whole net amount must then be evaluated in money at prices received in the village. To this must be added estimated values of straw, (excluding the part reserved for the cattle),¹⁵ minor crops, fruits and vegetables, timber, fish and forest produce, eggs and poultry, milk and milk products, hides and skins, horns and so forth. The standing crop of fruits and vegetables can be estimated by experienced persons, and milk supply must be computed by studying the yields of a few sample cows. The wages for cattle labour need not be taken as they are included in the grain heap. The income of weavers, spinners, carpenters, mat-makers, cartmen, etc. in the village must also be assessed and added. Finally the incomes received by blacksmiths, dhobis, barbers and village functionaries for services rendered by them (excluding customary payments made for help in the productive process) must also be included. Remittances going out of the village must be deducted from the total and remittances into the village must be added to it. Thus we get the total income of the village.

By working up such village totals, we may estimate the agricultural production and income of the country. But it may not give adequate data about the distribution of the income from agriculture among landlords, tenants and labourers. Such a division of the

national dividend is important in countries where there is a clear demarcation between these three classes, but in the case of India, the distinction between the cultivator and the labourer is very difficult to draw; for, a good number of peasants do their own labour and even work as day-labourers when they are free. The amount going as rent is important, and this can be easily estimated from the data collected on the above plan.

As has already been shown, family budgets are the most suitable means of measuring the economic condition of the community and of the different groups composing it. It is therefore necessary to collect, from all villages surveyed, budgets of families comprising every economic group selected on the random sampling basis. In order that the budgets may give a clear idea of the real income and standard of living of the various classes, provision must be made for obtaining full details of the food, clothing and house-room available to the different economic groups. Family budgets will also supply ample data for measuring the distribution of the national dividend and the quantity of goods and services which the different grades of income can command.

With the help of the Universities and the active co-operation of the Departments of Revenue, Agriculture and Co-operation, the cost of the census can be kept within reasonable limits. If a thorough census is taken once, the cost of future censuses will not be considerable. India is now taking a step forward in constitutional development and in every province there is keen interest in rural uplift. This is just the time to make an economic survey of the whole country. It will give us valuable data for drawing up plans for economic advance, and it will also give a starting point from which we may measure in future the success of the various efforts at rural amelioration which have lately been inaugurated in different parts of the country.

15. Dr. Slater excludes straw on the ground that it forms fodder for plough cattle, but not all the straw is so utilized.

THE HISTORY OF THE TAMIL-MALAYĀLAM ALVEOLAR-PLOSIVE

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(Continued from Vol. VIII, No. 3, Page 242)

CATEGORY 5.

This category is constituted of cases of what Tamil grammars describe as *pada-p-puṇarcci* (word-combinations in the special circumstances prescribed for Tamil) involving the junction of *l* and *n* meeting a following *t*. Here we are concerned with "external sandhi", and the external sandhi of this category, giving rise to the production of the alveolar plosive sounds, is represented only in literary Tamil and rarely in old Malayālam. The underlying principle of the sandhi change involved here, is mirrored in the internal sandhi of certain other speeches also, but as a phenomenon of external sandhi it appears standardized only in literary Tamil and less absolutely in old Malayālam.

Tamil

l + t.¹⁵

(1) When the final *-l* of monosyllabic bases with short radical vowels meets *t*-, *t't'(r')* is produced (as *ādēśa*) in *vēt't'r'umai* or casal combinations [*kal* 'stone' + *tūṇ* 'pillar' = *kat't'r'ūṇ*]; and *t't'(r')* or optionally *ḥd'* (pronounced and symbolized as *ḥṛ*) is produced as *ādēśa* [*kal* 'stone' + *tīdu* 'bad' = *kat't'r'īdu* or *kaḥ-ṛīdu*] in *alvaḷi* or non-casal combinations.

(2) When the first constituent of the word-combination is monosyllabic with a long radical vowel or when it is dissyllabic,

15. Tol., E., 150, 370, 371.

16. The *ṛ* of verb-forms like *cēru* (I shall enter) derived from the base *cel-* (to enter) and the affix *-du* separately appearing in forms like *varu-d-u* ('I shall come') is due to the sandhi change arising from the meeting of *-l + -d*. Cf. also *kōṛal* (= *kol-dal* 'killing'), *cēṛal* (= *cel-dal* 'entering').

then the junction of *-l* and *t*- produces *t't'(r')*, in casal combinations as in *vēt't'(r')imai* [*vēl* 'javelin' + *tīmai* 'badness'] and *d'* written and pronounced as *ṛ*¹⁶) in non-casal ones, as in *vēṛīdu* [*vēl* 'javelin' + *tīdu* 'bad']

The phonetic changes involved in these cases are the following. The junction of *-l* and *t*- producing *t't'(r')* in *vēt't'r'umai* combinations of (1) and (2) and optionally in *alvaḷi* combinations of (1) entails assimilation in both directions: the alveolar lateral *l* is converted to an alveolar plosive (voiceless *t'*), and the dental plosive in its turn also becomes changed to a voiceless alveolar plosive. [For the peculiar incorporation of *r'* in the consonant group *t't'r'* resulting from this Tamil sandhi, see the end of my essay.] The production of the Tamil *āydam* optionally in the non-casal word-combinations of (1) has been dealt with by me elsewhere. As for the production of *d'* (evaluated to-day as *ṛ*) in the non-casal combinations of (2), the phonetic change here is restricted to the introduction of a single semi-voiced *ādēśa* alveolar.

-n + t-

(1) In *vēt't'r'umai* combinations, *t't'(r')* is produced, as in *pon* 'gold' + *tīmai* 'badness' = *pot't'r'īmai*.

(2) In *alvaḷi* combinations, *nd'(r')* is produced i.e., the dental *t* of the second constituent becomes a voiced alveolar, as in *pond'-(r')īdu* [*pon* 'gold' + *tīdu* 'bad'].

Malayālam

While the Tamil rules of change regarding the junction with *t-* of *l* and *n* appear rigorously standardized in the literary dialect of Tamil in external sandhi, the west coast sister of Middle Tamil, Malayālam, evidences this change only in a few old compounds inherited from the parent speech and preserved in the older literature of Malayālam. Modern Malayālam does not show this change at all in external sandhi. Even old Malayālam, so far as one can judge from the texts and inscriptions available, preserves this change only in some old compounds handed down by tradition.

The fourteenth-century Malayālam grammar, *Līlātilakam*, however, prescribes a rule which appears to be somewhat similar to the literary Tamil rules. In the second *Śilpam*, the *Śūtra tēsya ca* and the illustrations given under this *Śūtra* [*kal* 'stone' + *taḷam* 'floor' = *kat't'aḷam*; *kōl + tēn* = *kōt't'ēn*; *pon* 'gold' + *tāmara* 'lotus' = *pot't'āmara*; *pon + tār* = *pot't'ār*] would tend to show that at least in intimate compounds like these given as illustra-

tions under this Sūtra, the Tamil rule came into operation. It should be said, however, that the oldest Malayālam texts and inscriptions show instances of this change ($l + t = t'$) only rarely in external sandhi; on the other hand, the absence of the sandhi change in circumstances in which we should have expected the rule to operate in literary Tamil, is particularly seen in several instances. The instances showing the change, that I have been able to collect from the older texts are the following:

mêt'taram (high quality)—*mêl + taram* [RC., 81, 3]
ñat'tuna (good prop)—*ñal + tuna* [R.C., 80, 2]
ñat'tavanē — *ñal + tavan* [KR., Ār. 188, 4]
kôt'tên (fine honey)—*kôl + t + tēn* [US., P., 100, 3]
varuṇand'iśa (west)—*varuṇan + diśa* [RC.]

On the other hand, instances like the following in which the sandhi rule has not operated, are most numerous and popular:

paravayil-t-tira (waves of the sea) [RC., 572, 1]
cembol-t-taḷir-oḷi (glitter of red gold leaf) [RC., 107, 2]
eri-tiṇṇil-t-taḷḷugulum (even if pushed into the burning fire)
 [KR., Ār. 222, 3]
pin-tuḍarn'n' - [KR., Ār., 1, 7]
kāli-k-kālil-t-taḍavina [US., 1, 47, 1]
kôl-t-tēn (good honey) [US., 1, 100, 3]
pārttāl-t-tiruviral [US., II, 50, 1]
pol-t-tār (gold flower) [KG.]

The early Malayālam inscriptions also have instances which fail to show this sandhi change in external sandhi:

9th century—Kaṇḍiyūr Inscription [TAS., Vol. I, p. 290ff.]
 —*kālattil-t-tiṅgal* (line 14).

12th century—Māmballi Plates [TAS., IV, p. 72ff.]—*iḷavaḷa-n'āṭṭil-t-taṇṇaḷkuḷḷa* (l. 43).

teṇṇiṅgalil-t-tan kūru (l. 41),
ayyan kōyilkal-t-taṇṇir yaḍuppānum (l. 187),

13th century—Tiruvalla Shrine Inscription [TAS., III, p. 39ff.]
 —*pontaṇḍam*.

In view of these instances, I am inclined to think that the rule of literary Tamil, though persisting in Old Malayālam in a few old compounds like *n'at'tuna* and *mêt'taram* and in the consciousness of learned men in the West coast (like the author of

Lilatilakam), who were familiar with the rules of Tamil grammar, never struck deep root in Malayālam. In this connection, I may note here that the literary Tamil rules under reference were often inoperative in the Middle Tamil colloquial as shown by inscriptional instances. The absoluteness with which *Lilatilakam* prescribed the rule was certainly not true of the popular speech (in external sandhi), since the speech-consciousness in the colloquial should have felt the constituents of the word-compounds as separate entities and treated them as such in actual usage. That the author of the *Lilatilakam* was inclined to be very conservative and that certain colloquial features of Malayālam which conflicted with the old literary Tamil rules were expressly disapproved by him would be evident from my discussion of the next category.

I might add here that in modern Malayālam the change [of $l + n + t = t'$] is conspicuous by its absence in external sandhi; *kal-t-taḷam* (stone floor), *pol-t-tāmara* [in poetry] but *pon-tāmara* [in the colloquial], *kôl-t-tēn*, etc., alone are met with, whenever used.

CATEGORY 6.

Here we are concerned with the junction of *l* and *n* with the plosives *k-*, *p-* and the affricate *c-* (which last is treated as a plosive by the grammars). Like the previous category, the present one is represented only in literary Tamil and in very old Malayālam in external sandhi. In literary Tamil there are many contexts where the change does not occur; and representative instances belonging to this category are even in the oldest Malayālam records so few that one is inclined to think that the change was not a popular one in Malayālam at all.

Tamil.

$l + k-$, $p-$, c ¹⁷

(1) *vêt't'r'umai* or *casal* combinations:—the production of an alveolar plosive **t'* which, however, is evaluated to-day as the cerebral *ṛ*:

*kal + kuṛai + *kat'kuṛai, kaṛkuṛai.*

Exc. In combinations formed of the noun-object followed by the verb, as in *kāl kudittu*, *kaḍal pukkū*, the change is absent.

17. Tol. Eḷ., 333, 367, 369.

(2) *Alvaḷi* or non-casal combinations:—the change of *l* to the alveolar plosive occurs only in certain adjectival compounds like **vet'paḍai*; in comparisinal compounds **vēt'kaṇ* (arrow-like eye); in syntactical sequences like **vandāt'ceyvan* (he will do if he comes).

In other cases of *alvaḷi* combinations, the change is absent.

$n + k-, p-, c-$

(1) In *vēt't'rumai* combinations *n* changes to **t'* which is evaluated as *r*: *pon* 'gold' + *kāppū* 'bracelet' = **pot'kāppū* (*poṛkāppu*).

(2) In *alvaḷi* combinations the change does not usually occur except in one context: *varin* 'in the event of coming' + *ceyvan* (he will do) = **varit'ceyvan* (*variṛceyvan*).

It is useful to note the following points in regard to the change in Tamil:

(a) Even in the literary dialect, the exceptions are fairly numerous.

(b) The rule does not operate in the colloquial¹⁸ from the Middle Tamil period onwards, as shown by the inscriptional instances of Tamil of the 9th and 10th centuries except in some common forms like

mēṛku 'west' [$< *mēt'ku = mēl$ 'above' + directive-*ku*],
mēṛpaḍi 'upper beam' [$*mēt'paḍi = mēl$ 'above'
 + *paḍi*], *ēṛpāḍu* 'arrangement' [$< ēt'pāḍu = ēl$ 'taking
 on + *pāḍu* 'arrangement'].

When the constituents of the compounds are felt by the speech-consciousness (in the colloquial of the masses) as separate and when the compounds are mere collocations of words without involving any special change in the meanings or in the connotations of the original constituents, it is natural to expect that the colloquial will fail to introduce the structural alterations implied in the standardized rules. In *mēṛku*, etc., given above, the significations of the compounds are, semantically speaking, different from those of the constituents, and so the structural alteration **t' > r* is embodied in the colloquial also.

18. Cf. how even in old literary Tamil, cases like *uḷ-paḍ-* and *uṭ-paḍ-* (to be included) existed side by side.

It is interesting to observe here that in modern Malayâḷam the only compound which at the present day shows the change is *ēṛpāḍu*.

Malayâḷam.

The change is very rare even in Old Malayâḷam. I shall take up the Inscriptions to begin with, since the evidence of these documents is unmistakable:

12th century—Mitrānandapuram copper plates [TAS., III, p. 3ff.] *n'ālpadu* 'forty' *n'āḷkalam* 'four measures' (l. 36) beside *n'ārḷkalam* (l. 8).

12th century—Kollūr maṭham plates [TAS., III, p. 229ff.]—*n'ālpadu* 'forty' (l. 15) beside *n'ārḷpadu* (l. 106),

12th century—Māmbaḷḷi plate [TAS., IV, p. 72ff.]—*mēlpāḍi* 'upper half' l. 62), *kalpiccu* 'ordered' (l. 39) beside *karpiccu* (l. 41).

13th century—Maṇalikkarai Inscription [TAS., III, p. 59ff.]—*kalpiccu* 'ordered.'

14th century—Ravivarman Inscription [TAS., V(2), p. 142] *mēlku* 'to the west.'

These are instances where variations are met with; in the following we find the literary Tamil rule followed, though the inscriptions themselves contain many exclusively Mal. features:

13th century—Tiruvalla Inscriptions [TAS., III, p. 45ff.]:

nāraṇa tādariṛ-piṛ-pagam [Note $r < *d$, occurring twice here].

Even an 18th century document [Pālayūr copper plate—TAS., III, p. 81ff.] shows *nerpaḷiśa* 'interest in the shape of paddy', but such cases are rare after about the 14th century except when the archaic forms are expressly introduced into documents like the Pālayūr copper plate under the influence of the Tamil tradition.

In the printed editions of the old literary texts, based upon MSS. preserved in different parts of Malabar, the change [$r < *t' = l$ or $n + k-, p-, c-$] is not found embodied anywhere:

cembol-k-kaḷal [RC., 364, 4],

kaiyāḷ-piḍitt- [RC., 369, 1],

kaṇṇil-p-punal [RC., 644, 5],

nīlpavar [KR., Ār., 72, 4],

mul-poludu [KR., Ar., 81, 2],
mēl-p-puḍava [KR., 216, 4],
mul-p-pāḍu [US., I, 116, 1],
polppū [US., I, 121, 1],
ṇal-col [US., II, 71, 1].

An examination of these instances would show that in Malayalam, as it gradually developed in the west coast, the change was only a rare one in initial stages (possibly confined to the literary dialect) and that soon this particular change of $l > *t(r)$ became most infrequent.

Lilātilakam, however, clings on to the literary tradition, even though many of the passages cited in this work fail to evidence this particular change. In the third Śilpam, the grammar prescribes that "l and n before k-, c- and p- become r" (i.e. $< *d'$) [*lanayōḥ ka-ca-pēṣu raḥ*], and gives the illustrations *kaṛkuḷam* 'tank built round with stone' [= *kaḷ* 'stone' + *kuḷam* 'tank'], *poṛkaṇṇāḍi* 'gold mirror' [= *pon* 'gold' + *kaṇṇāḍi* 'mirror'], *poṛpū* 'gold flower' [= *pon* 'gold' + *pū* 'flower']

I think that for the following reasons the rule as prescribed here was not quite justified by the state of the living Malayalam speech of that time and that the author of Lilātilakam was influenced very much by the conservative Tamil tradition in prescribing this rule with such absoluteness in the Sūtra. I shall give below my reasons:—

(i) As seen above, the early inscriptions contain several instances where the rule has not operated, and Lilātilakam itself appears to have been composed in the fourteenth century.

(ii) Uṇṇunīlisandēśam from which extracts are quoted in Lilātilakam does not show any instances of the change of $l, n + k-, p-, c- = r$; on the other hand it evidences uniformly the retention of *l* before plosives and a peculiar Mal. change (which I shall refer to again below) of Skt. $t > l$ (in Mal. adaptations of Sanskrit words) and of native *n* to *l* (in *mun*, *pon* and *pin*) before plosives.

(iii) The evidence of the Sūtras of Lilātilakam itself bears testimony to the absence of the change in at least some contexts in Malayalam:

(a) The Sūtra [Śilpam III, 13] *ka-ca-pa-yavēṣu na vikṛtiḥ* states that *n*¹⁹ undergoes no change before *k-*, *c-*, *p-*, etc.

(b) The Sūtra *ya-ra-la-lēbhyaḥ ka-ca-ta-pānām dvitvam* "after *y*, *r*, *l*, *l*, the sounds *k-*, *c-*, *t-* *p-* are doubled," and the illustrations *pāl-k-kiṇḍi* 'milk-vessel,' *tōl-p-peṭṭi* 'leather box,' *pal-k-kuttu* 'tooth-ache,' approve of the absence of the literary Tamil change before plosives, and prescribe gemination of the plosives.

(iv) A very significant observation is made in the *vyākhyā* to the Sūtra prescribing the change of *l*, *n* to *r* before *p-*, *k-*, *c-*: *atra la-kāra chāyā kēṛalabhāṣāyam nātiyuktā* "in instances (like *poṛkaṇṇāḍi*, etc.), the use of an *l*-like sound²⁰ (instead of *r*) is not quite appropriate in Malayalam."

Here the author of the grammar is expressly discountenancing (a) the retention of *l* in cases like *kaḷ-k-kuḷam* and (b) the peculiar Mal. change of *n* to *l* before the plosives *k-*, *p-*, *c-* (as in *pol-k-kaṇṇāḍi*, *mul-p-pāḍu*, etc.), which had already become popular enough among literary men in Malabar (cf. the use of such forms in Uṇṇunīlisandēśam) to merit the displeasure of the rather conservative author of Lilātilakam.

I think that these facts would lead to the inference that the Tamil rule was probably non-existent in the colloquial of Malayalam while persisting in rare cases in the literary dialect, and

19. Similarly, the same sūtra forbids the change of $n > t$, when *n* is followed by plosives; in literary Tamil, on the other hand, this change does occur in *vēṭṭrūmai* combinations.

20. The Malayalam fondness for *l* manifests itself in the following contexts apart from the instances in which the old *l* is retained in Mal. without change in *sandhi* positions where literary Tam. converts *l* to other sounds: (i) Skt. *t* or *d* in consonant groups formed of this dental and plosives, *s* or *m*, is adapted in Mal. with the value of *l*, while the corresponding adaptations of the same Skt. words in Tamil show $r (< *t')$ for the Skt. dental *t*: Mal. *salguṇam*, Tam. *sarguṇam*; Mal. *ulsāham*, Tam. *urcāham*; Mal. *albhuṭam*, Tam. *arbudam*; etc. It is noteworthy that the change of *t* to *l* in Mal. led to the symbol for *t* itself being regarded as that for *l*; and to the gradual replacement of the older symbol for *l* by the new one in modern Mal.

(ii) Skt. dental *t* as the final in forms like *hatāt* (suddenly), *daivāt* (through God) is adopted in Mal. as *-l*.

(iii) Native Dr. *-n* when meeting *p-*, *k-*, *c-* in external *sandhi* is converted by a process of analogy to *-l*, as in *mul-p-pāḍu* (before), *pol-p-pū* (gold flower).

that the influence of the colloquial was making itself felt to such an extent even in the literary sphere that the conservative author of *Lilātilakam* was forced to uphold the Tamil rule in *Sūtra* 26 even while he gave recognition to the popular forms like *pāl-k-kiṇḍi* in III, 20.

CATEGORY 9.

Inscriptional Telugu	<i>vānd'u</i>
Literary	<i>vāṇḍu</i>
Colloquial	<i>vāḍu.</i>
Koi	<i>vōṇḍu, ṇḍu.</i>
Kūi masculine gender ending	<i>-āṇju.</i>
Kūvi	<i>ansu.</i>

This category is constituted of a number of connected forms in Tel., Koi (a dialect of Gōṇḍi spoken in the Madras Presidency) and Kūi (including Kūvi), denoting the nominative masculine third personal singular pronoun and the appellative ending corresponding to it.

The endings here are found only in the nominative case forms; the so-called 'oblique' cases lack these terminations *-ru*, *-ḍu*, *-ḍu*, *ṇḍu*, *ṇju* I shall point out below that the Tel. inscriptional form stands for an original stage from which the other forms of this category are normally derived:

Inscriptional Tel. *nd'* (*nr*) > literary Tel. *ṇḍ*.

A similar consonant group *nd'* > Kūi *ṇj*.

Telugu.

Literary Telugu has *vāṇḍu* with the *ara-sunna* preceding *-ḍ*-, but the early MSS. of old works and the texts of old inscriptions show *vāṇḍu* with the symbol for the *niṇḍu sunna* embodied. Śrīmān Jayanti Rāmayya Pantulu has pointed out (p. 7 of his pamphlet on "Yuddhamalla Bezwada Inscription") how the use of the *niṇḍu sunna* in early MSS. and in old inscriptions points to a stage when perhaps the full consonantal value was given to the nasal sound as a *varga* nasal and how in later periods the *ara sunna* may have replaced the *niṇḍu sunna* when the full consonantal value of the nasal was perhaps reduced to that of a mere nasalization of the preceding vowel. The modern colloquial *vāḍu* represents a later stage still, in which the sound was lost altogether.

Now, this form *vā[n]ḍu* is peculiar in that in the "oblique" cases *-ḍ*- does not appear. The nominative form is *vāṇḍu* though

we should expect a form like *vānu* (an aphœresized representative in Tel. corresponding to Tam. *avan*), in view of the inflexional base *vān-(i)*. This peculiarity exists in the case of the Madras Gōṇḍi *ōṇḍu*, Kūi *e-aṇju* (he) and Kūvi *eansu* also; in all these dialects the respective "oblique" bases fail to show these finals of the nominative forms.

(2) Recently, an inscriptional form *vānd'u* (*vāṇṛu*) corresponding to the literary *vā[n]ḍu* has been unearthed by epigraphists as occurring in very old Tel. inscriptions belonging to a period prior to the 9th and the 10th centuries. The actual symbols employed in the representation of the ending look like those for alveolar *n* and the cerebral *ṛ*. It was, I think, Śrīmān Sōmaśēkhara Śarma who first suggested (p. 61 of *Rājarājanarēndra paṭṭābhiṣeka sancika*, published by the Andhra Historical Research Society) the relationship of the inscriptional *vāṇṛu* and the appellative ending *-anṛu* to literary *vāṇḍu* and *-aṇḍu*. I give below some of these forms:

Satyaditu-nṛu (= literally *satyādityu-[n]ḍu*)

vaccu-vāṇṛu

ḷaccina-vāṇṛu (? he who spoiled)

ḷaccu-vāṇṛu (? he who will spoil)

maganṛu (son)

ēḷu-vāṇṛu (he who rules)

vinṛināyaku-nṛu [a name].

Śrīmān Śarmā equated the symbol after the alveolar *n* in these endings to *ṛ* in his paper contributed to the *Rājarājanarēndra* volume. Śrīmān Prabhākara Śāstri, another Telugu scholar, disputed this in a paper of his contributed to the Telugu journal *Bhāratī* (July, 1928) and postulated that the symbol used in the inscriptions, being slightly different from the usual one used for *ṛ*, probably stood for an alveolar *d'* as in Tamil *nd'* (*r'*). He therefore considered that the inscriptional endings should be evaluated as *vānd'u*, *-(a)nd'u*. Śrīmān Śarma in a rejoinder (*Bhāratī*, August 1928) tried to answer Śāstri's arguments and reaffirmed that the symbol stood only for *ṛ*. Both these Telugu scholars²¹ are agreed

21. Mr. Prabhākara Śāstri in a subsequent paper (Tel. *Bhāratī*, Aug. 1929) has gone further and tried to discuss the origin of the ending in the inscriptional *vāṇṛu* (or *vānd'u*). He postulates that *ṛ* (*u*) here was a plural ending and argues that an alveolar *d'* cropped up as an *āgama* between old *n* (cf. Tam. *avan* 'he') and this plural ending *ṛ* and that at a subsequent

in thinking that the inscriptional endings are the ancestors of literary $vā[n]du$, $-a[n]d$. Regarding the nature of the symbol after n , even Śāstri admits that it resembles that for r .

The discovery of this inscriptional form²² is of the utmost importance in the study of Tel. $-nd-$ corresponding to Tam. $nd'(r')$ - of many categories. It shows that such cases of Tel. $-nd-$ may have had ancestors in Telugu itself of groups with the alveolar d' , corresponding to Tam. $nd'(r')$. A number of perspectives (see below) are opened up regarding the pre-literary ancestors of those Telugu cerebrals and cerebral groups ($-t-$, $-tt-$, $-nd-$, $-nt-$) which correspond to Tamil consonant groups with the alveolar in many of the categories discussed in the present paper. I shall deal with these general perspectives later on, and content myself here with observing that the group nd' (or $nd'(r')$) is shown by the inscriptional endings under reference to have existed as such in Telugu also besides Tamil and Malayalam.

Kūi.

The masculine ending $-aṇju$ appears in quite a characteristically Dravidian way in the following:—

- (1) pronouns like $a-vaṇju$ (he);

stage a singular $vānd'u$ (as Śāstri evaluates the inscriptional form) was detached by false analogy. He relies for this theory on the view that literary $vāṇḍru$ (they) may have been inherited from the old plural $vāṇḍu$. The explanation is an ingenious one, but I think that there are difficulties in accepting it:

(i) There is no evidence to prove that the literary plural $vāṇḍru$ may not have been formed from already existing singular $vāṇḍu$.

(ii) The gravest objection is probably furnished by the fact that Śāstri's explanation of the alveolar of $vānd'u$ is inapplicable to the alveolar in the other inscriptional forms:

$mūnd'u$ (three) literary $mūṇḍu$ [p. 61, Rājarāja Narendra Volume]
 $kond'ugal$ (infants, children) literary $koṇḍukal$ [Ahadanakara inscription].

22. I might here suggest a possible explanation for Tel. $vānd'u$ ($vāṇḍru$), though it is nothing more than a mere suggestion. I note that in the following dialects a $-d$ appears after the masculine third person singular form: Bhīli $avand$ (he) [LSI, IV, p. 566], Kōlāmi amd (he) [ib., p. 562], Burgāṇḍi [ib., p. 343], ad (he); this $-d-$ is absent from the oblique bases in these dialects. May it have been that a similar affix (the precise force or significance of which it is not possible to determine now) was incorporated in the Tel. form and that the junction of n and d gave rise to nd' ?

(2) appellative nouns like $neg-aṇju$ (good man);

(3) participial nouns like $vât-aṇju$ (man who came).

Only the nominatives show $-ṇj-$ in Kūi,—a peculiarity already noted in the case of Tel. $vâ[n]du$.

$-ṇj-$ of Kūi corresponds to Tamil $nd'(r')$ in the following:—

Kūi $iṇji$ (having said)	Tam. $ind'(r')$;
„ $tiṇji$ (having eaten)	„ $tind'(r')$;
„ $paji$ (pig)	„ $pand'(r')i$;
„ $tôṇj-$ (to appear)	„ $tônd'(r')$;

Further, if what is evaluated now as r in the following south Dravidian words stood for an old alveolar plosive, then we find the correspondence of Kūi j ~ south Dr. alveolar in the following also:

Kūi $âj-$ (to cool down)	Tam. $âr-$
„ $neṇj-$ (to be full)	„ $niṛ-ai-$

CATEGORY 8.

This category embraces the following:—

(i) the inflexional 'incremental' endings of the literary Tamil neuter demonstrative plurals $ava(i)$, $iva(i)$, $uva(i)$, of the interrogative neuter $yâva(i)$ and of the neuter plurals $pala$ (many), $ellâ cila$ (some);

(ii) similar inflexional "incremental" endings of Mal. ava , iva , and of old Mal. $pala$, $cila$, $ellâ$;

(iii) inflexional endings $vâṭi$, $vîṭi$ of the Telugu neuter plurals avi , ivi (corresponding to Tamil $avai$, $ivai$ and Mal. ava , iva).

The correspondence of the sounds here is literary Tamil $t't'(r')$ = Mal. $t't'$ = Tel. t .

Tamil.

Tol., EĪ, Sūtra 120 mentions the $câriyai$ (increment) $vat't'(r')$; we shall see below that the real form of the increment is $at't'(r')$ - and that $vat't'(r')$ -given by Tolkāppiyam is due to a false division of the base and the increment in forms like $avat't'(r')$ -. It is significant that this grammar has correctly recognized the nature of the ending as $câriyai$ or "increment."

Tol., EĪ, S. 175 treats about $pala-v-at't'(r')$ -, $cila-v-ât't'(r')$ - as the inflexional bases of $pala$ and $cila$; similarly, S. 176 deals with

yâ-v-at't'r'- (of *yâvai*), S. 178 with *avai-y-at't'(r')u*, *ivai-y-at't'(r')u*, *uvai-y-at't'(r')u*, S. 184 with the alternative *avat't'r'*-, *ivat't'r'*-, *uvat't'r'*- (of *avai*, *ivai*, *uvai*), and S. 190 with *ellâ-v-at't'(r')-* (of *ellâ*).

Malayâlam

The so-called "intermediate" demonstrative is not met with in Malayâlam; and *uvai* based upon this demonstrative does not exist in this speech. *Yâva*, though represented in old Mal., does not show the inflexional base *yâ-v-at't'*; nor does the more modern *êva* have in Mal. the inflexional augment with the alveolar plosive. The following, however, are met with in Malayâlam:—

(1) *avatt'*-, *ivatt'*- (as in the inflexional bases of *ava*, *iva*, the neuter plurals)—

Lilâtilakam [Ś.II,11]—*avat't'e*, *ivat't'e* [Acc.], *avat't'e-k-konḍu* [Third case with the post-positional *konḍu*], *ivat't'innu* [Dative].

US., U., 17, 4—*avai-y-it't'ingal* [Loc.]

[cf. the Tam. inflexional base *avai-y-at't'(r')-* of Tol. E], S. 178].

RC., 707, 3 and 580, 5—*ivat't'-âl*

KR., Kišk., 219, 1—*avai-y-it't'-in-uḍe*

„ 214, 6 and 215, 2—*ivat't'-il*

SM., 116—*avat't'-il*.

These inflexional bases, found not only in old Mal. but also in early modern Mal. (in Eluttassan's works, for instance), correspond to Tam. *avat't'(r')-*, *ivat't'(r')-* in meaning and usage. But already in Malayâlam *ava* (and in late stages *ava-gal*) had begun to be inflected (particularly in the colloquial) without the augment, as in Middle Tamil; in the later stages of modern Mal., therefore, the older bases with the augments *-at't'* became gradually restricted in usage to pronouns denoting animals and "low-caste" people, while forms like *ava-y-uḍe* (*ava-gal-uḍe*), *avayil* (*avaga-ḷil*) have become common in plural pronouns referring to other "neuter" or inanimate objects. Thus the present-day Mal., *avat't'*-, *ivat't'*- are used with a certain connotation of contempt with reference to cattle and "low-caste" people.

Another peculiar feature of late modern Mal., is that nominatives like *avat't'a*, *ivat't'a*, *avat't'unṇal*, *ivat't'unṇal*, *avat't'agal*, *ivat't'agal* have also been created by a process of analogy. *Avat't'*-

unṇal [*<avat't-in-gal*] and *ivat't'unṇal* are commonly heard in north Malabar while *avat't'a*, *ivat't'a* are common in certain parts of the Cochin State.

(2) *Adit't'*-, *idit't'*-, as the inflexional bases of the neuter singulars *adu*, *idu*, have been cited by Gundert [Gr., p. 38] as occurring in Vêṭāḷa caritam. These bases are quite unique, as similar bases for the neuter singulars *adu*, *idu* do not occur in Tamil.

adit't'-, *idit't'*-, so far as I have been able to ascertain, are not common in old Mal. texts or inscriptions, nor are they met with in Cochin State to-day.

(3) *palat't'*- and *pala-v-at't'*- (as the inflexional bases of *pala*) are found as rarities in old Mal. texts: Eluttassan's Bhāg. shows *palat't'-il-um* (in many), and Śp. has *pala-v-at't'-il*.

Modern Mal., however, does not use the bases with the augment *-at't'*.

(4) *cilat't'*- > *cila-v-at't'*- also appear as rare forms in old texts.

(5) *ellât't'*-²³ has persisted down to the present day, and even the colloquial uses this base.

padit't'- (the inflexional base of *pattu* 'ten') is another old form which has gone out of use in the later stages of modern Mal. and in the colloquial, except in the "arithmetical" calculations like *padit't' mūṇu muppadu* (thrice ten would give thirty), etc.

For the old usage, cf. Lilâtilakam *muppadit't'-aḍi* (thirty feet) [III, Vyākhyā,] Ceruṣṣeri's *padit't'-āṇḍu kâlam* (a period of ten years), *muppadit't'-âḷkô* (for thirty men?); T.A.S., III, p. 91, *irupadit't'-aḍi* (twenty feet).

Telugu.

The "neuter" plurals *avi*, *ivi* have the following inflexional bases in Telugu: *vân-i-*, *vîn-i-*; *vât-i-*, *vîṭ-i-*. *vâṭi-*, *vîṭi-* occur in the modern colloquial, and puristic grammarians [cf. Prauḍha-vyākaraṇam] used to maintain that these are purely colloquial as they are not sanctioned by the literary texts; recently,

23. *ellât't'*- with a dental *tt* instead of the alveolar group is frequently heard in the mass-colloquial.

however, it has been pointed out [cf. Mallâdi S. Śâstri's Śs., II, p. 45] that the forms do occur in old texts (though not in the very earliest ones) and that they have been "dignified" by the "approval" of Ahôbalapaṇḍita.

In Bhârata and the very earliest texts the bases are *vân-i*, *vîn-i*. I have already pointed out (see *supra*) that -i- in Telugu inflexional endings is unique in Telugu, so that the bases with which we can compare cognate bases from other Dravidian speeches would be *vân-*, *vîn-*, *vât-*, *vîṭ-*. The bases appear in Telugu as aphœresized forms with lengthening of the vowels of the second syllables. The correspondence with which this essay is concerned is between Tam. *avat't'*-, *ivat't'*- on the one hand and Tel. *vât-*, *vîṭ-* on the other: Tam. *t't'(r)* = Tel. *ṭ*.

It will be seen presently that the alternative Tel. bases *vân-*, *vîn-* would also be found to be significant, among other points of evidence, in illuminating the probable origin of Tam. *t't'(r)* and Tel. *ṭ* of this category.

A satisfactory explanation has so far not been given for the *t't'(r)* of the câriyais—*at't'(r)*, *it't'(r)* of Tamil. Caldwell considered *t't'(r)* as being due to the "doubling" of the *r* of what he regarded as a primitive Dravidian inflexional increment *ar* which he equated to the Kannaḍa augment -*ar*- (see below) appearing in certain inflexional bases. Caldwell's opinion (*Comp. Gr.*, p. 266) is based upon his theory of Tamil *t't'(r)* being the resultant in several instances of the "reduplication" of *r*. This theory of his may be applicable to a few Tamil cases of the gemination of *r* in *alvali* compounds like *veḷit't'(r)u-p-panai* where probably the principle of "doubling" was introduced analogically; on the other hand, as noted *supra*, the primary impulse for the production of *t't'(r)* was the *sandhi* combination of the sounds *l*, *n*, *r*, with a particle *t* in some of the categories discussed above.

Further, a flexional increment like -*ar*- (from which Caldwell derives the Tamil -*t't'(r)*) is not found in any of the Dravidian dialects except Kannaḍa and probably Kûi (see below).

It has been noted above that what is evaluated as *r* is itself in Tamil instances like *vêṇṇidu* [= *vêl* + *tidu*—category 5 above] due to the *sandhi* combination of *l* + *t*.

Similarly, *r* in cases like *pâr-kuḍam* and *adaṛku* [*adan* + *ku*—category 6] is due to the *sandhi* combination of *l*, *n* + other

plosives; it will be seen later on (see the chapter on cerebral *r* ") that in a number of other instances also it is possible to account for *r* as being due to a *sandhi* combination.

In view of all these, it is not justified to presume (as Caldwell does) that *ar* which appears only in Kannaḍa (and perhaps in Kûi) was the original increment which gave rise to *t't'(r)* of Tamil.

On the other hand, the explanation for Tam. *t't'(r)* of this category has (I think) to be sought through the comparative examination of the inflexional increments appearing in the different Dravidian speeches in forms cognate with the instances of this category. I shall here draw up a list of the cognate augments appearing in the south Dravidian speeches.

- (1) Inflexional bases of the singular neuter demonstratives *adu*, *idu*.
- (2) Infl. bases of the plurals of these neuter demonstratives.
- (3) Infl. bases of the neuter plurals *pala*, *cila*, *ellâ*.
- (4) Infl. bases of the numerals from 'one' to 'nine'.
- [(5) Infl. bases with -*in* of the numeral for 'ten'.]

Types.	Tamil.	Malayalam.	Telugu.	Kannada.	Kūi.	Gôṇḍi.
(1) Inflexional bases of <i>adu</i> , <i>idu</i>	<i>ad-an</i> , later <i>ad-in</i> ; <i>id-an</i> , later <i>id-in</i>	<i>adit't'</i> , beside <i>ad-in</i> ; <i>idit't'</i> , beside <i>id-in</i>	<i>dân</i> -(i)-, <i>addân</i> <i>dîn</i> -(i)-	<i>ad-ar</i>	<i>adan</i> -, <i>arar</i> -, <i>idan</i> -, <i>irar</i> -. <i>ivan</i> - <i>ivar</i> -	<i>add-ên</i> or <i>tân</i> <i>idd-ên</i> or <i>ten</i> . <i>av-en</i> <i>iv-en</i>
(2) Infl. bases of <i>ava</i> (i), <i>iva</i> (i)	<i>avatt't'</i> -, <i>avaiyatt't'</i> -, <i>ivat't'</i> -, <i>ivaiyatt't'</i> -	<i>avatt't'</i> - <i>ivat't'</i> -	<i>vân</i> -(i), beside <i>vât</i> (i) <i>vîn</i> -(i), beside <i>vî</i> (i)	<i>avar</i> - <i>ivar</i> -		
(3) Infl. bases of <i>pala</i> , <i>cila</i> , <i>ellā</i>	<i>pala-v-att't'</i> -, <i>cila-v-att't'</i> -, <i>cilatt't'</i> .	<i>pala-v-att't'</i> - <i>ella-v-att't'</i> - <i>ellatt't'</i> -		<i>ella</i> -		
(4) Infl. bases of neuter numerals	<i>nāl-an</i> -, <i>ār-an</i> -, etc.			<i>nāl-ar</i> -, <i>ār-ar</i> -, etc.		<i>mund-n-ā</i> - (of three) <i>raṇi-en-ā</i> - (of two)
(5) Base of <i>pattu</i> in compounds	<i>pad-in</i> - [before vowels] and <i>pad-it't'</i> -	<i>pad-in</i> - <i>pad-it't'</i> -	<i>pad-in</i> -, <i>pad-an</i>	<i>pad-in</i> -		<i>pad-n-ā</i> - (often)

Type (1). The inflexional "augments" are: *-an*²⁴ in Tamil, Tel., Kūi and Gôṇḍi; *-ar*- in Kannada and Kūi.

Tel. *-i*- in *dân-i*- is unique in Telugu, and the "augment" to which one has to relate *-an*- of Tamil is contained in the aphœresized *dân*-, *dîn*-. Gôṇḍi [Trench, Gr., p. 8] shows the non-aphœresized *add-ên*, *idd-ên* and the aphœresized *tân*, *ten* wherein an old augment *-an* can be postulated.

For Kannada *-ar*- appearing in all types except 5, see Śabda-maṇḍarpaṇa S. 110, Śabdānuśāsana, 266-270 and Kittel, Gr., p. 61. For Kūi *-ar*-, perhaps related to this Kannada *-ar*-, see p. 44 of Winfield's Gr.

The inflexional augment *-in*- of Mal. is cognate with Middle Tamil *-in*-. *-it't'*- appearing in Mal. *adit't'-āl* would be found to be related to the augment *-in*-, in the same way as *-in*- in Type (5) is related to the alternative *-it't'* (r') of Tamil and *-it't'*- of Malayalam.

For *ad-an*-, *id-an*-, see Tol., El, S. 201 and Nannūl 251. *ad-in*- in Tamil with *-in*- appears in Middle Tam. and in the colloquial. Mal. had only *-in*- and a rare *-it't'*-; *-in*- is mentioned in Līlātīlakaṁ, and is found uniformly in all the early texts and inscriptions.

Types (2) and (3)—These may be taken together in as much as in (3) the instances incorporate the neuter plural affix.

The inflexional augments are *-at't'* (r')- in Tamil, *at't'*- in Mal., *-aṭ*- beside *-an*- in Telugu, *-en*- (<*-an*) in Gôṇḍi, *-ar*- in Kannada and in Kūi.

The cognate augments, therefore, are *at't'* (r') ~ *at't'* ~ *aṭ* ~ *an* ~ *ar*.

The occurrence of *an* beside *aṭ* in Telugu on the one hand, and on the other of the same *an* in these types in Gôṇḍi and Telugu and in Type (1) in Tam., Tel., Gôṇḍi and in the "rude" dialects like Kōlāmi and Parji is significant in revealing the universality of the augment *-an*- in these contexts. The augments common to the singular and plural demonstratives are *-an*- (for Tel., Gôṇḍi) and *ar* (for Kannada).

24. cf. the following also:

[LSI, IV, p. 566] Bhili *adn*-, the oblique base of *ad*- (that);
[ib., p. 554] Parji *ad-an*, the oblique base of *ad*- (that);
[ib., p. 560] Kōlāmi *ad-an*, the oblique base of *ad*- (that).

Type (4)—*-an-* appears here in Tamil (Tel., El., 201) and in Gôṇḍi (Trench, Gr., p. 49), while Kannaḍa correspondingly shows *-ar-* (Śmd., 110).

Type (5)—Here, while *-in-* appears in Tam., Mal., Tel., Kann. and Gôṇḍi one finds that in Tam. and Mal. there are alternative augments with the alveolar plosive: Tam. *t't'(r')* and Mal. *it't'*. For Tam. *-t't'(r')*-, cf. Nannūl S. 247 and Tol. El., S. 122 in which latter *-it't'*- is implicitly alluded to as being derived from *-in-*.

Summing up, there are the following parallelisms:

- an* ~ *ar* in Type (1);
- an* ~ *-at't'(r')* ~ *-at-* ~ *ar-* in Type (2);
- at't'(r)* ~ *-ar-* ~ in Type (3);
- an* ~ *-ar-* in Type (4); and
- in* ~ *-it't'(r')* in Type (5) and in Mal. in Type (1).

Types (1), (2) and (3) are closely related, while Types (4) and (5) are useful for illustrating the parallelism of *-an-* and *-ar-* in (4), and *-in-* and *-it't'(r')* in (5).

There is therefore the following correspondence of inflexional augments:

-an ~ *at't'(r')* ~ *-at-* ~ *ar-*. The correspondence of Tam. *t't'(r')* to Tel. *t* forms one of the topics in the present paper; I have already pointed it out in the categories already discussed and the same correspondence is met with in the categories that I shall discuss later on. It will be seen later on that Tel. *-t-* is phonetically subsequent in origin to *t't'(r')*.

The origin of *t't'(r')* of this category, therefore, must be held to be connected somehow with *-an-* (appearing in a number of speeches in related Types) and *-ar* (appearing in Kannaḍa).

The exact nature of the relationship is not at present clear, though one might suggest that, in view of the rules of Dravidian sandhi, *-an-* might be original.

CATEGORY 9.

The genitive ending of (i) singular nouns and pronouns with final "person-denoting" *-n* and (ii) singular nouns which take on the flexional increment, *-in*, show the voiced alveolar *d'* :—

râman-d'e (of Rama)

kuśavan-d'e (of the potter)
end'e (my)
avan-d'e (his)
maratt-in-d'e (of the tree)

The alveolar *d'* here is always evaluated with the "correct" alveolar value.

This ending *-d'e* is unique in Malayâlam, as Tamil fails to show any genitive ending containing an alveolar plosive.

It appears to be fairly old in Malayâlam:

US., U., 9—*tên-mâvin-d'e* (of the sweet mango tree),
 US., U., 15—*cit't'ppan-d'e* (of the uncle),
 Lîl., vyâkhyâ to S.—*âlin-d'e* (of the fig tree),
 Lîl., vyâkhyâ to S.—*mâvin-d'e* (of the mango tree).

While forms with *-d'e* are rare in texts like Râmacaritam, Kannaḥṣa Râmāyanam, Bhagavālgīta and Râmakathappâtṭu, they are not absent in Uṇṇunilīsandeśam, as the above illustrations would show. Lîlâtīlakam expressly mentions forms with *-d'e* as a unique Mal. ending.

From the Kṛṣṇāgātha onwards, forms with *-d'e* are very popular, though Eluttāṣṣan and other poets employ the older *-uḍe* for metrical purposes or for an "archaic" effect.

The inscriptions tell more or less the same tale. The oldest inscriptions show *-uḍaya*²⁵ in some cases (as in Tamil), while at a later stage we find *-uḍe* and *ide* as the genitive endings [TAS., III, 18 ff].

25. *uḍaiya* in the oldest Tamil texts is not used as an inflexional ending but only with the meaning 'having the property of' which signification qualifies the noun to which it is annexed, as in *kapp-uḍaiya* etc. It is in what I have called the Early Middle Tamil stage that this form appears in Tamil itself as an ending of the genitive. The older usage is preserved in old Mal. texts in cases like the following: *n'irām-uḍaya mugundan* [Bh. G., III, 14, 1], *parākramam-uḍaya nīnakku* [KR., Kiṣ., 310, 2]; when the form is used as an inflexional ending, it appears in Mal. generally contracted as *-uḍe*, *-ide*, *-ḍe*, though *uḍaya* is also used in poetry occasionally for prosodic convenience. In modern Mal. which preserves the ending with *-ḍ-* in the genitive of words which do not have a basal or incremental *-n*, contracted forms are very common, e.g., *kutti-ḍe* (of the boy), *peñña-ḍe* (of the sister).

It is in a fourteenth century Mal. inscription that one finds a genitive form *tand'e* [TAS., Vol. IV, II, p. 149, l. 9]; but *-uḍe*, *-iḍe* continue sometimes to be used in later periods also.

There is little doubt that this *-d'e* of Malayāḷam which occurs (be it remembered) only in connection an *-n-* preceding it (whether this *-n-* be "person-denoting" or pronominal as in *end'e* or a part of the flexional augment *-in-* as in *maratt-in-d'e*, *ṇātt-in-d'e*) is due to the *sandhi* combination (which occurred only in Malayāḷam in this context) of the alveolar *n* and *-ḍ-* of the older *-uḍe*, *-iḍe* appearing as a genitive ending in early Mal. texts plentifully. The stages of change were the following:

(1) *-n-uḍaiya* (with the full post-position) is preserved in all inscriptions of the west coast prior to the 10th century and it occasionally occurs even in 14th century texts like the following:

KR., Kiṣk., 233, 2—*ṇinnuḍaya* (your),
Bh G., V, 8, 3—*adin-uḍaya*.

(2) *-n-uḍe* in which *uḍaiya* or *uḍai* is contracted to *-uḍe* appears from about the tenth century onwards in inscriptions. It is also very common in the earliest Mal. literary texts.

(3) *-n-iḍe*, with *-u-* of *-uḍe* being reduced in the unaccented position to *-i-*, marked the next stage in the evolution of the Mal. ending. This *-iḍe* appears in the west coast inscriptions of the twelfth century [TAS., IV, Māmballi plate]. Līlātilakam makes mention of *avaḷ-iḍe*, *avar-iḍe* in the vyākhyā to S. 11 of Śilpam II.

(4) *-n-d'e* with the elision of *-i-* and the assimilation of *-ḍ-* to the alveolar *d'* as a result of the influence of the alveolar nasal *n*, denotes the final stage.

It may be noted in this connection that the old *-uḍe* has been preserved as such in all Mal. cases where an alveolar nasal *n* does not precede it. Both old and modern Mal. show forms like the following in cases where there is no *n* preceding:

paḍa-y-uḍe (of the army)—RC., 103, 1.
jānaki-y-uḍe (of jānaki's)—KR., Ār., 166, 1.
avargaḷ-uḍe (their)—KR., Ār., 68, 1.

Gundert's view (*Mal. Gr.*, p. 26) that *d'e* arose from the *sandhi* combination of *-n-* and *adu* which latter is the genitive ending in Tamil as in *avan-adu*, *rāman-adu*, etc., is not correct in view of the following facts:—

(1) *uḍaiya*, *uḍe*, *iḍe* and then *(n)d'e* are the only endings that one meets with in Mal. texts and inscriptions so far available; in the earlier texts *uḍe* and *iḍe* are, as already noted, very common. The genitive ending *-adu-* has never been used in Mal. texts or inscriptions apart from one or two instances in RC which preserves a few old Tamil features like these.

(2) *-uḍe* is preserved down to this day in Mal. uniformly for all genitives where an alveolar nasal *n* does not precede the ending, and it is only where the *n* precedes the ending that we have *-n-d'e* replacing the older *-n-uḍe*, *-n-iḍe*.

CATEGORY 10.

Certain Dravidic forms for the numerals 'one' and 'three' involve the correspondence: literary Tam. *nd'(r')* ~ Mal. *ṇṇ* ~ Kann. *nd* ~ Tel. *ṇḍ* ~ Tuḷu *ṇj*, *j* ~ Gōṇḍi *nd*, *ṇḍ* ~ Kurukh *ṇt* ~ Malto. *ṇḍ* ~ Brāhūi *s*. The relevant forms are given in the table at the beginning of this essay.

Tamil.

The substantival form is *ond'(r')u*, while the "adjectival" forms are *or-* *ōr-* before vowels (Tol. Eḷ., 455, 464, 465) and *oru* before consonants (To Eḷ., 446, 460, 478).

Malayāḷam.

The substantival form in old Mal. is *ond'u* but *oṇṇu* in modern Mal. and in the colloquial. *ond'u* began to be replaced by *oṇṇu* in old Mal.; nevertheless, the earliest texts retain *ond'u* also beside *oṇṇu*. *oṇṇ'*- [TAS, V, p. 78ff.—12th century].

13th century Arrur plate [TAS., IV, p. 86 ff.] *oṇṇ'*- (line 14).

Kannāḍa.

ond'u, the substantival form, is used in modern Kann. adjectivally also, while in the older stages the adjectival *or* before consonants and *ōr-* before vowels are found:

old *or-nuḍi* (one word), new *ondu nuḍi*.
,, *or-dale* (one head), new *ondu tale*.
,, *or-piḍi* (one handful), new *ondu-piḍi*.

Telugu.

Okaṭi is the usual substantive and *oka* is the adjective; but Telugu does also show forms cognate with the Tam. substantival *ond'(r')u* and adjectival *oru*:

- Tel. *onḍu* (an individual).
 „ *onḍ-onḍa* (one by one).
 „ *onḍ-orun* (mutually).
 „ *onṭi-gāḍu* (lonely fellow).

onḍ- here is cognate with Tam. *ond'r-*. The form *onṭi* in the last instance shows the *aupavibhakti* modification of older *onḍ-*.

The following Tel. forms contain *or-* cognate with *or-* of Tamil, Kann., etc. :—

- ôr-ti* (one woman).
oruṇḍu (a certain man).
ori-mi (agreement, oneness).

Tuḷu.

Oñji, connected structurally with the Tamil substantival *ond'(r)u*, is used as a substantive and as an adjective: *oñj-êḍu* (one goat) with the final *-i-* elided (like Tam. *-ü*) before vowels, *oñj-oñji* (one by one), *oñji dina* (one day), etc.

Tuḷu also preserves the original adjectival base *or-* in *orti* (a certain woman) and in compound words like *or-kaṇṇü* (single-eyed), *or-kârü* (single-legged), *or-mæ* (throughout, everywhere), *or-portü* (one session of the day), etc.

Küi.

The adjectival form is *ro* (< *or*, by aphæresis and sound-transference), as in *ro mraṇnu* (one tree), *ro-añju* (a certain man); the substantival form is *ronḍe* where the final *-ṇḍe* is perhaps due to analogy with *rinḍe* (two) corresponding to south Dr. *reṇḍu*.

There are no forms in Küi which can be directly related to Tamil substantival *ond'(r)ü*.

Gôṇḍi.

The substantival forms are used adjectivally in this dialect (cf. modern Kann., Tuḷu and Kuṛukh).

In Mandla Gôṇḍi the form has a cerebral consonant group *uṇḍi* (LSI., p. 480), while in Betul the form shows the dental group: *undî* (Trench, Gr. p. 48).

The Gôṇḍi words *ôr-ul* (one, a certain man) and *orroni*, *orrai* (alone) probably contain the base *or-* corresponding to south Dr. *or-*.

Kuṛukh.

The form now employed as a substantive is a Hindi loan-word; but representatives of Tam. *ond'(r')* do exist.

Ort- and *onṭ-* are two Kuṛukh bases used adjectively now; *ort-* is employed in connection with persons, as in *ort-as* (a certain man), *ort-ortos-ge ciâ* (give to each), etc. *or^ot* is also used as an adjective with the signification of “a certain . . .”

ôṇṭ- is used for persons as well as things. *ôṇṭ-as* means ‘one man’ and *ôṇṭ-ad* (or *ôṇṭ-â*) ‘one woman or one thing’. The meanings and usage would be clear from the following sentences supplied by Grignard in his *Gr*.

ort ortos-ge ôṇṭâ ôṇṭâ ciâ (give one to each).

[cf. Tam. (coll.) *ôr-ôruttanukk-onn-onnu kuḍu*.]
âr or^ot or^ot ârsyar (they arrived one by one).

Malto.

ort- and *onḍ* are found, the former in connection with persons and the latter with non-humans:

- ort-eh* (a certain man),
ort male (one man).
ort maqi (one girl).
maq-onḍ êra (one goat).
kaḍ-onḍ târe (one wire).

cf. also *ort-ge* (alone, by oneself) and *or-me* (all).

Brâhûi.

asi is adjectival and *asiṭ* substantival. *asi* perhaps corresponds to south Dr. forms like Tuḷu *oñji*, Tam. *ond'(r)u*; Br. *a-* does correspond to south Dr. *o*, as in Br. *xall-* (to strike) and Tam. *kol-*; possibly *-s-* is a simplification of an old group like *ns* or *ñj*. I consider *-ṭ* in *asiṭ* as probably having been introduced by analogy of *iraṭ* (two) when *asi*, which (as I have just suggested) was structurally connected with the original substantival form, came to be used adjectivally and the need was felt for a new substantival form. Final *ṭ* in Br. *iraṭ* is a normal cognate of *ṭ* and *ḍ* in south Dr. *iraṭṭ-*, *raṇḍ-*, while *ṭ* in the Br. form for ‘one’ is abnormal.

In all the forms based on *or-* we find only the post-dental *r*. While the cerebral *r* is connected with the alveolar plosives (see below for discussion), the old post-dental *r* does not appear to be related historically to the alveolar plosives. It is difficult

therefore to approve of Caldwell's view (Comp. Gr., p. 324) that "Tam. *ond'ru* is the euphonised form of *oru*." I think that in the absence of forms with *r* in any of the Dravidian dialects (not even in Tamil and in Kannaḍa where *or*, *ôr*- with the post-dental *r* alone is found) it will be unsafe to postulate as Caldwell does, an original hypothetical form like **or* with *r*. That there is relationship between *or*- and *ond'r*- is of course beyond all doubt, but the nature of this relationship is not sufficiently clear.

"Three"—Tamil. *münd'(r)u* is the substantival form, and it is also used as an adjective. In ancient compounds we find also *mu*-, *mū*- as adjectival bases: *mu-k-kalam* (three *kalam* measures), *mu-ñ-nūṛū* (three hundred), *mū-v-āyiram* (three thousand), etc. cf. Tol. E., Ss. 441, 447, 457, 461, 466. *mū*- is generally found before words with initial vowels. These compounds are old ones, the modern adjectival combinations being formed with *münd'(r)u* as in *mūn'd(r)u nāl* (three days).

Malayālam.

Old Mal. had *münd'u* as the substantival form; modern Mal. *mūñu* (spelt *mūññu*) is its normal development. The earliest inscriptions show *münd'u*: cf. T.A.S., III, p. 30, l. 12 (12th century); T.A.S., III, p. 33 ff, l. 7, (12th century); T.A.S., III, p. 207 ff, l. 1 (13th century).

A thirteenth century plate (T.A.S., IV, p. 86 ff, l. 1) contains the modern development *mūññu*; though occasionally in later inscriptions the older *münd'u* is retained (cf. the 17th century Eraniel inscription in T.A.S., III, p. 219), the form *mūññu* has by about the 15th century gained wide currency and popularity in the language, as evidenced by the exclusive use of this form KG. I shall deal with the historical development of *nd' > ññ* in Malayālam (a change which affected not only the words of this category but those of other categories also) in greater detail farther on in the course of this essay.

mūñu is used adjectivally in Mal., like *münd'(r)* in Tam. *mu*-, *mū*- also occur in Mal. compounds like *mu-ñ-nāli* (three *nāli* measures), *mu-k-kuḍam* (three pots), *mū-v-āṇḍu* (three years), etc.

Kannaḍa.

Old *mūru* and new *mūru* are used substantivally and adjectivally. Further, *mu*- and *mū*- occur in compounds (Bhb., 163).

mū-gāvudam (three leagues), *mu-y-yāne* (three elephants), *mu-k-koḍe* or *mū-goḍe* (three parasols).

Telugu.

Besides the literary *mū[n]ḍu* from which the popular *mūḍu* is derived, there is also an inscriptional *mūnru* [p. 61, Rājarāja-narēndra volume].

mū[n]ḍu and *mūḍu* are used both substantivally and adjectivally. *mu*- also exists in compounds like *mu-p-piri* (three folds), *mu-k-kaṇṭi* (three-eyed), *mu-n-nūru* (three hundred), etc.

The importance of the inscriptional *mūnru* (which certainly contains a group corresponding to the Tamil *nd'(r)* with the alveolar) in elucidating the history of *mū[n]ḍu* and its relationship to Tam. *münd'(r)u*, cannot be over-estimated.

Tuḷu.

mūji acts alike as the substantive and the adjective: *mūj-aḍi* (three feet), *mūji bāra* (three plantain trees). *mu*- also occurs in compounds like *mu-k-kāru* (three legs), *mu-m-maḍi* (three folds), etc.

Gōṇḍi.

Maṇḍla Gōṇḍi *mūṇḍ* (L.S.I., p. 481) and Betul Gōṇḍi *mūṇḍ* are used substantivally and adjectively. If the distributive numeral *muhk* (three each) contains an affix *-k-*, then the *h* preceding it can be accounted for by postulating an old Gōṇḍi change of **mūr* + *k*, as in the Gōṇḍi plural formation *nāhk* (countries), the plural of *nār* (Trench, Gr., p. 36).

Kuṛukh.

mūṇḍ and *nubb* (cf. Tam. *mū-v-* in *mūvāyiram*, Tel. *mu-vv-aṇṭu* 'three pollutions', etc., where *v* appears a glide-sound) are native forms in Kuṛukh, used adjectivally. The substantival form is a Hindi loan.

Brāhūi.

musi is adjectival and *musiṭ* substantival. Cf. *asi* and *asiṭ* for 'one.' The dental *-s-* of Brāhūi is possibly a Brāhūi representative corresponding to *-j-* of Tuḷu *mūji* (three). The *-ṭ-* of the substantival *musiṭ* was perhaps due to the analogy of the substantival *iraṭ* (two) beside adjectival *ira*. cf. *asi* and *asiṭ* again.

mū-, mūr and mūd'r'u

mu-, *mū-* appearing in compounds were probably reduced forms of *mūr-* which in compounds like Kann. *mūr-maḍi* (three folds) and *mūr-me* lost the *r* (like Kann. *emme* 'buffalo' beside Tam. *erumai*, and Kann. *obban* 'a certain man' beside Tam. *oruvan*) and assumed the form *mu* (with shortening of *u* before consonants). As *mu-* appears in all the south Dravidian speeches from the earliest known times, it is not possible to trace in a clearer way its relationship to *mūr-* and *mūr'u*.

mūr'u of Kann. on the one side and *mūd'r'u* of Tamil and inscripational *mūr'u* of Telugu on the other are no doubt intimately related. The exact nature of the relationship would depend upon whether *r* itself in *mūr* may not have been an old alveolar plosive which in subsequent stages came to be pronounced as cerebral *r*. I have discussed this topic later on in the course of this essay. In some instances at least there is a sufficient warrant for us to postulate that what is now evaluated as *r* was an alveolar plosive. There is, however, no proof to show that *r* in *mūr* was an alveolar plosive; but if it was one, then *mūd'r'u* would have to be considered as a variant of *mūr* with a 'checking' nasal appearing before the alveolar plosive.

CATEGORY 11.

The following table contains a number of verb-bases, the Tamil representatives of which show the alveolar plosive. One set involves the inter-dialectal sound-correspondence:—

Lit Tam. *nd'* (*r'*) ~ Mal. *nñ* ~ Kann. *nd*, *r* ~ Tuḷu *j*, *nd* ~ Tel. *t*, (*ns*) ~ Kūi *ñj*, *s*.

Another set involves the inter-dialectal sound-correspondence lit. Tam. *r*, *t't'* (*r'*) ~ Mal. *r*, *t't'* ~ Kann. *tt* ~ Tam. *tt* ~ north Dr. *tt*.

Tamil.	Malayālam.	Kannada.	Tuḷu.	Telugu.	Kūi.	Gōṇḍi.	Kuṛukh.	Brāhūi.	Connected bases.
(1) <i>tōnd'r'-</i> (to appear)	<i>tōññ-</i>	<i>tōr-</i>	<i>tōj-</i>	<i>tōns-</i>	<i>tōñj-</i>				<i>ur-</i> (to be stable)
(2) <i>ūnd'r'-</i> (to be fixed)	<i>ūññ-</i>	<i>ūr-</i>	<i>ūnd-</i>	<i>ūt-</i>	<i>ūs-</i> (to fix)				<i>kar</i> (black)
(3) <i>kand'r'-</i> (to be burnt black)	<i>kaññ-</i>	<i>kand-, kar-</i>			<i>kānd-</i>				
(4) <i>kund'r'-</i> (to become deficient)	<i>kuññ-</i>	<i>kund-</i>	<i>kund-</i>						
(5) <i>vat't'r'-</i> (to be dried)	<i>vat't'-</i>	<i>batt-</i>	<i>batt-</i>	<i>vaṭṭ-</i>		<i>vatt-</i>	<i>batt-</i>		<i>kur</i> (short) <i>var-</i> (dry)
(6) cf. <i>nir-ai</i> (to be full)	cf. <i>nir-ai</i>	cf. <i>nir-e</i>		<i>nind-</i> (to be full)	<i>neñj-</i>	<i>nind-</i>	<i>nind-</i>		<i>nir-</i> (to be full)
(7) <i>tet't'r'-</i> (to slip)	<i>tet't'-</i>								cf. <i>ter-i-</i> (to slip off)

144 JOURNAL OF THE MADRAS UNIVERSITY

(1) The base with *-r* appears in Kannaḍa and in the Tamil-Mal. *tôṛ-um*. Possibly Tel. *tūr-* (to rise, be visible) is connected.

On the other hand, the base with the alveolar plosive in Tamil corresponds to Mal. *tôn̄n̄-*, Tuḷu *tôn̄j-* and Kūi *tôn̄j-*. Mal. *n̄n̄* on the one hand and *n̄j* of Tuḷu and Kūi on the other will be shown later on to be the developments of an old group containing the alveolar plosive.

(2) This series appears to be connected with an old base *ur-* (to be stable) appearing in all southern speeches and in Gôṇḍi *urr-* (to coagulate).

Just as Kann. shows *tôṛ-* corresponding to Tam. *tônd' (r')-*, so here too we have *ūr-* corresponding to Tam. *ūnd' r'-*; Tel. *ūt* and Kūi *ūs-* are transitives.

(3) *kar-* (black) is a very common base in the south, with which *kand' (r')-* and its immediate cognates are connected.

(4) This is a group which is related to common Dravidian *kur* (short).

(5) Here there is the correspondence Tam. *t't' (r') ~ Mal. t't' ~ Kann. tt ~ Tel. tt*.

(6) While Tam., Mal. and Kann. show forms derived from a base with *-r* (*nir-*), Tel. *nind-* (to be full), Kūi *neñj-*, Gôṇḍi *nind-* and Kuṛ. *nind-* appear to be connected with a base having the alveolar plosive, since Tel. *-ṇḍ-* and Kūi *-ñj-* of instance (1) of this very category and of other categories are directly related to (and, as shown below, derived from) an older alveolar group with *nd'*.

The relationship of *t't' (r')* of Nos. 5 and 7 of this category to *r* is probably accountable by the postulate of an old *sandhi* change of *r + t* where *-t-* may have played the part of a reinforcer.

As for the others with *r* and *nd' r'*, cf. my remarks *supra* in connection with *r* and *nd' r'* of category 1.

CATEGORY 12.

The alveolar plosive group *t't' (r')* appears in Tam. and Mal. in the causative verb-bases of a large number of simple verb-bases with final *-r*, *-l* and of a few with *-n*.

êtt' (r')- (to raise) from *êṛ-* (to rise).

agatt' (r')- (to separate) from *agal-* (to be separated).

titt' (r')- (to feed) from *tin-* (to eat).

In my paper on Dravidian causative verbs I have dealt with the several processes of the formation of causative bases from simple verbs. One of the most prominent and widely-represented among these is the production of the causative base with a particle *-t-*.²⁶

Tam.	<i>cel-u-tt-</i> (to cause to enter) from <i>cel-</i> (to enter). <i>uḍ-u-tt-</i> (to cause to wear) from <i>uḍ-</i> (to wear).
Gôṇḍi	<i>tiht-</i> (to feed) from <i>tind-</i> (to eat). <i>meht-</i> (to cause to graze) from <i>mei-</i> (to graze). <i>kist-</i> (to cause to do) from <i>kî-</i> (to do).
Kuṛukh	<i>ônd-</i> (to cause to drink) from <i>ôn-</i> (to drink). <i>êkt-</i> (to cause to walk) from <i>êk-</i> (to walk).

I am of the view that the *t't' (r')* of the causatives of this category is due to the internal *sandhi* combination of *-r*, *-l*, *-n* of the simple verb-bases and the causative particle *-t-* which appears separately in the causatives, given above, of Tam., Kann., Gôṇḍi, Kuṛukh.

I think that Caldwell's explanation of *t't' (r')* being the "reduplicated sound of *-r*" (*Comp. Gr.*, p. 454) is unsatisfactory in its failure to account for (i) *t't' (r')* of the causatives of simple verbs with *-l* and *-n*, (ii) the occurrence in other categories of a change of *r + t = t't' (r')*, and (iii) the widespread use of a causative particle *-t-*.

For the change of *r + t = t't' (r')*, compare especially the category of past stems like *pet't' (r')* from *per-* (to be born) + past affix *-t-*.

CATEGORY 13

There is a present tense ending *gind' (r')* in Tamil alternating with *gir*. The tense-ending *gind' (r')* has become modified in Malayalam as *-un'n'-* through the stages *-in'n' < ind' < gind'*.

In Tamil, *-gind' r'-* (or *-gir*) appears to be a comparatively late formation (see my "Morphology of the old Tam. verb") and the Malayalam ending is based on *(g)ind'*.

The different stages of the evolution of *-(g)ind' r'-* in Mal. to modern *-un'n'-* can be illustrated with the help of the forms available from the texts and inscriptions:

26. Kūl *tis-p* (to feed) beside *tin-b-* (to eat) contains an *-s-* which may be related to an older alveolar plosive, as in Tam. *titt' r'-*.

(1) *-gind'*-, *-ind'*- : the very earliest inscriptions prior to the 12th century, written in the west coast dialect, show *-ind'*- and *-gind'* .

12th century—Vellâni inscription—T. A. S., III, p. 33 ff.—

Cey-ind'a (paras 7 and 13), but *aruḷ-u-gind'-a* (para 1),

12th century—Mitrânandapuram copper plate—T. A. S., III—*cey-ind'-a* (l. 8).

13th century—Maṇalikkarai inscription—T. A. S., III, p. 59 ff.—*aruḷ-ind'-a*

(2) *in'n'*-, *-un'n'*- :

13th century—Arrūr plate—T. A. S., IV, p. 86ff.—*aruḷ-un'n'-a* (line 2) [Note:—This document also shows *n'n'* < *nd'* in *on'n'-innu* (l. 14) and *mūn'n'u* (l. 1)].

That an intermediate stage with *in'n'* < *ind'* did exist in Mal. is indicated by a 17th century inscription (T.A.S., III, p. 219ff.) which shows *vikk-in'n'-a* (l. 65), *cey-in'n'-avar* (l. 80). It should be remembered that the development of Mal. forms from older stages may not have synchronized in all tracts of Malabar; it is possible (as this 17th century inscription shows) that *in'n'*- continued to be retained in some regions (or among some communities) while *-un'n'*- had already been developed in other areas.

Among the old texts, the evidence of the grammar *Līlātilakam* is perhaps the most reliable, as in the case of the *kāvyaś* it is quite possible that the MSS. on which the printed editions are based may not represent in all cases the actual forms used by the authors.

Līlātilakam does not, however, mention the development with *īn*, though both *-ind'* and *-und'*- are referred to.

Uṇṇunīlisandēśam (in *Āt't'ūr Kṛṣṇa Piṣāroḍi's* printed edition) shows uniformly the ending with *-nd'*-; it may be noted that this work never uses the symbol *n'n'* in any of the Mal. forms derived from older ones with *-nd'*-. It is quite possible that the uniform use of *-nd'*- in this fourteenth century work was only a case of the preservation of a traditional *symbol* in spite of the change in its value.

Pūrvasandēśam, 2, 2—*urañṇi-ind'-a*
54, 4—*toḷ-ind'-ēn*

In *Kṛṣṇagātha* only *-un'n'*- is found in the published texts. From the time of *Eḷuttaśśan* onwards, the older *-ind'*-, *-in'n'*- have completely disappeared in literature, *un'n'*- alone being used as the present tense ending.

Summing up, I am inclined to think that the change of *nd'* to *n'n'* in Mal. in the present tense ending started somewhere about the 11th or the 12th century and became completely effected before the commencement of the 15th century. This view is more or less borne out by the history of the Mal. *n'n'* < *nd'* of other categories also so far as one can trace it with the help of the inscriptions (see below).

CATEGORY 14

The following table gives a list of verbs which in their past stems show *t't'(r')* or *nd'(r')* in Tamil, and cognate sounds in other speeches.

The past stem in Dravidian is generally formed with the particle *-t-* (see my paper on "Dravidian Verbs"). The appearance of the alveolar plosives in Tamil is directly connected with this past-forming particle *-t-*.

Base.	Tamil.	Mal.	Kannada.	Telugu.	Kūi.
(a) <i>per-</i> (to be obtained, born, etc.)	<i>pet't'(r')-</i>	<i>pet't'-</i>	<i>pett-</i>		
<i>ar-</i> (to be severed)	<i>at't'(r')-</i>	<i>at't'-</i>			
<i>ur-</i> (to be stable)	<i>ut't'(r')-</i>	<i>ut't'-</i>			
(b) <i>tōl-</i> (to be defeated)	<i>tōt't'(r')-</i>	<i>tōt't'-</i>	<i>sōt-</i> (from base <i>sōl-</i>)		
<i>nōl-</i> (to fast)	<i>nōt't'(r')-</i>	<i>nōt't'-</i>	<i>nōt-</i>		
<i>vīl-</i> (to sell)	<i>vit't'(r')-</i>	<i>vit't'-</i>			
<i>ēl-</i> (to assume)	<i>ēt't'(r')-</i>	<i>ēt't'-</i>			
(c) <i>cel-, sel-, sal-</i> (to enter)	<i>cend'(r')-</i>	<i>cend'-, cēññ-</i>	<i>sand-</i>		<i>soṭ-</i>
<i>nīl-</i> (to stand)	<i>ñind'(r')-</i>	<i>ñinñ-</i>	<i>nind-</i>		<i>niṭ-</i>
<i>en-, an-, in-</i> (to say)	<i>end'(r')-</i>	<i>eññ-</i>	<i>and-, end-</i>	<i>anṭ-</i>	<i>iñj-</i>
<i>tin-</i> (to eat)	<i>tind'(r')-</i>	<i>tiññ-</i>	<i>tind-</i>	<i>tiṇṭ-</i>	<i>tiñj-</i>

Group I is represented in Tamil and in Malayalam; here we note a change of $r + t = t't'(r')$. The past affix *-t-* appears separately in so many dialects of Dravidian that $t't'(r')$ here has to be attributed to the meeting of this past affix with *-r*.

In II, a *sandhi* change of $l + t = t't'(r')$ which is so common in internal and external positions in Tamil has to be postulated.

In III, the bases with *-l* and those with *-n* alike have in Tamil *nd'(r')* in the past stem. Mal. shows old *nd'* and later *ññ*, corresponding normally to Tam. *nd'(r')*; it may, however, be noted that the past stem of the compound *eḷu-ñil-* (to rise up, to stand up) has *eḷu-ñit't'-* as the past stem in modern Mal. and in the colloquial, while older texts [e.g., K.R., Kiṣ., 18, 8] have *eḷu-ñin'n'-* where *ñin'n'-* is the normal descendant of *ñind'-*.

Kūi *-t-* in the past stems of *nil-* and *sol-* (corresponding to *nil* and *cel* of Tamil) is pointed out by Winfield (Gr., p. 79) as a variant of the usual past affix *-t-*. The *t* here in *niṭ-* (the past stem of *nil-*) may probably be the Kūi representative of the *sandhi* change of $l + t$.

In the case of the past stems of the bases with final *-n*, the sound-correspondence of Tam. *nd'(r')* ~ Mal. *nd'*, *ññ* ~ Kann. *nd* ~ Tel. *ṇṭ* ~ Kūi *ñj* is noteworthy. Tel. *ṇṭ* corresponding to Tam. *nd'(r')* in this category may be compared to a similar correspondence in certain forms of category 2. Tel. *ṇṭ* in the past stems of *an-* and *tin-* is said to be of late origin (cf. Mallādi S. Śāstri's Śabdānuśāsanam, II, p. 148); but as the popular representative of old *-it-* (as in *an-it*, *tin-it*) the sound may have been of ancient origin. For Kūi *ñj* here corresponding to Tam. *nd'(r')* cf. the parallels that I have cited *supra*; cf. also the correspondence of Kūi *-ñj-* to inscriptional Tel. *nd'* in category 9.

CATEGORY 15

This is unique in Tam. *nd'(r')* and *t't'(r')* appear in the past tense "neuter" singular forms of certain verbs. We might group these cases under two headings:—(1) Forms of verbs which show *-i-* as the past affix; (2) those which have *-t-* or its *sandhi*—modified forms as the past affix:

- (1) *âg-ind'r'ü*, *âyit't'r'ü* (it became)
ñôkk-ind'r'ü, *ñôkk-it't'r'ü* (it saw)
- (2) *kaṇḍ-and'r'ü* (it saw) beside *kaṇḍadü*
ñadand-and'r'ü (it walked) beside *ñadandadü*

Of these, forms like *âgind'ri*, *nôkkind'ri*, *kaṇḍand'ri*, *naḍand'ri* are very ancient, being found only in the oldest Śaṅgam texts like *Puṇanānūru*. *âyit't'ri*, *nôkkit't'ri*, *kaṇḍadu*, *naḍandadu* are the more common finite tense-forms. The colloquial forms *âccü*, *nôkkittü*, *kaṇḍüdü*, *naḍandüdü* are based upon these latter.

The following illustrations of the ancient forms are taken from *Puṇanānūru* (Swāminātha Iyer's edition):—

- 1, 7—*oru diran âgind'(r')u*
- 1, 9—*vaṇṇam âgind'r'u*
- 148, 7—*kilattal eyyâd-âgind'r'ü*
- 243, 1—*irakkam âgind'r'ü*
- 141, 15—*piṇar vaṇmai nôkkind'r'-avan kai-vaṇmaiye*
- 61, 17—*vâla-k kaṇḍand'r'-um ilamê*
- 226, 1—*cet't'r' and'r'-*
- 226, 1—*ceyirttand'r'-*

Tamil grammarians usually explain *ind'r'u* and *it't'r'u* of the first type as containing the *idai-nilai* or tense-sign *-in* and the "neuter" affix *-ru*, while *and'r'u* of the second type is resolved into the *cāriyai -an* and the neuter affix *-ru*.

Whether *-in-* is a tense-sign and *-an-* is an increment here, forms part of the larger question of tense-formation in Tamil and need not occupy me now. I would only note here that the group *nd'r'* and *t't'(r')* of the first type and *nd'(r')* of the second type are the resultants of the *sandhi* combination of *n* with the "neuter" affix *t(d)*. The neuter formations *nôkkind'(r')u* and *nôkkit't'ru* correspond to masculine *nôkki-n-ân*, feminine *nôkki-n-âl*, first person *nôkki-n-ên*, second person *nôkki-n-ây*. In the neuter third person persons, therefore, *nd'(r')* and *t't'(r')* are certainly due to the *sandhi* coalescence of *n* and *t(d)*. Similarly, the third person neuter *naḍandand'r'u* may be compared with third person masculine past *naḍand-an-an*, fem. *naḍand-an-al*, etc. Here too, therefore, *nd'(r')* of the neuter form presupposes the meeting or junction of *n* and *t(d)*.

CATEGORY 16

The following indeclinables are concerned in this category.

- (1) Tam. *at't'(r')u*; *it't'(r')u*; *at't'(r')-ai*; *it't'(r')-ai*
Tel. *aṭu*, *aṭṭu*; *iṭu*, *iṭṭu* (of such kind)

Kann. *atu*, *aṭṭu*, *âṭu*, *aṣṭu*, *aysu*, *âsu*; *iṭu*, etc.
Tulu *añci*, *iñci*; *âtu*, *îtu* (so much)
Kūi *ahtî* (in that manner).
Br. *aṭ* 'how many'

- (2) Tam. *and'(r')u* (that day), *ind'(r')u* (to-day)
Mal. *an'n'u*, *in'n'u*
Kann. *andu*, *indu*
Tulu *ittæ* (now)
Kūi *ide* (now).
- (3) Tam. *and'(r')u* (not *-it*)
Mal. *aññ-*
Tulu *andu*
[Kann. *al-tu*].
- (4) Tam. *ind'(r')u* (exists *-not- -it*)
Mal. *in'n'-*, *en'n'-*
Tulu *ijji*, *iddi*.
- (5) Tam. *pônd'(r')u*
Tel. *pôṇḍi*

(1) The Kannada forms in this group are of comparatively late origin (Kittel, *Gr.*, p. 257), the older representatives being *anitu*, *initu*. *ṭ* or *ṭṭ* corresponding to Tam. *t't'(r')* is unusual in Kannada, the only instances of this kind in Category 1-a being probable Telugu loans. In the present category also, the forms with *ṭ*, *ṭṭ* are probably borrowings in view of the late occurrence of the forms in Kannada. Kann. *âsu* (such, so much) may have been developed from the older **âtu* (cf. Tulu *âtu*) < **attu* with a dental group; and *aṣṭu*, *iṣṭu* (so common in the modern dialect of Kannada) are probably late creations influenced in their formation by *âsu* and *aṭu*, *aṭṭu*.

As for the *t't'(r')* of Tamil, it is difficult to suggest a satisfactory origin. I would, however, compare this group with the following forms which are closely related in meaning to Group (1):

- Tam. *anai-y-a* (such), *anaittu* (of that kind, so much)
anaitt-um (all), *anna* (such)
- Mal. old *anaittu*
- Kann. old *anitu* (such, so much), *aneya* (such)
- Tel. *anta* (so much, all), *inta*
- Kur. *annū*, *innū*, (*h*)*unnū* (in such manner)
- Malto *any*, *iny* (such, thus).

The significations of the base underlying these formations are directly related to *Gr.* (1). It is possible that Tam. *at't'(r')*- is derived from a more elementary base like *an-* with an affix *t*, in which the meeting of *n* and *t* produced *t't'(r')*.

(2) The sound-correspondence here is Tam. *nd'(r')* ~ Mal. *nñ* ~ Kann. *nd*.

(3) The Tam. form *and'(r')u* is the neuter third personal form of *al*, where the neuter particle *t* (*d*) meeting *-l* produced *nd'(r')*. The base *al* (not) (which is conjugated for number and person in Tamil) exists in Mal., Kann., Gôṇḍi (*al*, *hal*) and Brâhûi (*allau*, *all-*). In Kann. *al-tu*, the *sandhi* change of *l + t* has failed to operate: cf. Kann. *pôl-tu* (like *-it*) with Tam. *pônd'(r')u*; Kann. *pin-tu* with Tam. *pind'(r')*-, *pit't'(r')*-.

(4) Tam. *ind'(r')* is the neuter third personal form of *il* (exists not). The base occurs in all south Dravidian speeches: Mal. *illa*, Kann. *ill-a*, *il-tu* (exists-not-it), Tel. *lêdu* < **eladu* < *il-adu* (exists-not-it), Tulu *ijji*, *iddi*.

(5) Tam. *nd'(r')* derived from *l + d(t)* corresponds to *nd* of Telugu.

27. Deictic bases of "local" origin denoting time (besides place) and containing *-l* exist in south Dravidian: Tam. *el* (day, night), *ell-ai* (day, limit), Tel. *elli* (to-morrow), Tulu *elle* (to-morrow); cf. also Kann. *al-l-i* (there), *il-l-i* (here), Tel. *alla* (that). One may suspect that *nd'(r')* of Tam. *and'ru* (that day), *ind'ru* (to-day) is derived from older forms like **al*, **il* + *d*.

V
RESUMÉ OF SOUND-CORRESPONDENCES

Category.	Tamil.	Mal.	Kannada	Telugu.	Tulu	Kûi.	Gôṇḍi.	Kurukh.	Malto.	Brâhûi.
(1) $-r + t$ $l, n + t$	<i>t't'(r')</i> <i>nd'(r')</i>	<i>t't'</i> <i>nd'</i> , <i>nñ</i>	<i>tt</i> <i>nd</i>	<i>t</i> <i>nd</i>	<i>tt</i> <i>nñ</i>	<i>tt</i> (<i>n</i>) <i>j</i>	<i>dd</i> <i>ḍ</i>	<i>dd</i>	<i>nd</i>	<i>s</i>
(2) $r + t$	<i>t't'(r')</i>	<i>t't'</i>		<i>t</i>						
(3) $ḡ + t$	<i>t't'(r')</i>	<i>t't'</i>		<i>t</i>						
(4) (?) $r + t$	<i>t't'(r')</i>	<i>t't'</i>	<i>tt</i>	<i>tt</i>						
(5) $l, n + t$	<i>t't'(r')</i> [<i>nd'(r')</i>]	[<i>t't'</i>] [<i>r</i> < * <i>t'd'</i>]		<i>tt</i>						
(6) $l, n + p-$, $k-$, c	r < * <i>t'd'</i>		(?) r < * <i>t'</i>	<i>nr'(nd'r)</i> , <i>nd</i>		<i>nñ</i>				
(7) (?)			<i>nd</i>	<i>t</i>						
(8) (?) $n + t$	<i>t't'(r')</i>	<i>t't'</i> <i>d'</i>	<i>nd</i>	<i>nd</i>						
(9) $n + ḍ$	<i>nd'(r')</i>	<i>nñ</i>	<i>r</i>	<i>nd</i>	<i>nñ</i>					
(10) r and <i>nd'(r')</i>	<i>nd'(r')</i>	<i>nñ</i>	<i>tt</i>	<i>ns</i>	<i>nñ</i>					
(11) r and <i>nd'(r')</i> $r + t$	<i>t't'(r')</i>	<i>t't'</i>		<i>tt</i>	<i>tt</i>					
(12) $r, l, n + t$	<i>t't'(r')</i>	<i>t't'</i>	<i>tt</i>							
(13) ?	<i>nd'(r')</i>	<i>nñ</i>	<i>nd</i>							
(14) $r, l + t$ $n, l + d$	<i>t't'(r')</i> <i>nd'(r')</i>	<i>t't'</i> <i>nñ</i>		<i>nt</i>						
(15) $n + t$	<i>t't'(r')</i>			<i>tt</i> [<i>nd</i>]						
(16) $l, n + d$	<i>nd'(r')</i>	<i>nñ</i>	<i>nd</i>							

The cognate sounds corresponding to Tam. $nd'(r')$ are Mal. $\acute{n}\acute{n}$ (1b, 10, 11a, 13, 14b, 16b), Tel. $\acute{n}\acute{d}$ (1b, 10, 14b, 16b), Kann. $\acute{n}\acute{d}$ (1b, 10, 14b; 16b), Tuḷu $\acute{n}\acute{j}$ (1b, 10, 11a); while those corresponding to Tam. $t't'(r')$ are Mal. $t't'$ (1a, 2, 3, 4, 5, 8, 11b, 12, 14a), Kann. tt (1a, 4, 11b, 14a), Tel. $\acute{t}$ or $\acute{t}\acute{t}$ (1a, 2, 3, 4, 8, 11b, 16a), Tuḷu tt or nd (1a, 11b, 16a).

The correspondences: Tam. $nd'(r') \sim$ Mal. $\acute{n}\acute{n} \sim$ Kann. $\acute{n}\acute{d} \sim$ Tel. $\acute{n}\acute{d} \sim$ Tuḷu $\acute{n}\acute{j}$ and Tam. $t't'(r') \sim$ Mal. $t't' \sim$ Kann. $tt \sim$ Tel. $\acute{t}$ or $\acute{t}\acute{t}$, occur in many categories in each case.

VI

The relationship of the short liquid cerebral r and the alveolar plosive.

The short cerebral liquid r occurs to-day among the south Dravidian speeches only in Tamil and Malayālam as a separate phoneme. The value of r in Tamil is that of a cerebral. When it occurs singly in inter-vocal positions, the cerebral value is given to it, while the r' appearing in the groups $t't'r'$ and $nd'r'$ in the south Indian enunciation of literary texts and in the literary contexts where l, n meet $p-, k-, c-$, is alveolar in value. In modern Malayālam the sound r is always cerebral. A difference between the Tamil sound and the Malayālam sound which careful observation would disclose is that the Mal. sound is more "trilled" than the Tamil one.

The sound r (with a distinctive symbol) existed in old Kannaḍa and old Telugu, but in the modern varieties and particularly in the colloquials the old r (which was regarded as a *guru rēpha* or a variant of the post-dental r) has been replaced by r . According to Kittel, the sound r disappeared from literary Kannaḍa some time about the 17th or 18th century (*Kann. Gr.*, p. 15); in Telugu the literary tradition still tries to bolster up the sound, though it should have been replaced in the colloquial by post-dental r from a very early period.

It has been noted above how the symbols used in Tamil and in Mal. for the consonant groups with the *alveolar plosives* are those for r ; it is noteworthy that the Telugu inscriptional form $vāṇṛu$ (see *supra*) also uses the symbol for r to represent a presumably alveolar plosive sound (d') which in the subsequent history of this speech changed to cerebral $\acute{d}$ in $vāṇḍu$, $mūṇḍu$, etc. Again it has also been noted how the original alveolar plosives

resulting from the *sandhi* combinations of l, n with $p-, k-, c-$ are evaluated as r . Further, in category 5 one notes that it is r that stands for an older alveolar plosive $*d'$ arising from the *sandhi* coalescence of $-l$ (after long vowels) and $-d$. These facts would lead one to query whether what is evaluated as a short cerebral liquid r may not in other contexts (than those mentioned immediately above) have been evolved from an older alveolar plosive. Phonetically, an alveolar liquid r' is produced by the tip of the tongue on the same position on the mouth-roof as for the alveolar plosive, the difference between the liquid and the plosive being only that the liquid involves vibratory movements of the tongue-tip while the plosive entails stoppage and plosion. The cerebral r is in phonation allied to the alveolar r' , the difference between the two being that the former is produced higher up on the mouth-roof. Phonetically, then, a short alveolar plosive may *prima facie* change into an alveolar liquid r' and thence easily to the cerebral liquid r . And this is apparently what has happened in instances like $vêṛidu$ ($vêl + \acute{t}idu$) and $cêru$ ($cel-du$) of category 5 and $êṛpaḍ-$ of category 6. The question is whether other cases of r (and particularly those with which the forms with $t't'$ and nd' are connected) may not have been developed from an alveolar plosive, just as r of $vêṛidu$ is developed from older $*d'$. This question does not admit of an easy solution: but I shall outline below a few perspectives which would favour the view that at least some cases of what is now evaluated as the short cerebral liquid r may have been evolved from an alveolar plosive.

Before I outline these new perspectives, I may here emphasize the value of the testimony of instances like $êṛ-pāḍu$ (of category 6), $vêṛidu$ (of category 5) and of $cêru$ (of category 5). I may also note here that $êṛ-pāḍu$ ($= \acute{e}l + pāḍu$) exists in Tel. also as an ancient form in circumstances which, so far as one can observe now, suggest that it is not a loan from Tamil. This would indicate that the change of $*d' > *r' > r$ may here have been common to south Dravidian speeches. The analysis of a few south Dravidian bases, which I shall give below, would tend to extend this view to a few other instances.

I would now suggest a few orientations tending to support the view that r even in cases other than $êṛpāḍu$, $vêṛidu$ $cêru$ may have been derived from an alveolar plosive:

(1) Even in the Tamil cases of *sandhi* change of $l, n + t$ giving rise to $t't'(r')$ or $nd'(r')$, the symbol employed from time immemorial has been that for r .

(2) Tamil verbal nouns like *kôṛal* (killing) formed of *kol-*, the base, and *-dal*, the ending (as in *cey-dal* 'doing' *ôḍu-dal* 'running,' etc.), *cêṛal* (joining) formed of *cel-*, the base, and *-dal*, evidence an *ṛ* instead of the alveolar plosive **d'* which one should normally expect from the *sandhi* combination of alveolar *l* and dental *d*.

(3) There are some bases with *-ṛ-* common to the south Dravidian speeches, in which the *ṛ* could conceivably be traced, on a comparative examination of these and connected bases, to old *sandhi* combinations:—

(i) *nīṛ-* (to cause to stand), the causative of *nīl-* (to stand)

Tam. *nīṛ-* (to make stand, set, place, weigh, balance)

„ *nīṛ-uv-* (to cause to stand)

Mal. *nīṛ-uga* (what stands straight)

„ *nīṛ-utt-* (to cause to stand)

Kann. *nīṛ-is-* (to cause to stand)

nīl- (to stand) occurs in all south Dr. speeches and in Kūi, Gôṇḍi and Kuṛukh of the north.

ṛ here is very probably a development of older **d'* from the *sandhi* change of *l* (of *nīl-*) and a transitival affix *-d* (cf. category 12).

(ii) *ñar-* (good, fragrant ~ *ñal-* (good)

Tam. *ñaru-mai* (goodness, fragrance) —used with the primary meaning of 'goodness' [*ñan-mai*] in Puṛaṇânūru

Mal. *ñaru* (good, fragrant)

If *l* of *ñal-*, is related to *ṛ* of *ñar-* (as it well might be), the change was probably due to a *sandhi* change.

(iii) *aṛ-* (to be non-existent) ~ *al* (not)

Tam. *aṛ-* (to cease to exist, be lost, be severed)

[The primary signification 'to cease to exist' occurs in very old texts].

Mal. *aṛ-* (to be severed)

Kann. *aṛ-*

Tel. *aṛ-* (to be severed, lost)

al (not) is very widely represented in Dravidian, occurring as it does in the south Dravidian speeches, in Gôṇḍi (*h*)*al* and Brâhūi *all-*.

al is a particle, while *aṛ-* is a verb-base derived from it; hence probably *ṛ* here is derivative.

(iv) *iṛ-* (to cease to exist) ~ *il* (not)

Tam. *iṛ-*

Mal. *iṛ-*

Kann. *iṛ-*

il (not) is a particle represented in all south Dravidian speeches. *iṛ-* appears to have been derived from it.

(v) *piṛ-* (back) ~ *pin* (back)

Tam. *piṛ-agu* (back-side)

Mal. *piṛ-agu* (back)

Tel. *piṛ-id* (back).

In all the instances that I have cited here, what is evaluated as *ṛ* could conceivably be explained as standing for an older alveolar plosive *d'* which arose from pre-literary *sandhi* changes. It is significant that all these bases have *developments* in Tamil with *t't'(r')* in consequence of further *sandhi* changes: *ñât't'-am* (odour, smell) is derived from *ñâr-*, related to *ñar*, *it't'(r')* is the past stem of *iṛ*, *at't'(r')* that of *aṛ-*, *pit't'r'-ai* is a derivative from *piṛ-*.

(4) From the earliest known times, Tamil grammarians have treated *ṛ* as a plosive or vallinam and classified it with *k*, *t*, *p* and *c* (the affricate with a plosive element). Tolkâppiyam, E1, 94 describing the sound definitely alludes to the plosive character of the sound by the use of the term *ot't'r'a* (forming a contact or stoppage): *aṇari ṇuniñâ-v-aṇṇam ot't'ra raḥkânahkânâyiraṇḍum pirakkum* "*ṛ* and *n* (alveolar) are produced when the tip of the tongue forms a contact with the hard palate." Like other plosives, it is not *halanta* in final positions but is followed by the enunciat-ive. In *sandhi*, *ṛ* receives a treatment parallel to that of the other plosives. *ṛ* is a phoneme with an independent existence of its own, as distinct from the pre-alveolar *ṛ* (*ṛ*). While *ṛ* (*ṛ*) may be *halanta*, *ṛ* is never so. *ṛ* never rhymes with *ṛ* but only with plosives in consonantal assonance. Like other plosives, *ṛ* takes on a checking nasal before it in certain contexts. The treatment of *ṛ* in Tamil is entirely different from that of the pre-alveolar *ṛ*.

All this would indicate that what is evaluated to-day as short liquid r had in some instances a plosive value in the past; and this plosive, as we have already seen from the discussions given above, was an *alveolar* one. When exactly the sound-value changed from that of an alveolar plosive to that of a cerebral liquid r cannot be determined. One thing is clear. Since Middle Tam. colloquial inscriptions show a "confused" interchange of r and r , the evaluation of r as a cerebral liquid was current already in the colloquial of this period. Whether Tolkāppiyam (the earliest extant grammar of Tamil) reflects merely a tradition in the matter of the actual value of the sound or whether at the time of the composition of this Tamil grammar what is now evaluated as r involved the value of an alveolar plosive d' cannot now be said.

It is noteworthy that while the Tamil grammars distinguish ($\dot{r}$) as a plosive, the Kannaḍa and Telugu grammars (the earliest among which are certainly compositions of a considerably later period than Tolkāppiyam) treat r as a liquid and as a variant of the *laghu rēpha* or the pre-alveolar r . In actual value, therefore, the symbol r occurring short has to-day only the value of a cerebral liquid in Middle and Modern Tamil, in old Kannaḍa and in old Telugu. The grammatical tradition of Telugu and Kannaḍa apparently does not reach back to a stage when what is pronounced as r had the value of an alveolar plosive. Kannaḍa Bhb. [10], Śabdasmṛti (of Kāvyaśāloka) and Smd. [14] regard r as the variant of the *laghu rēpha*, produced by *prayatnāśraya*.²⁸

Similarly, the so-called *śakata rēpha* (*bandi ra*) of Telugu (answering in intervocal positions generally to Tam. $\dot{r}$) is regarded by Āndhraśābdacintāmaṇi (the earliest known grammar of Telugu) as a variant of the *laghu rēpha*: *rastvatra gṛhyatē dvi-vidah* "two kinds of r exist (in Telugu)."

Līlātilakam, the fourteenth-century Mal. grammar, considers r as a liquid though it carefully distinguishes the sound from the pre-alveolar r .

28. Bhb., 10—*la-ra-ḍairēvala-ra-lāḥ* [vṛtti —*prayatnāśrayāt la-ra-ḍairēva la-ra-lā-iti dēsiyākṣare bhavanti*].

Śabdasmṛti, 6—*la-ra-ḍa grahanade la-ra-lāḥsaram*
akkum pīḍanaprayatnāśrayadim.

Smd. 18. *atipīḍanaḍim rēphāśridamāda rakāramum*.

There is little doubt that the traditional view of ($\dot{r}$) being a plosive in Tamil had been completely lost in Telugu and in Kannaḍa; but the value of the Tamil tradition itself is of the greatest significance.

All these various perspectives lead to the following conclusions: (i) What is evaluated in the main south Dravidian speeches as the short cerebral liquid r may, at least in the instances mentioned immediately above, have been developed from an older alveolar plosive. That this change of value might have occurred at a common stage is shown by (a) the existence in all these speeches of bases like *nir-*, *nar-*, *ar-*, etc.; (b) the use of a symbol which is identical with, or very nearly resembling, one for the (modern) cerebral liquid r in the Tel. inscriptional forms *vānru*, *mūnru*.

(ii) So far as the r which in the categories of this essay is connected with alveolar plosive groups in *sandhi*, is concerned, one might suggest that it may have had an alveolar value in the earlier stages, with perhaps some plosive element involved in the phonation.

VII

Tamil.

(1) Tamil *nd'* is, as already noted in connection with the several categories concerned, the direct phonetic resultant in 1b, 5b, 14b, and 16b, of the sandhi change of an alveolar l or n + a dental plosive particle. While in 5b (external sandhi of the *alvali* type, of $n + t$) the change is quite apparent, in the other types the action of a dental plosive particle can be postulated in view of the fact that this particle appears separately in each of the types in exactly parallel instances.

(2) $r < *d' < *t' < l$ or $n + t$ is another change in Tamil occurring in 5a (one group), 6 and 11c. While in instances like *vêr'īdu* (= *vêl + tīdu*) of 5a and in 6, we are concerned with external sandhi where the phonetic change is quite obvious, the change is an internal one in 11c, capable of being inferred from a comparison of the relevant instances with more elementary bases.

(3) Bases with *-nd'* occur side by side with those having *-r* in 1c and 11a (instances like Tam. *tōnd'*, *tōr*, Kann. *tōr*). If *-r* is really $<$ older d' in these cases, it is probable that *nd'* appearing in alternative Tamil instances may have been variants in which

the checking nasal characteristically appeared before the original alveolar plosive :

* d' nd'
 r

(4) *t't'* in 5, 8, 11b, 12, 14 and 15 has already been traced by me to the *sandhi* meeting of *l* or *n* + *t*. Among these, 5 treats about external *sandhi* where the meeting sounds are quite apparent, 12 deals with cases where a causative particle *-t-* appearing widely in Dravidian has been employed, and 14 with instances where the past affix *-t-* has made itself active; in 8 also, as I have already tried to show, an old *sandhi* change can be postulated on the basis of the comparison of Tamil instances with non-Tamil ones of a parallel kind.

(5) In 1a, 2, 3, 4 and 11b, the change appears to have been a case of *r* (appearing in cognate bases) + *t*. No direct proof is available for us to trace the *r* here back to an older *d'* or *t'*.

My discussion of each one of these cases has dealt with the appropriateness of the use of a dental particle with a definite function and with the probability of a particle of this kind having been originally used in each context as made evident by the employment of the same particle in an unmodified state in parallel instances of each of the categories.

(6) The alternation of *nd'* and *t't'* occurring in Tamil instances like *vend'i*, *vet't'i* (victory), *tind'i* (food) and *tit't'i* (meat) [Category 1], is perhaps connected with accent which in some instances protected the breathed character of the particle *-t-* with which these derivatives were formed.

(7) The colloquial Tamil *nn* and *ṇṇ* (the latter used sometimes in the proximity of dorsal vowels by the cultured classes and employed always everywhere in south India by the illiterate masses) are derived from old *nd'* which latter form, I understand, is even now used in Jaffna Tamil. *nn* shows how the influence of *n* in old *nd'* has changed the plosive to the nasal. In *ṇṇ* the assimilative influence of the nasal should have been exercised on a cerebral *ḍ* produced by the raising of the tongue-tip in the evaluation of the older alveolar *d'* of *nd'*.

The fact that Jaffna Tamil shows *nd'* even to-day in the literary as well as the colloquial dialects, together with the fact that the south Indian Tamil colloquial representatives (and the Mal. sounds,

for which see below) show no *r'* incorporated, leads me to suggest that the evaluation of *nd'* as *nd'r'* in the literary dialect of south India should have been introduced early on account of the influence of the association of the old alveolar plosive with *r*.

(8) The colloquial representative of literary *t't'* is the dental group *tt*, while in Jaffna Tamil it is *t't'* or *ṭṭ*. Apparently the point of articulation has been moved forward in the conversion of *t't'* to *tt*, while it has receded in the case of *ṭṭ*. For the latter, compare Telugu below.

Malayâlam.

The Tamil group *nd'* occurs in the earliest stages of Malayâlam (up to the 11th or 12th centuries); subsequently both *nd'* and its development *ṇṇ* appear more or less side by side in inscriptions and texts in what one might describe as the late Old Mal. period of the evolution of the Mal. language (up to about the 16th century), while in the modern period *ṇṇ* has completely replaced *nd'* in symbol and in sound though in certain solemn documents the traditional symbol for *nd'* was sometimes used.

Mal. old *nd'* and new *ṇṇ* occur in 1b, 10, 11a, 13, 14b and 16b.

Lilâtîlakam, the 14th century Mal. grammar, does not refer, in unequivocal terms, to the change of *nd'* to *ṇṇ*.

Among the inscriptions, while the oldest ones show *nd'* only, we have *ṇṇ* in *ceṇṇa*, *vaccirikkunṇa* in a 11th century plate [TAS, V, p. 61] illustrating categories 14b and 13, *oṇṇ*- (one), *mūṇṇ*- (three) in a 12th century record [T.A.S. V, p. 78ff.] illustrating category 10, *ṇaṇṇu* (good) illustrating 1b in another 12th century record [T. A. S. IV, Kollūr maṭham plates], *aruṇṇa*- (who extends his grace) illustrating category 13 in a 13th century document [T. A. S. IV, p. 86ff.] and *ceṇṇa*- (which passed off) illustrating category 14b in the same document (l. 1).

The phonetic change of old *nd'* > *ṇṇ* possibly passed through an intermediate stage of *ṇḍ*. Instances of forms with *-ṇḍ-* corresponding to *nd'* are not available in the texts or the inscriptions; but there is a significant observation in the vyākhyā of S. 7 of the second Śilpam in Lilâtîlakam to the effect that it is wrong to derive *nd'* from *ṇḍ*, though *kund'u* (hill) is sometimes pronounced as *kuṇḍu*. This perhaps implies that *kund'u* (hill) was pronounced in some parts of Malabar as *kuṇḍu* also. Perhaps an intermediate stage with *ṇḍ* did exist, though its life was

of too short a duration to receive symbolic representation in as much as it should have very soon changed to $\acute{n}\acute{n}$ which (as already noted) began to appear about the 12th century.

It is likely that the south Indian practice of evaluating nd' as $nd'r'$ (and $t't'$ as $t't'r'$) did not exist in the Malabar dialect. The traditional value given to nd' when old texts are read to-day is nd' only; further, the modern development $\acute{n}\acute{n}$ pre-supposes a sound-group without any intrusive r' . As for $t't'$, the alveolar plosive sound has been preserved in a pure state down till to-day.

The terms in which Līlātilakam speaks of $t't'$ and r also show that the evaluation of the former could not have involved any intrusive r' sound.

d' - of the Mal. genitive singular ending of nouns with final "person—denoting" n or with the increment $-in$ and of certain pronouns with final $-n$, is different in origin from the nd' of old Mal. corresponding to Tam. nd' . As already noted by me, this $-d'$ is a unique development in Mal. arising from the *sandhi* meeting $-n$ and $-ḍ$ of $-ide$, $-uḍe$ when the unaccented $-i-$ ($-u-$) was elided.

I have pointed out already that this $-de'$ is rare in the earlier texts, though it occurs in US and it is expressly mentioned in the *vyākhyā* of Līlātilakam.

Kannaḍa.

nd of Kannaḍa corresponds to nd' of Tamil in 1b, 10, 14b and 16b, while the dental tt answers to Tam. $t't'$ in 1a, 4, 11b and 14a.

It is difficult for us to say whether *all* types of Kann. nd and tt were derived from consonant groups with alveolars, as it is quite possible that nd or tt may in some categories have been formed directly from l , $n + t$ without the alveolar being produced as in Tamil. The existence in Kannaḍa of forms like *altu* (cf. Tam. *and'u* 'not it') and *pōltu* (like it) [cf. Tam. *pōnd'u*] without the production of the alveolar as in Tamil leads me to suspect that nd and tt in some categories may have been directly produced from l , $n + t$ without any immediate alveolar being involved. I examined a number of inscriptions to find out if anything like an alveolar plosive existed in pre-literary Kannaḍa in

the consonant groups corresponding to those of our categories with nd and tt ; but I could not find any.

At the same time, the occurrence in Kann. of r (corresponding to Tam. $t't'$) in category 8, and of r (corresponding to Tam. nd') in categories 11a, 11c, and of r in *nir-*, etc., would tend to indicate that a *sandhi* change may have been in these instances inherited by Kannaḍa also.

Tuḷu

$\tilde{n}j$ corresponds to nd' in 1b, 10, 11a and 16a. Was this $\tilde{n}j$ (which certainly shows in its j the resultant of palatalization by front vowels occurring in the Tuḷu forms of our categories: *kañji*, *oñji*, *añci*) derived from an immediately preceding nd' , or was it only a palatalised variant of nd without the alveolar being produced? Here too, no definite view is possible.

Telugu.

(1) $ṇḍ$ of Tel. corresponds to Tam. nd' in 1b, 10 and 16c, and to Tel. inscriptional nd' itself in 7.

The correspondence of Tel. $ṇḍ$ to Tam. nd' is regular in most of the categories in which Tam. shows nd' .

The inscriptional $nd'(r')$ (or nr') is of the utmost importance not only from the point of view of Telugu but also from the general standpoint of the south Dravidian speeches. This inscriptional $nd'(r')$ (or nr'), as we have seen, occurs in the 3rd person singular masculine ending and in the word for "three." The perspectives that the discovery of this Tel. inscriptional ending opens up are the following:—(i) Tel. literary $ṇḍ$ of categories 7 and 10b is definitely traceable to an older Tel. stage represented by a group corresponding to Tam. $nd'(r')$; and this Tel. $nd'(r')$ in 10b appears to be identical with Tam. $nd'(r')$ (*mūnd'u* "three") of the same category. Inscriptional evidence of the pre-literary nd' corresponding to literary $ṇḍ$ of Tel. is available now only for two categories; but the fact that $nd'(r')$ corresponds to Tam. $nd'r'$ in one category leads one to suspect that in other categories also where literary $ṇḍ$ corresponds to Tam. $nd(r')$, an earlier stage with the alveolar may have existed in Tel. itself.

The symbol used in the inscriptional forms for the alveolar plosive has been pointed out to be very nearly alike, if not

identical with, the symbol for r . This would tend to show that the symbol r here *either* stood for d' or represented a change of $d' > r$. The fact that the grammatical tradition embodied in the 11th century grammar recognizes only the cerebral liquid value for r would tend to show that the symbol r used in the Tel. inscriptional forms may already have had the *guru rēpha* value.

(2) Tel. $\ddot{t}$ or $\ddot{t}$ answers to Tam. $t't'$ in 1a, 2, 3, 8, 11b and 16a. Here too, the correspondence is regular in most of the categories where Tam. has $t't'$.

The use of the geminated $\ddot{t}$ in Tel. is found generally in categories where the Tel. instances with this geminated consonant group are preceded by *short* vowels, while $\ddot{t}$ occurs in these categories in which the Tel. instances are preceded by *long* vowels. The alternation in the use of the geminated and ungeminated sounds is thus connected with the length of the preceding vowel in Telugu. Compare, in this connection, Kann. tt in 4 and t in 1a, where the same principle underlies the use of the geminated and the ungeminated sounds in Kannaḍa. This kind of quantitative rhythm is reflected in Tam. also in *sandhi* types.

(3) The phonetic processes whereby nd' became $n\dot{d}$ and $t't'$ (for which last-mentioned group, however, we have not yet had any evidence from inscriptional Tel., though we might postulate an earlier alveolar plosive stage here also on the strength of the general circumstances and sound-correspondences) changed to $\ddot{t}$ or $\ddot{t}$ in Telugu, may be likened to the following in other dialects:

- (i) Tam. colloquial $n\dot{n} < *n\dot{d} < nd'$
- (ii) Burgāṇḍi, Kaikāḍi $n\dot{d} < nd'$.
- (iii) Jaffna Tam. colloquial $\ddot{t} < t't'$

Kūi

$\tilde{n}j$ (or j) corresponds to Tam. nd' in 1b and 11, to Tel. nd' (inscriptional) in 7 and to Tel. $n\dot{d}$ in 11c.

The remarkable similarity in the circumstances in which Kūi $\tilde{n}j$ and Tel. nd' , $n\dot{d}$ occur in category 7 and the correspondence of Kūi $\tilde{n}j$ to Tam. nd' in some words mentioned *supra*, leads one to postulate that Kūi $\tilde{n}j$ was derived from an alveolar group like nd' .

Gōṇḍi

Here the correspondence of sound is not quite uniform:

- (i) Gōṇḍi $n\dot{d} \sim$ Tam. nd' in 10b.
- „ $\dot{d} \sim$ Tam. $t't'$, Tel. $\ddot{t}$ in 2.
- (ii) „ $dd \sim$ Tam. nd' , Kann. nd in 1:

Perhaps only in (i) here the sounds were derived from an earlier stage represented by the alveolar plosive.

Kuṛukh

Uniformity of development is absent here also.

- $n\dot{t} \sim$ Tam. nd' , Tel. $n\dot{d}$ in 10a;
- but $dd \sim$ Tam. nd' , Kann. nd in 1;
- and $tt \sim$ Tam. $t't'$, Kann. tt in 11b.

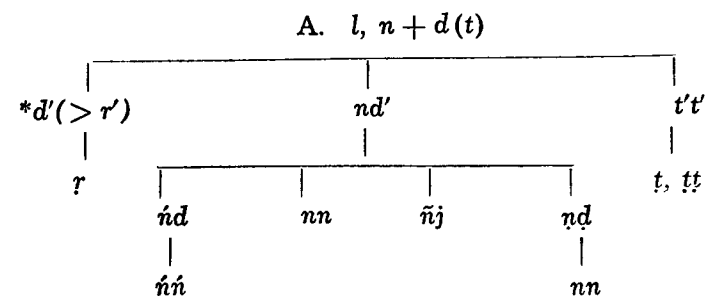
Possibly only the first case ($n\dot{t}$) illustrates the development of an earlier alveolar plosive; the question, however, cannot be clearly decided (cf. my remarks on Kann. nd , tt above).

Brāhūi

Except for *asi*, *musi* of category 10, in which -s- may be compared to Tuḷu - $\tilde{n}j$ -, - j - of the same category, no illustrations are available from this dialect to indicate a possible development of the old plosive.

VIII

Three types of phonetic changes are thus involved in the history of the alveolar plosive.



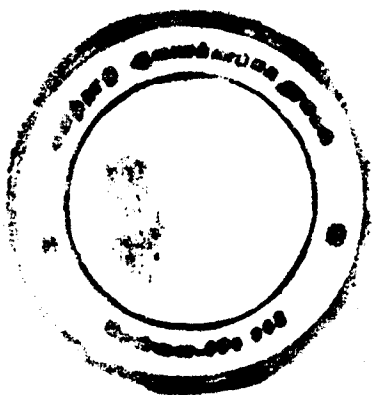
- (1) r —Tamil *vêṛidu* type [cat. 5], *kôṛal* type, *cêṛu* type, south Dr. bases *nir*-, etc.
- (2) nd' —Jaffna evaluation of ($\dot{a}\dot{r}\dot{p}$), old Mal. nd' , south Indian $nd'(r')$, Tel. pre-literary $nd'r'$.
- (3) $\dot{n}\dot{d}$ —Mal. intermediate stage between nd' and $\dot{n}\dot{n}$ [cf. *kuṇḍu*, *kund'u* mentioned in Līl], (?) Kann. nd .
- (4) $\dot{n}\dot{n}$ —Mal.

- (5) *nn*—colloquial Tam. in south Indian areas.
- (6) *ñj*—Tuḷu (?) and Kūi.
- (7) *ṇḍ*—Literary Telugu, Koṛava Tamil, Burgaṇḍi, Gôṇḍi, Kuṛukh, Malto.
- (8) *ṇṇ*—colloquial evaluation in regional and communal dialects of south India.
- (9) *t't'*—Mal., Jaffna Tamil, south Indian *t't'r'*.
- (10) *tt*—dental development in south Indian colloquial Tamil, (?) Kann. *tt*.
- (11) *t, ṭṭ*—Telugu, Jaffna Tamil variant *ṭṭ*.

B.—*l, n* (+ *p-, k-, c-*) < **d'* > **r'* > *ṛ*—Tamil, old Mal., and south Dr. *ēṛpaḍ-*.

C.—*r + t* = Tam. *t't'*, Tel. *ṭṭ* or *ṭ*, Kann. *tt*.

D.—*r* and *nd'* [categories 1c and 11]: if *r* is a development of older **d'*, then *nd'* is a variant of **d'* with the characteristic "checking" nasal embodied.





BIRD'S EYE VIEW OF THE NEW LIBRARY AND DEPARTMENTAL BUILDING AND SENATE HOUSE.

THE NEW BUILDINGS OF THE UNIVERSITY

On Sep. 3, 1936, Rai Bahadur Sir K. V. Reddi Naidu Kt. (Ag. Governor of Madras and Chancellor of the University) opened the New University Buildings, namely :—

- Library Building
- Departmental Building
- Examination Hall
- Botanical Research Laboratory.

A brief sketch of the course of events leading to the completion of the buildings may be of interest.

(a) *Library*.—As early as 1911 a Committee of three members recommended that steps be taken at an early date to accommodate the University Library, in a suitable building. The suggestion of that Committee was to erect a Library Building at a modest cost of Rs. 85,000 to Rs. 1,00,000. The present new Library Building costs a little over Rs. 11,00,000. As far back as 1912 the proposal was put forward to provide accommodation for the Government Oriental Manuscripts in the proposed new buildings. Three alternative sites were suggested :—

- (a) a site to the North of the Senate House
- (b) a site to the West of the Senate House
- (c) the site occupied by the Marine Villa.

The site to the West of the Senate House was originally selected and the foundation stone laid by Lord Hardinge (Viceroy) on the 25th November 1913. Owing to the outbreak of the Great War and consequent high cost of and difficulty in obtaining materials, the proposal to build on this site was deferred. In the meantime a survey had been made and borings had been taken of the site and it was found that owing to the previous existence of a tank on the West of the Senate House, it was impossible to build a University Library there with any sense of security or without great cost for strengthening the foundations. The original fund set aside for building purposes was Rs. 1,24,000. Wise management, Government grants, and judicious saving during the subsequent years increased the amount set apart for building operations in 1926 to Rs. 11,86,000.

On the cessation of hostilities, steps were taken to find a more suitable site for the new Library Building, and Government were addressed to permit the University to build on the site then occupied by the Marine Villa. Government in 1919 agreed to alienate this site to the University on condition that a suitable residence was built, at University cost, by the P.W.D., for the Surgeon to H.E. the Governor. This arrangement was accepted by the University and, at a cost of about Rs. 50,000, the University obtained possession of the Marine Villa site and it is upon this site that the University new Library Building and Departmental Building are constructed. Difficulty was found in commencing building operations owing to the nature of the soil and it was finally agreed to erect the superstructure on pile foundations. Various difficulties arose, which necessitated modifying the plans from time to time, and it was not until 26th August 1926 that the first sod was cut: a little over 10 years later the library has been thrown open to the public.

When the idea of the construction of a Library was mooted, the Government stipulated that the main object should preferably be the constructing of a spacious building for the University Library including accommodation for the Oriental Manuscripts Library and the purchase of books and manuscripts.

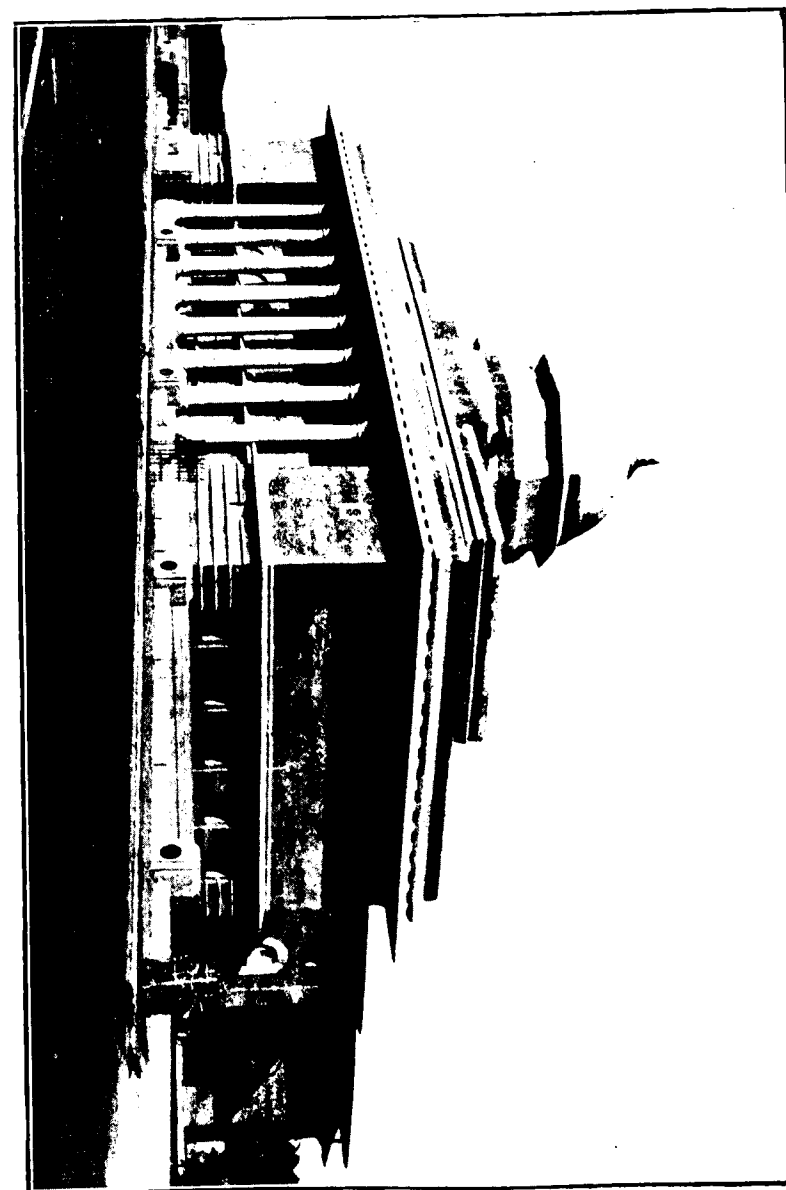
In accordance with that stipulation, the Library Building has been so planned that the Oriental Manuscripts Library now housed in the Museum will in future be accommodated in the Library Building. A special floor in the stack room has been provided for the exclusive location of the Oriental Manuscripts Library, and extensive accommodation is available in the main building for research workers and scholars and for various other conveniences and necessities for the proper maintenance and use of the Manuscripts Library.

The Government have been addressed on the matter of transferring the Oriental Manuscripts Library, now that the buildings are ready for the purpose, and it is hoped that this Library will be located very shortly in the Library Building.

The administrative Offices of the University, Vice-Chancellor's Room, Registrar's Room and Office, the Syndicate and Committee rooms are housed on the first floor of the Library Building.

The University is indebted to the Government of India and the Government of Madras and tenders its grateful thanks for grants which were made by them to the following extent and purposes :—

THE NEW UNIVERSITY EXAMINATION HALL, MARINA.



Government of India —Non-recurring grants—Re. 5,00,000 for buildings.

Government of Madras—Non-recurring grant of Rs. 1,24,000 for buildings, Special grant—Rs. 2,00,000 for pile foundations.

Some idea of the magnitude of the present building scheme now completed, as compared with the original suggestion, may be gathered from the fact that in 1911 the original cost contemplated on building a new Library was a maximum of one lakh of rupees. The cost of the building scheme has reached the figure of over 20 lakhs of rupees.

(b) *Departmental Building.*—In the scheme proposed by Mr. W. H. Nichols, former Consulting Architect to the Government of Madras, provision had been made to accommodate the University Research Departments in three corner blocks of buildings surrounding the main University Library Building on the South-East, North-East and South-West corners. The proposal to erect the corner blocks was later abandoned owing to the fact that it was not possible to build them without encroaching upon land not owned by the University. As an alternative scheme, the University decided to construct the present Departmental Building running North-East of the Library Building and connected to it by a corridor. The same difficulties in the nature of the soil were experienced here and the superstructure was built on pile foundations. It has now been possible, with the construction of the Library and the Departmental Buildings, to co-ordinate in one convenient centre adjacent to the Senate House all the University research activities and to get over the difficulty which has been experienced until now of locating various Departments of the University in rented buildings in different parts of the City.

(c) *Botany Laboratory.*—The completion of the Botany Research Laboratory completes the scheme which was first proposed in 1925 for the erection of suitable Laboratories for one or more Science subjects, it being finally agreed upon that the subjects most suitable were Botany, Zoology and Biochemistry.

Government were addressed in March 1925 to assist the University financially in the construction of University Laboratories in the experimental sciences. In reply to the request of Government, a detailed scheme was placed before Government in the same year. Eventually in 1926, the Government graciously sanctioned Rs. 1,80,000 for the erection of the two buildings—the Zoology and

the Biochemistry Laboratories. These two buildings were completed and occupied in 1933.

The Botany block, has been constructed with University funds at a cost of Rs. 1,00,000 and will be the most advanced research Laboratory in Southern India in Botany with special reference to the subject of Algae and Hydrobiology.

This Laboratory is also constructed, as are the Zoology and the Biochemistry Laboratories, on pile foundations.

(d) *Examination Hall.*—The necessity for the provision of a University Examination Hall at Madras, for conducting examinations pertaining to the University, has been felt for a long time. In Madras, as distinct from the arrangements made for candidates in recognised centres in the mofussil, provision has to be made each year for not less than 3,000 candidates in the March Examinations and 1,600 candidates in the September Examinations. It has not, so far, been possible to accommodate these large numbers in halls under the immediate control of the University: that ideal is nearer achievement by the opening to-day of the University Examination Hall. In 1930 the Government of Madras graciously alienated the present site for the main purpose of erecting an Examination Hall. The superstructure is built on pile foundations, is entirely steel framed and capable of accommodating 500 candidates. With the accommodation now available, in the Examination Hall, Departmental Building, and Senate House, the University will be able to house at one sitting, in buildings under its immediate control, roughly 1,500 candidates, half the number of candidates at present examined in March and the approximate number of candidates examined in September.

DESIGN AND CONSTRUCTION.

The design of the Library Building and Departmental Building was modified at several stages. Building operations were commenced in 1926 under the Firm of University Engineers—Messrs. Ayyar and Mudaliar. Owing to the death of one of the partners, this Firm was dissolved and in 1934 the work of supervising construction of the Library, Department Building, Examination Hall, and Botany Research Laboratory, was entrusted to the Firm of Messrs. Edwards, Reid & Booth, who opened in Madras an office under the charge of the Senior Partner, Mr. S. J. Edwards, M.A., F.R.I.B.A., F.S.I. Since 1934, Mr. Edwards has been in direct supervision of the construction of the new buildings, and the designs

were, particularly with regard to the Examination Hall, considerably modified to meet the needs of the University and its financial resources.

As far as possible, local materials and Indian materials have been used in the construction. Stock bricks have been used in the Library, Departmental Building and Examination Hall, and the construction of the Library and Departmental Buildings has been made to conform in appearance with the Senate House and other buildings of importance in the vicinity. Sholinghur stone dressings have been extensively used and the arches may be placed among the biggest constructed in Southern India. Many Dravidian characteristics have been embodied in the carved stonework. All the four buildings are carried on reinforced concrete pile foundations, the average length of pile being about 75 feet at which depth hard sub-soil was found. The walls of brickwork in cement mortar carry the reinforced concrete floors, roofs and domes. The tower of the Departmental Building, one hundred and twenty-five feet high, weighs one thousand tons and is constructed of reinforced concrete up to the level of the roof of the building. A feature of special engineering interest is the unique design of the joints in floors and roofs to guard against cracks, due to expansion and contraction, through varying temperatures.

The four floors of the Stack Room are calculated to accommodate more than 300 tons of books and are carried by a steel frame on a reinforced concrete raft foundation entirely independent of the main walls of the building to guard against cracks through unequal settlement. Two electric hoists have been provided.

The Examination Hall is of an entirely different form of construction, being a steel framed building in which all the weights of the superstructure are conveyed through the beams and stanchions of the frame to point loading of foundations where groups of reinforced concrete piles transfer the loads to the hard stratum of sub-soil some seventy-five feet below ground level.

The clear span of the main halls is fifty feet and broad flange sections of steel were adopted.

The fifty feet span reinforced concrete ties connecting the pile heads were cast on end supports, the supporting ground being afterwards excavated to allow these beams to take up their natural deflection before being concreted into the pile heads to guard against shearing of piles.



EAST ELEVATION OF THE UNIVERSITY DEPARTMENTAL BUILDINGS.

The walls are built with 2 inch thick bricks and are battered. Interesting features of this building are the unusually large projection of the main chajja and the delicate jali tracery carried out in reinforced concrete especially over the main entrance.

ACCOMMODATION.

The Departmental Building is a two-storeyed structure surmounted by a clock tower.

On the ground floor are accommodated the following Departments :—

Tamil (including the Tamil Lexicon, Department), Telugu, Arabic, Persian, Urdu, Malayalam, Kanarese and Students' Information Bureau.

The upper floor accommodates the Departments of Indian Economics, Indian History and Archaeology, Geography, Statistics, Mathematics, Indian Philosophy, Sanskrit, Mackenzie Manuscripts, Catalogus Catalogorum, French and German.

The Library Building in its two floors provides accommodation for the Vice-Chancellor, the Registrar and staff, the University Library staff, the various Library reading rooms and the Stack Room.

The Examination Hall has three storeys and provides two main halls, lecture rooms and professors' rooms.

The Botany Research Laboratory is a two-storeyed structure, and contains the most up-to-date equipment, for the prosecution of Botanical Research, in South India.

THE NEW UNIVERSITY LIBRARY AND DEPARTMENTAL BUILDING. FROM THE SOUTH-EAST ASPECT.



REVIEWS

A CONCISE HISTORY OF BRITAIN. By ROBERT M. RAYNER, London. Longmans Green & Co. 1934. 6sh. 6d.

Of the making of text-books on British History there is no end, and Mr. Rayner appears to have made a substantial contribution to the output of such works in this and other publications. The book is written in a simple, straight forward style, it is well paragraphed and provided with clear maps and diagrams. Its novel feature is the provision of notes at the end of each chapter to give more detailed information on points raised within the chapter. They certainly serve to fill out the narrative which has been rigidly condensed, but they may be a trifle too scrappy for the use of pupils. The standard of the book is that of the various School Certificate examinations in England, and lists of examination questions actually set in such examinations are provided; these are likely to prove most useful both for pupils and teachers. The book might serve as a useful introduction for Intermediate British History in Madras University.

E. J. B.

THE STORY OF INDIAN CIVILISATION. By C. E. M. JOAD, published by Messrs. Macmillan & Co., Ltd., London, 1936. Price: 2sh. 6d.

The author of *The Story of Civilisation*, Mr. C. E. M. Joad, has now come out with a book on *The Story of Indian Civilisation*. In the Introduction the author himself admits that he is in no sense an authority on India, and yet he offers us what he calls a modest sketch of our civilisation. As regards the plan of the book, he writes, "My plan has been to select those aspects of Indian History which have seemed to me significant or distinctive, and try to give some account of them, and, as my interest is mainly attracted by the thought and culture of India, these, rather than the political history of the country, have pride of place."

This little volume of 152 pages is divided into six chapters. The first chapter is devoted to a sketch of Indian History and the second to an outline of Indian philosophy and religion. The following chapter deals with a history of Indian art and architecture and the next chapter is a history of Indian literature. In the chapter on the Art of Government, Mr. Joad begins with the Societies

of Mohenjo Daro and draws the inference that they were ignorant of war from the absence of remains of weapons of offence and defence. Its explanation is sought in the practice of a certain psychological technique. It is conjectured that by mystical methods the ancients succeeded in avoiding violence. It is rather difficult to accept these imaginary theories. Towards the end of the chapter he pleads for a policy on the part of Great Britain to co-operate with Indians on equal terms in the administration and defence of their country. The concluding chapter is an interesting one. Here a survey is made of the effects of contact with the West and it is concluded that the present moment requires 'a judicious blend of western materialism and Indian spirituality.' Before we close, attention may be drawn to an observation which betrays lack of proper understanding of Hindu political literature: "Indeed it does not seem to have occurred to the average Indian ruler of the past that it was his duty to improve the condition of his subjects." (p. 143). On page 86, Ayur Veda has been misprinted as Avur Veda and on page 96, Mricchakatika has been misprinted as Mricehakatika.

V. R. R.

A HISTORY OF ROME DOWN TO THE REIGN OF CONSTANTINE. By DR. M. CARY, D.LITT. (OXON.), Macmillan & Co., Ltd., 1935, pp. 820, Price 10sh. net.

The history of Rome is the history of a political system and a civilization which lasted a thousand years and eventually comprised the whole Mediterranean area and Western Europe. In this vast field, research has led in recent years to great advances in knowledge, and it is the object of Dr. Cary to write a comprehensive and up-to-date general history of Rome. He states that his aim has been to arrange and evaluate facts in due order and proportion rather than to be meticulously exact and up-to-date in all the facts. He has sought to present Roman history like Polybius 'as an organic whole' so that its meaning and function in world history should stand out clearly. We may say at once that the learned author has realised his aim in a remarkable measure, and teachers of Roman history will be truly grateful to him for having produced this excellent text-book of Roman history. Though not comparable to Professor Bury's classic History of Greece which this book resembles in its format, it will doubtless serve for many years to come as a not unworthy companion to that history.

Dr. Cary writes clearly and with ample knowledge of recent historical research in the wide field covered by his book. This is evident for instance in the pages devoted to the pre-history of Italy, the narrative of the struggle between the orders and in a short study of the financial system of Augustus, to mention only a few examples. On disputed points the author neatly summarises the rival views of leading authorities and indicates the need for withholding judgement pending the progress of further research. His estimates of great Roman statesmen are striking for their fulness and impartiality. The didactic touch which one occasionally detects is not perhaps altogether unwelcome to the modern student. Take for instance this on the Plebeian counter-organisation to the Roman State: "The most distinctive feature of this conflict is that the Plebeians entered it as an organised body. Their methods were not those of random agitation or mob violence, but of collective bargaining and preconcerted resistance." (pp. 75-76); or this for a final judgement on the struggle between the orders: "Yet the history of the conflict sets forth in a clear light the fundamental good sense of the early Romans in matters of politics. Despite occasional mutinies and outbreaks of violence, the contending parties again and again closed their ranks in the face of a common enemy, and in the final resort, rather than engage in civil war, they compromised their quarrels. The Plebeians displayed a rare patience and capacity for organisation; the Patricians loyally accepted most of the reforms, once conceded, and played a conservative rather than a reactionary part. In comparison with the class-struggles of the Greek city-states and of the Communes of medieval Italy, or with the internecine wars of later Roman history, the duel between Patricians and Plebeians was almost a model of patriotic solidarity and forbearance." (p. 117.) Some striking analogies with modern history deserve notice as calculated to help the understanding of the reader; the century that followed the merry monarchy of Nero after the accession of Vespasian is compared, for instance, to the transition from Charles II to 'Dutch William.'

There is due attention paid throughout to the literary and artistic side of the history of the Republic and Empire. The illustrations have been carefully chosen and beautifully produced. The maps, the bibliographical notes at the end of each chapter, the genealogical tables and the very serviceable index together with the succinct shoulder-headings make it a delight to use the book. There are a few misprints like 'centuriata' for 'curiata' in the

last marginal note on p. 108, which will no doubt disappear in the further issues of the book.

K. A. N.

HIGHER ALGEBRA. By S. BARNARD, M.A. and J. M. CHILD, B.A., B.Sc., (Macmillan & Co., Ltd.)

Mathematics books may be written by research workers and meant primarily for the specialist or else they may be intended chiefly for the class room with a view to helping those who prepare for examinations. To this latter class belongs 'Higher Algebra' written by Messrs. Barnard and Child the popular authors.

This text book is meant in the words of the Preface for students working for Higher School Certificate, mathematical scholarships, and examinations of similar standard. In Madras and other Indian Universities it will be welcomed by Honours students of Mathematics, supplying as it does a much felt demand for a book which, while sufficiently modern in treatment, condenses in one volume most of what is necessary under Algebra, *e.g.*, Theory of Equations, Determinants, Limits and Continuity, Infinite Series etc., for which the student so far has had to have recourse to several volumes.

A second volume entitled 'Advanced Algebra' in which the subject will be developed further along the lines of Honours courses in Universities is also announced. These two volumes are bound to make the task of the Honours student far easier than it is at present and should as a consequence gradually improve the standard of the examination.

The volume under review besides being a useful reference book for the B.A. (Pass) student and lecturer may well form a first year's course for the Honours Mathematics student. Whilst it introduces many modern notions and is sufficiently rigorous, the presentation is essentially of the older type, the matter being cut into a number of short theorems clearly stated, with a brief proof following each, and numerous exercises, in the text, at the end of each chapter, and at the end of the book; the connection between the theorems being occasionally but a loose one and the proofs often applying only to a particular case with a "similarly for the general case." This method has its advantages with a junior set of students just coming out of the Intermediate classes, but cannot evidently be sufficient for the best senior students for whom a more

logical development of the subject such as is found in continental books and several modern English books will always be necessary. The matter is well arranged and considerable attention has been paid to the choice of examples which are very typical and cover a very wide field of application of the principles involved.

The get up of the book is truly excellent, and 20sh. for it is very moderate given its bulk of 600 closely printed pages on good paper.

F. L. V.

BOOKS RECEIVED.

From Messrs. Macmillan & Co., Ltd.

- Electricity and Magnetism.* By R. G. Mitton. 3s. 6d.
Richard Carvel (Abridged). By Winston Churchill. 2s.
Organic Chemistry. By A. J. Mee. 4s. 6d.
A New School Arithmetic. By L. Crosland. 3s.
Mystery. Edited by A. K. Barton. 1s.
Dr. Faustus. Edited by Christopher Marlowe. 1s.
Romeo and Juliet. By William Shakespeare edited for schools by Guy N. Pocock. 1s.
Bevis and Mark from Bevis. By Richard Jefferies edited by Guy N. Pocock. 1s.
Drama Old and New. Edited by C. E. Eckersley. 1s.
The King's Treasuries of Literature. General Editor: A. T. Quiller Couch. 1s.
The British Empire and Commonwealth. By James A. Williamson. 6s.
Intermediate Botany. By L. J. F. Brimble. 8s. 6d.
The Story of Indian Civilization. By C. E. M. Joad. 2s. 6d.
A History of Rome Down to the Reign of Constantine. By M. Cary. 10s.
Higher Algebra. By S. Barnard and J. M. Child.

From Messrs Longmans, Green & Co., Ltd.,

- A Concise History of Britain.* By Robert M. Rayner 6s. 6d.

From The Cambridge University Press.

- Hydrostatics.* By A. S. Ramsey. 7s. 6d.

PUBLICATIONS OF THE MADRAS UNIVERSITY

(Text-books, Calendars and Question Papers have been omitted.)

Name of Publications	Price
	Rs. A. P.
1. Some South Indian Villages, by Dr. G. Slater. Available at the Oxford University Press, Madras each	5 0 0
2. Sources of Vizianagar History, by Dr. S. Krishnaswami Aiyangar, available from the Superintendent, Govt. Press, Mount Road, Madras each	4 8 0
3. Dravidic Studies, (available from the Superintendent, Govt. Press, Mount Road, Madras).	
Volume I	0 2 0
Volume II	0 8 0
Volume III	0 12 0
Bound Vols. I-III	2 4 0
4. History of Sri Vaishnavas, by Mr. R. Gopinatha Rao	0 10 0
5. Psychological Tests of Mental Abilities, by Dr. A. S. Woodburne	2 8 0
6. The Nayaks of Madura, by Mr. R. Satyanatha Ayyar, available at the Oxford University Press, Madras	8 0 0

TO BE HAD OF MESSRS

C. COOMARASWAMI NAIDU & SONS, GEORGE TOWN,
MADRAS

7. **A Study of the Optical Properties of Potassium Vapour,**
by Dr. A. L. Narayan 1 12 0
8. **Absorption Spectra and their Bearing on the Structure of Atoms and Molecules,**
by Dr. A. L. Narayan 0 8 0

University Publications—(continued)

Name of Publications	Price		
	Rs.	A.	P.
9. Investigations on the molecular scattering of light, by Dr. K. R. Ramanathan ...	1	12	0
10. The Kavari, the Mukari and the Sangam Age, by Mr. T. G. Aravamudan ...	2	4	0
11. Dravidic Studies—No. IV on the Octaval System of Reckoning in India, by Dr. Mark Collins ...	0	12	0
12. Stone Age in India, by Mr. P. T. Srinivasa Aiyangar, M.A. ...	1	0	0
13. Anatomical and Taxonomic Studies of some Indian fresh and Amphibious Gastropods, by Mr. H. Srinivasa Rao, M.A., D.Sc. ...	1	4	0
14. India through the Ages, by Dr. Jadunath Sirkar, K.T., M.A., Ph.D. ...	1	8	0
15. Political Theory of the Govt. of India, by Mr. M. Ruthnaswami, M.A., C.I.E. ...	1	0	0
16. Ante-natal, Natal, Neo-natal, mortality of infants, by Dr. A. Lakshmanaswami Mudaliar, M.D., L.R.C.P. ...	2	0	0
17. History of Pallavas, by Mr. R. Gopalan, M.A. ...	5	0	0
18. Industrial Welfare in India, by Mr. P. S. Lokanathan, M.A. ...	4	0	0
This is a critical study of the work and achievement of the three great agencies of the workers' welfare—the State, the employer and organized labour. The first part deals with industrial legislation and the second describes the Welfare Work carried on by the employers, emphasis being laid on the need for a new orientation in the relationship between the employers and workers. In the third part a history of the Trade Union Movement is given.			
19. Critical Survey of the Malayalam Language and Literature, by Mr. A. Krishna Pisharoti ...	0	8	0
20. Records of the Indian Museum, Vol. XXXI, Part I, by Mr. K. S. Padmanabha Ayyar ...	1	0	0
21. Restricted Relativity, by the Rev. D. Ferroli, S.J., D.Sc. ...	4	0	0

University Publications—(continued)

Name of Publications	Price		
	Rs.	A.	P.
22. Kuchalavirtham and Krishnavilasam, by Mr. C. Achuta Menon, B.A. ...	1	0	0
23. Hindu Administrative Institutions, by Mr. V. R. R. Dikshitar ...	6	0	0
24. Tamil Sangam Age, by Mahamahopadhyaya S. Swaminatha Ayyar ...	1	0	0
25. Agastya in the Tamil Land, by Mr. K. N. Sivaraj Pillai, B.A. ...	1	0	0
26. Purananutrin Palamai, by Mr. K. N. Sivaraj Pillai, B.A. ...	0	12	0
27. Rasa and Dhvani, by Dr. A. Sankaran, M.A., Ph.D. ...	1	12	0
28. Sivadvaita Nirnaya, by Mr. S. S. Suryanarayana Sastri, M.A., B.Sc. ...	2	8	0
In this work, Srikantha's commentary is analysed and considered in great detail. The work is published critically with a translation, introduction, and notes in English.			
29. Sivadvaita of Srikantha, by Mr. S. S. Suryanarayana Sastri ...	5	0	0
A critical exposition of the philosophy of Srikantha, otherwise known as Nilakantha Sivacarya, the author of Saiva commentary on the <i>Vedanta Sutras</i> . The first chapter determines Srikantha to be possibly a contemporary of Ramanuja. Chapters II-IV give an account of his philosophy, under the heads of Preliminaries, Criticism of Rival Theories, Brahman, the Jiva, and Release. The last chapter is an estimate.			
30. Taittiriya Pratisakhya, by Pandit V. Venkatarama Sharma ...	2	0	0
31. Essay on the Origin of South Indian Temple, by Dr. N. Venkataramanayya ...	1	8	0
32. Samkhya Karika, by Mr. S. S. Suryanarayana Sastri ...	2	0	0
33. Indian Currency System, 1835-1926, by Sir J. C. Coyajee ...	5	0	0
34. Political Theory of Imperialism, by Prof. K. Zachariah ...	0	8	0

University Publications—(continued)

	Name of Publications	Price		
		Rs.	A.	P.
35.	Vishnu Puranam, Ed. by Mr. K. Ramakrishniah	...	1	8 0
36.	Kavirajamarga, Ed. by Mr. A. Venkata Rao	...	1	8 0
37.	Sphotasiddi, by Mr. S. K. Ramanatha Sastri	...	3	0 0
38.	Problems of World Economy, by Prof. V. G. Kale	...	2	0 0
39.	Linguanuhasana, by Pandit V. Venkatarama Sarma	...	1	8 0
40.	Evolution of Hindu Administrative Institutions in S. India, by Dr. S. K. Aiyangar	...	6	0 0
41.	Mauriyan Polity, by Mr. V. R. R. Dikshitar	...	6	0 0
42.	Studies in Cola History and Administration, by Mr. K. A. Nilakanta Sastri	...	4	0 0
43.	Historical Inscriptions in S. India, by Robert Sewell. Ed. by Dr. S. K. Aiyangar	...	10	0 0
44.	New Light on Fundamental Problems, by Dr. T. V. Seshagiri Rao Naidu	...	3	0 0
45.	Chronology of the Early Tamils, by Mr. K. N. Sivaraja Pillai	...	5	0 0
46.	Civilization as a Co-operative Adventure, (Principal Miller Lectures of 1931) by Prof. A. R. Wadia. (Reprinted from the <i>Journal of the Madras University</i>)	...	0	8 0
47.	The Anatomy and Mechanism of the Tongue of Rana Lexadactyla, by Mr. C. P. Gnanamuthu (Thesis for the Maharaja of Travancore Curzon Prize, 1931)	...	1	0 0
48.	An Indian Federation, by Diwan Bahadur A. Ramaswami Mudaliar, M.L.A. (Reprinted from the <i>Journal of the Madras University</i>)	...	0	12 0
49.	Some Aspects of Vayu Purana, by Mr. V. R. R. Dikshitar. (Reprinted from the <i>Journal of the Madras University</i>)	...	1	0 0

University Publications—(continued)

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50.	A Report on the Modi MSS. in the Tanjore Palace Library, by Mr. R. S. Shelvankar	...	1	0 0
51.	Vijayanagar—The Origin of the City and the Empire, by Dr. N. Venkataramanayya	...	2	0 0
52.	Samkhya Karika Studied in the Light of the Chinese Version (Bulletin No. 1), by Mr. S. S. Suryanarayana Sastri. (Reprinted from the <i>Journal of the Madras University</i>)	...	1	0 0
53.	Paranar, by Mr. V. Venkatarajalu Reddiyar	...	2	8 0
54.	Prabhavati Pradyumnam, by Mr. P. Lakshmikantam	...	0	8 0
55.	Subadraharanam, by Mr. V. T. Sreemanavikrama Panikkar	...	1	0 0
56.	Rasaratnakara by Salva, Ed. by Mr. A. Venkata Rao	...	2	4 0
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