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POPULAR REPRESENTATION AND DEMOCRACY

(*The Right Hon'ble V. S. Srinivasa Sastri Lectures, 1935-36.*)

BY

MR. S. SATYAMURTI, M.L.A.,

LECTURE I

It is appropriate that these lectures should have been founded by his friends and admirers, in the name of a distinguished alumnus of the University, the Right Hon'ble V. S. Srinivasa Sastri, a politician, a statesman, and a patriot. I feel it a great privilege to be called upon to deliver the lectures this year. I have chosen as the subject of my lectures, *Popular Representation and Democracy*, not only because of the perennial importance of this subject to all students of political science, but also because of its great contemporary interest to Indian politicians and students of Indian politics.

It is not easy to define "democracy". But, for the purpose of these lectures, I treat democracy as a form of Government in which every citizen, if there is universal suffrage or, if the suffrage is in any other manner restricted, every other citizen has or feels he has a voice. The voice may be very little, but the consciousness of possessing it is very great. Its potential value, also under certain conditions, is equally great. From that point of view, Lord Bryce's definition is apposite. "Democracy is that form of Government in which the ruling power of the State is legally vested, not in any particular class or classes, but in the members of the community, as a whole. This means, in communities which act by voting, that rule belongs to the majority, as no other method has been found for determining peacefully and legally what is to be deemed the will of a community which is not unanimous."

The forms of democratic governments may vary, but the form, with which I will concern myself, is the form of Parliamentary or

representative democracy. The most salutary merit of representative government is the incalculability of popular judgment and the need for its continual canvassing. I recognise that there is a very important sense in which democracy is used often, as a state of society which will not tolerate governmental interference with the personal habits and normal occupations of the citizens. It also represents an aspiration for human equality, not only in the political, but also in the social and economic spheres. It has also much to do with the theory of equality of man. But I am dealing with democracy as simply and solely a form of Government, that is, government of the State by the many, in these lectures.

Of course, even in a system of government by the many, democracy may take different forms. Hereditary monarchy or dictatorship may alike be based on the general will of the people. We are concerned here only with representative democratic government, whose basis is the political equality of man. It may not be a fact, but that is the theory; and, after all, who knows? If discrimination in voting be the test, my own experience is that that discrimination is often found in strange places, and is conspicuous by its absence in places where you most expect it. At any rate, "belief in the value of the distinctive contribution which everyone has to make is fundamental to democracy. It gives real meaning to the doctrine of human equality. It implies that the welfare of all is the end of society, and it involves the repudiation of every form of restriction and privilege. Its animating force is faith in humanity, and in the moral worth of each citizen. The contribution which each makes is not indeed assumed to be of equal value. But the business of the democratic state is to guarantee that individual points of view shall find expression. The spontaneous activity of the individual is the end of government, and all are responsible for the active promotion of the common good. Participation in the management of public affairs is thus both a privilege and a responsibility."

The real test then of democracy is whether the government is so conducted as to show that the popular will is supreme in the really weighty affairs of the State, or, in the alternative, in the choice of men from time to time who will decide for the nation the really weighty affairs of the State. It is inevitable in the very state of things that, considering the complexities of human problems, there should be in all democracies, even in the most developed, a strong

element of aristocracy, but not an aristocracy based on wealth or birth or other accidents, but on character, ability, and service. This is really consistent with democracy, especially as this aristocracy can never be permanent in its composition, except by the worth of its members, and by the suffrage of the people. Indeed, the two ideas are reconciled in the following manner: Popular election serves, at least as well as any other system, in securing representative leaders, and serves better than any other system in confining the latter to their function of leadership. The doctrine holds on the one hand, that the rank and file are generally competent to make a relatively intelligent discrimination between candidates who intend to further the public interest, and others animated by individual or group self-interest; and, on the other hand, that no individual is ever so superior in wisdom and self-control, that he does not constantly need both the enlightenment and the restraint which come from the necessity of persuading the minds and wills, and maintaining the confidence and respect of the masses, whom he seeks to lead.

In representative democracy, the people do not directly rule. But they are the ultimate source of authority, and they exercise supreme control over the administration mainly by periodical elections, either at fixed periods, or whenever the representative assembly rebels against the government in power, or whenever there is a definite change in popular opinion which is reflected either by bye-elections, or by other well known methods. But we have no right to expect too much of democracy in this sense. After all, democracy is a matter of degree. What parliamentary democracy has so far achieved is that the work of the expert officials and of the Ministers who dictate policy and carry on the government shall be submitted at intervals to the bar of public opinion. This necessity for popular approval has been made more frequent, and the sensitiveness of the administration to public opinion is properly regarded as the hall-mark of democratic liberty.

The chief merit of parliamentary government, as opposed to almost any other form of Government, is that the Government is carried on by debate, fighting out differences of opinion and diversities of interests, by means of arguments in open conference, not by crushing them by physical force. Persuasion of the opponents, not intimidation by physical threats, is the aim. Parliamentarism therefore, stands as a definite method of settling

conflicts by arguments, and not by coercion. But, in order that this discretion may be real and may be representative of the current opinion of the people of the country, elections to these representative assemblies must be conducted in such a manner as to reflect the popular will. Hence the great importance of election, the suffrage, the constituency, the manner of voting, the method of representation, the relation between the representative and the constituency, both before and after election, and the nature of the control of the representative House by the electorate, and the means by which it will be in constant touch with public opinion, which may and will change.

In modern communities, the most difficult problem is the faithful representation of the will of the people in the organ of the government. Heroic remedies have been suggested, the most conspicuous example of which is direct democracy, i.e., people ruling themselves without elected representatives. Except in the form of the initiative and referendum, direct democracy does not obtain at all anywhere in the world of to-day. The size of the countries and their population, the complexity of the modern problems and the need for expert control and advice all alike make direct democracy impossible. Moreover, no direct democracy can carry on the day-to-day administration, control or carry out foreign policy, or exercise financial control. Hence it has come about that democracy of the modern world is generally representative democracy. Pure democracy, in which the politically qualified members of the community meet together to discuss and decide public questions, is suitable only for small communities with simple collective needs. It has never widely existed, and functions now only in a very few places. The initiative and the referendum can, even under the most favourable conditions, be employed only for relatively few questions. Further more,—and this is the most important criticism—they provide no opportunity for the essential function of deliberation. The most fundamental problem therefore, in organising modern democracy is that of securing a system of election, which insures the choice of representatives who reflect, as completely as possible, the varieties of interests and opinions among the people. The experience of those countries, where the referendum and the initiative have been or are in force, shows that those countries would be better off, if the voters concerned themselves more with exercising a choice of legislators, through the process

of nomination in their respective parties, a matter for which they seem to have a greater propensity, and which they are better able to do—to learn to choose some one, whom on the grounds of honesty, capacity, and consonance with their general point of view and interests, they can trust.

And indeed, this is inevitable. The people are not competent to legislate. Legislation is a very difficult and complicated process. I wonder, if even several members of the Legislature are competent to legislate. Above all, in such direct legislation, there is no scope for deliberation, discussion, or for compromise. And, after all, a general election is in fact considered by a large portion of the electorate of Great Britain as practically a referendum, on the question which of the two governments should be returned to power.

We, therefore, return to the important task of examining how a proper representative system may be devised, so that no citizen can have sound reasons to believe that he is being commanded, it may be in most vital matters, by a minority. In a democratic government, the right of decision undoubtedly belongs to the majority. But the right of representation belongs to all. The only stable foundation for a modern democracy is the habitual willing co-operation of all the principal elements of the community, and that co-operation can be retained only by giving all the principal elements genuine representation in all the Legislative Bodies. Perhaps the most important guarantee for the purpose of ensuring the harmonious functioning of democratic government, is the consciousness, on the part of the minority, that by education, propaganda, and persuasion it can convert itself into a majority, in course of time. If that consciousness is not created and maintained in the minority, anarchy must follow. This must be kept in mind, in devising systems of representative government.

The most important problem in connection with representative democracy is of course that of suffrage. I see no alternative to adult suffrage. Either men are equal, or they are not. If we act on the theory that men are not equal, then we have no use for democracy. But if we want democracy, we can act on no other theory than that of men being treated as equal. I have the high authority of John Stuart Mill, who says "there ought to be no

pariahs in a full-grown and civilized nation ; no persons disqualified except through their own fault. Everyone is degraded whether aware of it or not, when other people, without consulting him, take upon themselves unlimited power to regulate his destiny." He of course suggests that literacy and payment of taxes should be qualifications for franchise. I differ. Literacy and discrimination do not always go together. The illiterate persons are often discriminate. Moreover, the theory that payment of taxes alone gives the right to vote is an exploded one. Perhaps, it was right in the time when John Stuart Mill wrote. But, to-day, thanks to the inventions of science and the all-pervasive activities of the State, and the modern conception of obligations of the State to the citizen, I claim that every adult, unless he is a lunatic or an undischarged insolvent, should have an equal voice in governing, or rather in the choice of the government. Indeed, I see no other standard in conferring the suffrage, except the above. The poor man has perhaps no less stake in the country than the rich one. And, as for the popular passions governing the masses, recent experience of British elections shows that no section of the community is free from the gusto of such popular passions.

The elements of an electoral system are : (1) the method of recording the vote, (2) the method of determining the successful candidates, (3) the number of members to be returned for each constituency, (4) direct versus indirect election, (5) communal electorates, and (6) other means of minority representation, like proportional representation.

It is now assumed, as a matter of course, that voting should be by secret ballot. But, before 1872, voting was public in England. In India, voting is secret except for illiterates, genuine or otherwise. The system of open votes is insisted on by those who want to corrupt the illiterate by paying a price for their votes, or even the literate by making them declare themselves illiterate and openly vote for the particular candidate and earn their reward. There is an amount of sanctity attached to the secret ballot. I suggest that, so far as conditions in this country go, voting should be public ; or, in the alternative, three months after the election, the voting should be published to those whom it may concern, so that we may promote public political honesty. The problem of illiterate votes in India is bound to assume larger proportions, when the 35 millions proposed to be enfranchised

under the Government of India Act of 1935 begin to exercise their franchise. If secrecy is to be enforced, we must have recourse to the device of naming candidates by beasts, or flowers, or by giving them colours.

The next question is the nature of constituencies. Personally, I am all in favour of single-member constituencies. I know the argument against it in this country—that it will tend to encourage communalism and sub-communalism.

The remedy for it is for all organised parties to run candidates belonging to all communities on the party ticket, so that those who respond to the call of the party will feel that, in voting for " A " or " X " in a particular constituency, they are voting not only for that candidate, but for the entire list of candidates put up by the party, who will, in the nature of things, belong to all communities. Moreover, the single-member constituency is best calculated to encourage and maintain that living contact between the representative and his constituency, which on the one hand helps to keep the representative in touch with opinion in his constituency, and on the other hand encourages the constituency to keep alive political interest between one election and another, which is the *sine qua non* of the proper functioning of modern democracy. Lastly, the single member constituency, even in a huge country like India, is much more helpful to the poor candidate who cannot afford to spend the sums required for nursing, cultivating, and canvassing larger constituencies.

The next question is on what basis the successful candidates should be declared to have been elected. In the British system, single-member constituencies return candidates who obtain relative majorities. The system may be compendiously described as single member election by relative majority. But, for a long time now, measures have been discovered and are being since devised for securing more complete representation of the people, than is secured by the above system. It is often suggested that constituencies should be redistributed on a basis of equal electoral areas. This is an ideal to be arrived at, and I am hoping that, as a result of the deliberations of the Delimitation Committee, constituencies for the Provincial Legislatures, at least for the lower Houses, shall be so devised in this country as to insure more or less equal electoral areas. But, as the Royal Commission on Electoral Systems of 1910 found, there is not much warrant for the theory

that the varying sizes of constituencies account for the exaggeration of majorities.

As against relative majorities, there are some absolute majority systems. The second ballot—A candidate to be returned at the first election must receive an absolute majority of the valid votes cast. If no candidate obtains such a majority, a second election is held at which only the two candidates compete who received most votes at the first election.

The relative vote—here the voter is invited to arrange the candidates in the order of his choice by placing the figures, 1, 2, 3 . . . against their names. Only first votes are reckoned in the first count. If no candidate is found to have obtained an absolute majority, the candidate who has received the smallest number of first votes is eliminated, and his voting papers are distributed according to his second preferences. If no candidate receives an absolute majority even then, the process is repeated, as often as necessary, until the desired result is obtained. The second ballot may be summarily dismissed as involving a most undesirable prolongation of electoral turmoil and disturbance, besides greatly increasing the expenses of the candidates. There is also a great difficulty in inducing the electors to come up again to vote a second time. It has also been the experience of other countries that the interval between the two elections offers undesirable temptations to bargaining and intrigue. These are the findings of a Royal Commission, and I entirely agree with them. The alternative vote is more encouraging. But while it prevents the election of the worst candidate, it does not secure the election of the best. Moreover, the uneducated elector will find a serious difficulty in exercising his vote under this system. There will be large failures to exercise the second preference on the part of voters. The more candidates there are, the less satisfactory the method will be. In Australia, the opportunities for party intrigue and the gratification of personal ill-feeling which are conferred both by the power of using and by that of withholding preferences, have been found to produce regrettable results. The system is not capable of satisfactory application to two-member constituencies. The Royal Commission recommended the alternative vote, as the best method for single-member constituencies. I do not agree. I feel the difficulties are insuperable or, at any rate, that the system will not yield better results than the relative majority system.

But the problem of minority representation still remains. The case for that is often exaggerated; the present system in England is not unsuccessful. The majority rules with greater power to enforce its will than it in fact deserves, but minorities are heard. And, as I have said already, so long as the minorities have the right and opportunity to convert themselves into majorities, they cannot expect or ask for more representation under practical democratic government. All political minorities have found and will always find representation under that system. Other minorities do not deserve such representation.

I should, however, examine the devices suggested for securing what is called minority representation. First, the limited vote, which was recently suggested, I believe, by a brain wave of the Madras Government and the Madras Franchise Committee, which I hope will be rejected ultimately. It will not work successfully, and is found in very few countries. The next is the cumulative vote, which is found in the Bombay City for Assembly elections. But, as a means of ascertaining the wishes of the electorate, the Royal Commission points out that it suffers from the fatal defect of the limited vote and that its successful operation requires the implicit obedience of the electors to the directions of the party manager. A system which depends for its efficacy on such a requirement as this stands self-condemned.

Then, we have to examine the systems of proportional representation, *viz.*, the strict list system, the free list, and the transferable vote. The Belgian system is one in which candidates present themselves in groups or lists, and any vote given to any member of the group counts as a vote for the group. Proportional representation is then secured as between the groups, by dividing the available seats among them in proportion to the votes obtained by each group. This system has the advantage of simplicity. But it emphasises and stereotypes party divisions. The result has been the virtual extinction of small parties. Moreover, the person who is returned is not the choice of the majority of the supporters of the party, but only of the party organisation. Experience has shown that, only in the rarest cases, has the personal popularity of a candidate low on the list succeeded in upsetting the printed order. It cannot be accepted. The French system provides that the lists shall be arranged in alphabetical order, that the elector shall have as many votes as there are seats to be filled and may distribute

them among the lists exactly as he likes, or may accumulate his votes on one candidate. The total number of votes obtained for each list is added up, the seats are distributed among the lists, to those candidates returned from each list, up to the requisite number, who have obtained the largest number of votes. The Royal Commission concludes on this system that it will produce in Britain unreliable results in representation and much trouble and confusion in working, and that the comparative freedom of the elector is too dearly purchased in it, at the cost of the invaluable virtues of simplicity and decision.

Then, there remains only the Transferable Vote, or proportional representation on that basis. The practical considerations involved in the adoption of any system of proportional representation are the size of the constituencies which will have to be created, the question of expenses, and the provision to be made for bye-elections. The constituencies must be large enough to secure satisfactory results under this system. The Royal Commission recommends an average constituency of about seven members. The size of the constituencies need not present difficulties, which may or may not be overcome. But the question of bye-elections is a very difficult one. The Royal Commission says that no satisfactory solution of the problem has been put before it. The conclusion of the Royal Commission is, "The application of the Transferable Vote to a large electorate is, then, feasible. The possible intrusion of an element of chance might create some prejudice against it, and the undoubted difficulty of bye-elections certainly would; but the issues at stake are so large that, if the general case in favour of proportional representation and its effects, in and out of Parliament, were decided to be clearly made out, these defects are not serious enough to stand decisively in the way."

The claims made for proportional representation may be thus stated. "In the House of Commons, all parties, the majority, as surely as the minority, would find representation on the basis of their true strength in the country; small but respectable parties would be assured of a hearing, and the independent member would once more be added to the counsels of the nation. In the constituencies the elector would obtain greater variety of choice, greater freedom, and with freedom the education of an enlarged responsibility; the candidate would regain independence from the pressure of small sections, and the member an enlarged sphere of usefulness."

But as against this, it may be stated that the exaggeration of the majorities is, as a rule, no evil. Excessive majorities, of course, occur, but they are preferable to insufficient majorities. The object of representative government is not only to represent, but to govern. The greatest evil that can befall a democratic country is a weak executive; and, if a strong one can only be obtained at the cost of mathematical accuracy of representation, the price should be willingly paid. For two-party government would be substituted the habitual practice of government by bloc. The Royal Commission concludes, "Whatever their ultimate results might be, we cannot doubt that the immediate effect of changes in electoral conditions, so radical as those involved in the Transferable Vote, would be a confusion in constituencies, extending possibly over more than one election, which would render the results produced, a less reliable index to the true state of feeling in the country, than the present system. The Transferable Vote is unreliable, because it tends to give a decisive effect upon party representation to votes given least for party reasons. In political elections, it is the balance of parties which is of primary importance. This balance, under the Transferable Vote, is the net total of the balances obtained in a number of multi-member constituencies, and these balances depend upon late preferences. The apparent verdict of the country will, therefore, be determined by the least satisfactory criterion which the system provides. For a considerable number of voters will not exercise their later preferences at all, and, of those who do, many will be influenced by other than party motives." This argument is almost conclusive in my opinion. The Royal Commission, therefore, comes to the conclusion, with one dissentient—"Reviewing the whole evidence and duly considering the gravity of the change involved, we are unable to report that a case has been made out before us for the adoption of the Transferable Vote, here and now, for elections to the House of Commons." I respectfully agree. They, however, recommend the adoption of the Alternative Vote, in cases where more than two candidates stand for one seat, in a single member constituency. Even this system has not yet been adopted, and I should hesitate to accept it for my country.

The arguments against proportional representation have been dealt with in detail by Herman Finer in his book on "The Theory and Practice of Modern Government." I merely state them very briefly here. (1) The loss of the psychological value of the small constituency, the care of which is vested in a single member;

(2) the maleficent soothing of that permanent anxiety of the party leaders, as they scan their own constituency in the light of present policy and approaching elections; (3) giving added power to party leaders as compared with the local associations; (4) tightening the disciplinary power of the party leaders over the individual member and (5) encouraging group divisions and secessions, and thereby jeopardizing the stability of the Executive. This danger is very great in India. This system gives a positive bonus to group separatism. "Moreover, those who propose proportional representation leave out of all account the political manners and conventions of a country—the sense of decency and political fair-play. No decent political party or group in a country can get on, on the principles of arithmetic, nor are politics determined once and for all by the General Election, but by a multitude of dynamic and spiritual factors, as efficient in the cause of good representative and responsible Government, as the General Election itself." Though there are definite and disturbing flaws in the single member constituency with a relative majority, it has some strong points which are indispensable to secure responsiveness and responsibility in Government. I lay particular stress on this. The conclusion is inevitable that any electoral system which gives rough numerical expression of the strength of main political tendencies, is the only one practically workable, as far as Parliaments are concerned. Moreover, the case for proportional representation and accurate mathematical representation of all parties, great and small, is grossly exaggerated. It would be useless for every little group to be represented; the assemblies have not even the time adequately to discuss the views of three great parties in the State, on all the issues that arise. An electoral system, based wholly or mainly on the desire to give any and every small group the chance of returning a representative, would be a political futility; for only by a rare stroke of luck would the representative get the opportunity of speaking. Personally, I do not mind these cranks getting a hearing. For, "the best way to discredit a fool is to hire him a hall." But, if any assembly were fully representative, no business could be done. The exigencies of Parliamentary time force men, therefore, to leave their small caves and enter larger combinations for the support of a common programme; and, as they do this, the exactness of representation is seen to be a thing of neither great nor ultimate political moment.

From the point of view of India, the larger constituencies required, the complexities of the method, the non-existence of well

defined political minorities, and the existence of communal minorities are powerful arguments against the adoption of proportional representation.

This leads me on to say one word (in conclusion to-day) on the comparatively minor question of the candidates' expenses for the conveyance of voters, and for their feeding on the polling day. I know the puritanical theory on these matters. I know also that these theories are not often carried out, but in India, considering the size and poverty of the country, I suggest that, either a minimum scale of expenditure should be prescribed, or that public conveyances should be provided for voters, from public funds. This will encourage honesty in elections, and discourage corruption. This is a matter to be carefully considered by those in authority.

LECTURE II

I should like to begin this lecture by offering one or two more criticisms of the system of Proportional Representation.

I recognise that, with Proportional Representation on the basis of the single Transferable Vote, the effective candidature of independent men of repute, besides the official candidates, is made possible. But, we must recognise that these representative parliaments are elected mainly for the purpose of governing a country. While it is undoubtedly true that many battles have been won even by bad generals, no battle has ever been won by a good debating society. Moreover, we must take voters as they are, and provide for them. And, it does seem to me that there are complexities in Proportional Representation, which may baffle the average voter, even in a highly educated country, and certainly in ours. Again, we cannot forget the needs of a stable government based on the party system, and, if we are to have a stable government, it does seem to me that the method of single member constituency, either with relative majority or with an absolute majority, based on the system of the alternative vote, is now the best we can devise. Otherwise, there is every danger of fissiparous tendencies asserting themselves, of cliques being formed, and of the least popular candidates sometimes being elected. I should also like to say one word from personal experience of the working of Proportional Representation, on the basis of the single Transferable Vote. In the election by

Registered Graduates to the Senate of the University of Madras, it is least justifiable, because there can be no academic minorities, among these registered graduates. What often happens is that personal or communal minorities are created by adding to the electoral roll, and while undoubtedly the most popular candidates do get returned, some candidates do get returned, who will have no chance under the normal system. Therefore, it is easy to exaggerate the advantages of Proportional Representation.

After all, different representative systems have got to be judged also by the scope for corruption in those systems. We must so devise the systems, as to reduce to an absolute minimum such scope. I believe, in Proportional Representation, there is greater scope for corruption than in the ordinary system. Moreover, it cannot be forgotten that the system of Proportional Representation discourages public propaganda by meetings, by appeals in the Press, and encourages group canvassing, more or less privately. It is also found to affect adversely the evolution of a sound party system, because individuals will try to canvass for themselves apart from the party, and the position of the voter is rendered more difficult under this system than under the normal system. The cause of democracy is best served, if we do not demand too much of the voter.

Of course, if the idea is to give up the principle of responsible government, that is to say, a Cabinet governing with the consent of the majority of the representative assembly, and we are to go in for a form of government which, while it is terminable at the end of a stipulated period at the will of the electorate, still can carry on for that period, unless a specific motion of no-confidence is carried against it by a majority of the representative assembly after due notice, there is a good deal to be said for the system of Proportional Representation. I do not say, for one moment, that the last word on efficient popular democratic government has been said by the British system. I have already expressed a preference, so far as the Central Government in India is concerned for a Presidential, as opposed to a Parliamentary executive. And, indeed, we have still much to learn by experience, trial, and error. I recognise that thoughtful people in many countries are gradually coming to the conclusion that government must take advantage of all abilities in representative assemblies. This is a matter for careful and thoughtful consideration.

Another problem connected with popular representation and democracy is that concerning the difficulty of persuading all voters to go to the polling booth to record their votes. Even in the most advanced countries, many people do not use their right to vote. In England, the percentage of non-voters was estimated recently at about 25 per cent. ; in France and Germany, about the same ; and in the United States of America, about 30 per cent. The general reasons for not voting are physical difficulties, legal and administrative obstacles, disbelief in voting, and inertia. Is it worth while forcing all people, except those physically disabled, to vote ? Strong arguments against it are that the vote after all is a civic right, which a citizen may or may not use as he wishes ; but the strong practical reasons for the compulsory vote are that, otherwise, the candidates and their parties are put to great expense and difficulty in bringing the people to the poll. If there be compulsory voting, practically all corruption will be eliminated in elections. In Belgium, where the elector is forced to vote, the proportion of voters voting is over 93 per cent. In Australia, the Commonwealth Electoral Act of 1924 makes it the duty of every elector to record his vote. Therefore, there is no doubt that such compulsory voting will make the representatives say with conviction that they represent the majority of the people, and it will also develop political consciousness among the people. But the compulsory vote loses all the moral value of a voluntary vote. The vote under compulsion, as has been well said, is no proof of the will to vote, the capacity to vote, or the capacity for right judgment. On the other hand, if political education develops, if the issues are brought before the electorate in a direct and compelling form, more and more will go to the polling box. My experience in India is that, when the Indian National Congress boycotted the elections to the Legislatures and to the Local Bodies, the percentage of absentees was very high. But, in recent elections, however, which the Indian National Congress contested, a distinctly higher percentage has gone to the polls. On the whole, it seems to me that compulsory voting must be rejected. "There is no help for representative government in these devices. They either ascribe to the elector capacities which he does not possess and cannot possess, or seek to overcome the alleged defects of political parties by obliging the citizen to undertake functions, for which he has either no interest or no aptitude. Hope lies not in these devices, but in the more adequate selection and training of candidates for office " ; and, I would add, in the training and education of the voters themselves.

A minor question arises as to whether, apart from the qualifications of voters—I personally believe in adult suffrage—there should be any qualification for candidates for legislatures. I recognise that, if there is to be any limitation, it should be in such a manner as to exclude only in general terms, and not discriminate against any special class of citizens. But, as Professor Laski points out, there is no reason why we should allow men to be chosen, without any regard to their experience of affairs. “Absence of limitation may give us a younger Pitt, but it gives us also a large number of members who go to the Legislative Assemblies, merely for the prestige which membership confers. A rich man persuades a constituency to adopt his son as candidate, because he can afford to pay the expense of election; a retired merchant becomes a candidate to satisfy the social ambitions of an aspiring wife; the wife of a member elevated to the House of Lords succeeds him on a wave of sentiment unrelated to the problem of her fitness. It is wiser, surely, to exact a small qualification for membership, in order that those seeking election may offer proof of a genuine interest in affairs.” In his constitution for future India, Babu Bagavandas, M.L.A., has developed a similar idea and wants qualifications based on education, character, ability and public service, to be exacted from candidates, before they are allowed to stand for election to the Legislatures. Of course, it is difficult to specify the exact nature of the qualifications. Previous service on a Local Body is suggested, as a qualification for election to the Legislature. We may evolve similar qualifications. But I think that, although it appears on the face to be opposed to democratic theory, such qualifications will tend to improve the tone of representative assemblies.

Should there be a limit to the period of re-eligibility of a member of the assembly for election again and again? There is a common human feeling that these honours should go round, and should not be monopolised by the same people. That argument is full of flaws. Service in such bodies must be looked upon, not so much as a privilege, but as a duty. And no man gets re-elected, unless he continues to enjoy the confidence of his voters. So long as he does that, to seek to impose by legislation or otherwise restriction on the free choice of the voters is not only undemocratic, but also will do positive disservice to the character and ability of our assemblies. Again, as Prof. Laski points out, “in a legislative assembly, few things compensate for the absence of experience. Procedure is inevitably technical; and any limit will merely end a man’s term,

when he is at the height of his utility. Much of the strength of a chamber like the House of Commons has come from the fact that its leading figures have, over long years, been distinguished actors there. The thirty years’ membership of Edmund Burke, the sixty years’ service of Gladstone, the forty years’ of Disraeli, all meant an incomparable insight into the technique of government. Even in the case of the advent of a new party, like the British Labour Party to power, its leaders had been familiar with the centre of public affairs for twenty years. And, only upon the condition of unlimited eligibility, can a legislature properly fulfil its selective function.” I sincerely hope and trust that such a convention will be accepted, and acted upon in this country.

In order to ensure representative government under democracy, two other devices are necessary. There must be a limit to the period of life of the representative legislature, and about five years seems to be a safe period. Two or three years is too small, and more than five years is too large. Beyond five years, any legislature loses touch with the electorate. Parties ought to know that, if they are for the time being, protected from popular judgment, they will not be able to assume that their mistakes will be forgotten. Secondly, the executive must have the right to ask for and get a dissolution of the legislature. It is not safe to leave it to the legislature itself, for no legislature will willingly commit suicide. Unfortunately, under the Government of India Act, the right of dissolution is left to the Governor. I am, however, hoping that a convention will grow here, by which that right, which, in England though theoretically vested in the King in England, is normally exercised only on the recommendation of the Ministry in power, will also be similarly exercised here, according to the recommendation of the ministry in power. “The power of dissolution is the recognition that, ultimately, the electorate is the paramount authority in the State. And no executive ought to occupy the seat of power, unless its place is sanctioned by that authority. A coherent representative system would be impossible, unless the right to dissolve was always the prerogative of the Government of the day.”

In order to make the representative system effective, what should be the size of the Legislatures? On the one hand, it should not be so small as to make it impossible to be absolutely representative of the constituencies. It should be large enough to ensure the personal contact between the representative and his electors. On the other hand, it should not be so large as to make effective debate

impossible, or farcical. The problem becomes very difficult in this country, because of its size and population. But I have no hesitation in saying that the proposed strength of 375 for the Federal Lower House is too small. The strength should be at least 500. The strength of the Provincial Legislatures also ought to be increased and can be so increased, without any serious detriment to public business.

The next important question, which I propose to deal with, is that of the proper relations which ought to subsist between the voter and his representative, before and after election. Before election, in countries dominated by the party system, the voter normally votes for the nominee of the party, and not for the individual. But the party, in making its choice of the candidate, undoubtedly will consider the claims of the individuals and select only those who, apart from their allegiance to the party, are likely to command the support of the majority of the voters in the particular constituency, for which he is selected. This system can, of course, be criticised on the ground that the voter is reduced to a machine, and not given any freedom. The criticism becomes pointless, if the claims of efficient government are to be reconciled with democracy. The best solution, then, is for the voter to make up his mind as to which of the parties in the political stage he will support because of their principles, policy, or programme, and then to vote for the candidate set up by the party for his constituency. In order, however, to ensure the best result out of the system, the party must act in the selection of the candidates, in consonance with general public opinion, i.e., the opinion of the members of the party in the particular constituency. Sound party leadership must be fully trusted to keep this in mind.

The more difficult question is what should be the proper attitude between the representative and his voter after election. Before I proceed to deal with it, I desire to put in, in the name of the successful working of representative government, a plea on behalf of the hard-working and hard-worked representatives elected to the Legislatures. Unfortunately, there is a tendency to look on the politician with suspicion. This leads frequently to a lack of cordial support on the part of the public, when such support is needed by the politician. It also leads unfortunately to the breeding of cynicism on the part of the representatives themselves when, after conscientious and genuine effort, they find their motives misinterpreted, and a casual assumption prevailing that, somehow behind

everyone of their acts, is some subtle and mischievous intention to advance some private interest at the expense of the public interest. It sometimes leads to the driving of good men out of public life, it sometimes leads to the cynical attitude that, if one is getting the credit for misdoing, one may as well get the profit from it; and, in any case, it works seriously against a sympathetic and harmonious action of the representative and the voter towards accomplishing common ends. May the Goddess of Democracy protect India from this evil! The voters must learn to look upon the representatives as members with honesty of purpose, and a reasonable intelligence to conduct public affairs.

This leads me on to the more important question—how shall the representatives vote on questions coming before the Legislatures? Shall they be independent in thought and action, working and voting for what they consider are the best interests of the nation at large, or merely act as agents for the particular constituency, pledged to vote for the particular interests of that constituency, where they happen to be different and antagonistic to general national interests? I believe that, for all time, this question has been eloquently and accurately answered by Edmund Burke in his address to the electors of Bristol in 1774. He says: "Certainly, gentlemen, it ought to be the happiness and glory of a representative, to live in the strictest union, the closest correspondence, and the most unreserved communication with his constituents. Their wishes ought to have great weight with him; their opinion, high respect, their business, unremitting attention. It is his duty to sacrifice his repose, his pleasures, his satisfactions, to theirs; and, above all, ever, and in all cases, to prefer their interest to his own. But, his unbiassed opinion, his mature judgment, his enlightened conscience, he ought not to sacrifice to you; to any man, or to any set of men living. These, he does not derive from your pleasure; no, nor from the law and the constitution. They are a trust from Providence, for the abuse of which he is deeply answerable. Your representative owes you not his industry only, but his judgment; and he betrays, instead of serving you, if he sacrifices it to your opinion."

From the point of view of the nation also, he gave another conclusive reason for this position—"Parliament is not a Congress of ambassadors from different and hostile interests; which interests each must maintain, as an agent and advocate, against other agents and advocates; but parliament is a deliberative assembly

of one nation, with one interest, that of the whole; where, not local purposes, not local prejudices, ought to guide, but the general good, resulting from the general reason of the whole. You choose a member indeed; but, when you have chosen him, he is not a member of Bristol, but he is a member of parliament." I recognise that, sometimes, this may give rise to difficulties. The constituency may want the representative to vote in one manner. His judgment of national interests may require him to vote in another manner. I personally believe that, in such a case, the representative must choose to vote in favour of what he considers national interests. If it is a matter on which the constituency feels very strongly, he ought to resign his seat, and offer himself for re-election. If, on the other hand, it is a smaller matter, he may well wait for the next general election, when the constituency will have an opportunity of pronouncing its verdict on him. I have no hesitation in saying that, if any representative sacrifices what he considers best in the national interests, in favour of a demand of the constituency which he considers inconsistent with that national interest, he is betraying the country, to serve which alone he is sent to the legislature.

A fascinating question, on which I will only say a word in passing, is whether territorial representation may not be substituted wholly or partially by what is compendiously termed functional representation. A great deal has been said and written for the latter view, mainly on the theme that human life is so complex, that there are so many functions and interests which are opposite to one another, that no single parliament can subserve the needs of those functions and interests; and that, therefore, we must evolve a system by which these functions and interests may be represented. Apart from the practical difficulty in the way of satisfactorily defining these functions and interests, one must make a distinction between the normal functions of Government, and the extra, or the social and expanding services of modern governments. I have no hesitation in saying that, for the paramount purpose of government, a parliament elected on a territorial basis is the only possible parliament. But, while all paramount functions of government may be thus entrusted to this territorially elected parliament, I recognise a case may be made out for subordinate bodies dealing with specific questions, on which functions or interests may be represented. Such systems are now in force, as what are called economic advisory councils, local bodies, educational advisory councils, and so on, and so forth. But they can

never take the place of a properly elected territorial parliament governing the country.

The problem of adequate and satisfactory representation of minorities in representative legislatures is one which has assumed factitious importance in this country. So far as political minorities are concerned, their problems are transient. The bedrock of all sound democracies is that, under it, the minority of to-day will find itself the majority of to-morrow, and vice versa. But there are permanent minorities of different kinds—*viz.*, religious, territorial, racial, and social or communal, as in India. The interests of those minorities have been sought to be protected in the post-war treaties of Europe, by elaborate provisions in the constitution of those countries where these minorities are found, guaranteeing to these minorities freedom of worship, their own social habits and customs, so long as they are consistent with public order and morality, their educational advancement, and franchise, and generally the right to live on terms of equality with the majority communities in those countries. Another device has been to withdraw religious affairs, for example, from the interference of any public authority. Or autonomous and localized self-government has been conceded to the territorial minority by the majority. Apart from all this, however, the problem still remains how to make the majorities reasonable always in their treatment of minorities, and how to make minorities have absolute confidence in majority rule, which is the basis of democracy. Besides the devices mentioned above, communal representation in the legislatures in one form or another has been recognised, and certain fundamental rights are guaranteed, as I have mentioned before, to the minorities in the constitution.

Proportional representation which I have discussed fully above is often put forward as a means of protecting minorities, but its limitations are well known. If proportional representation were adopted on a wide scale, the formation of sound majorities will become almost impossible, and the parliamentary machine will break down.

In India, however, the problem has been attempted to be solved in a very unsatisfactory manner. Before the Minto-Morley reforms, there were no communal electorates in this country. Of course, there were no representative legislatures on any large scale. But Lord Minto started 'the Mohammadan hare', to quote Lord

Morley. From that time, we have gone from bad to worse until, under the Government of India Act of 1935, we find separate representation in the legislatures for the scheduled castes, the Sikhs, the Muhammadans, the Anglo-Indians, the Europeans and the Indian Christians, besides representatives for Commerce, and Industries, Land-holders, Labour and Women. This is surely creating a political museum of communities and interests, and is wholly inconsistent with the history and the theory of democratic and responsible government. The evil is made worse by the creation of communal electorates, who have got to elect these representatives, and not even merely reserving seats for them on the basis of a general electorate. These separate electorates are made compulsory for all these communities. Even the most advanced amongst them are not given the right to enroll themselves on the general electoral roll. The Statute reserves seats even for majorities, and the provision for a change in the system is difficult. The arguments against such communal representation need not be repeated here. A nation cannot grow, communities tend to perpetuate themselves in their narrow outlook, existing relations are stereotyped, and nationalism cannot grow out of the statutory recognition of communalism. For the purpose of the present lecture, it is enough for me to say that the theories of popular representation and democracy, either as discovered by the greatest political scientists of the world, or as they are found working in modern democratic countries, are wholly inconsistent with the provisions of the Communal Award as it is called, or of the Government of India Act on this question.

Should there be a residential qualification for candidates, *viz.*, that they should not only live in the country for a prescribed period, but also live in the particular constituency? There is a great deal to be said for the view that, if representation is to be genuine, the representative must live in the area which he represents; for, then and only then, can he claim to have any active and constant touch with the sentiments, wishes, and desires of the people whom he represents. If the representative is to serve on a Local Body, I grant that residence within the area which he represents may be desirable, although it should not be compulsory. But, so far as national legislatures are concerned, there is absolutely no need for the representative to live in the particular constituency which he represents. On the other hand, there is a danger that, if all representatives live in their constituencies, the resulting parliament will be a very mediocre affair and will never function

efficiently. "Little constituencies tend to make little representatives;" and there is no danger of the Carpet-baggers getting overwhelming representation on the Legislatures. Local men are jealous, and local men have a pull over strangers. If, in spite of the pull, a stranger gets the majority of votes, it is a powerful argument that, in spite of no residential qualification, that representative is so able and so good that the people of the locality prefer him to the local magnate.

Should there be a right of what is called "recall" of representatives, once they are elected to the legislatures? On the whole, I think there should be, though it should be capable of exercise only under strict conditions, and on special occasions. Recent happenings in this Presidency and in India of elected representatives voting just against their electoral promises have convinced me of the need for such a power. In order to exercise this power of recall wisely, the acts of the representatives in the legislature or local body should be published, so that the voters may know how the representative speaks, and votes. But I find in Local Bodies in this country, after the election of the representatives, the election of the Presidents and of the Vice-Presidents or of the Chairmen and the Vice-Chairmen takes place by ballot. I do not see why it should be so. I think an open vote will improve matters all round. In order, however, to get the best out of representative democracy, the voters must keep a watch on the doings of the representatives, and the latter must explain and expound their work from time to time to their electors.

Coming to the provisions of the Government of India Act of 1935, which seeks to establish representative government on the basis of qualified democracy in India, I desire to point out that suffrage in the lower houses of Provincial Legislatures, for example, in Madras, is the payment of any tax to a Local Board or to the Local Government or to the Government of India, ownership of property, the guardianship of a qualified minor, or literacy. Women have got additional qualifications—if their husbands possess the requisite qualification, or if they are the mothers or widows of officers or soldiers of His Majesty's regular military forces. But the possibility of a wider electoral roll is sought to be restricted by the provision that persons qualified as sole tenants, or as Kanamdars, or as mortgagees, or as guardians of qualified minors, or as literates, or as women claiming additional qualifications, should not be enrolled on the electoral roll, unless application is made by

people in the prescribed form. I deprecate this provision strongly. It should be the duty of the Government and its officers to bring all those enfranchised, on the electoral roll, without prescribing an application for certain classes of qualifications.

For the Federal Lower Houses, the Government of India Act has curiously enough, prescribed indirect election. The arguments against it cannot be put better than in the words of the Marquess of Reading, Lord Lothian and Mr. Isaac Foot, in the discussion before the Joint Parliamentary Committee. The arguments against indirect election from the Provincial Lower House to the Federal Lower House are mainly five. "In the first place, it means that the Provinces, in effect, will be able to control the Central Legislature, and therefore the Ministry. The supreme problem in India is the maintenance of its constitutional unity. The breakdown of its central government is the greatest catastrophe which would overtake the country. Yet, to constitute the central legislature by what, in effect, will be provincial delegations, the majority of whom will hold their seats on the nomination, and, at times of re-election, at the discretion of the Provincial Governments and the parties which support them in office, would, in our view aggravate the tendency to provincial separation which already exists and endanger the unity of India."

Secondly, "the system inevitably involves the confusion of provincial and all-India issues at times of election, with bad results for both central and provincial legislatures. Legislatures ought to be elected on the issues which they are constitutionally responsible for dealing with. The indirect system under consideration means that the provincial elections may turn on all-India issues such as tariffs or income-tax, in which case there will be no clear decision about the provincial issues which the legislatures will alone have to deal with in the next few years, or that they may turn on provincial issues alone, in which case the electorate will have no voice or influence in all-India issues."

"In the third place, the system inevitably opens the door to corruption, for it means that each member of the Central Legislature, which will deal with matters vitally affecting business and finance, will be elected by a number of provincial electors on the average, not more than 7 or 8 in number. The opportunities for corruption, under a system which enables any seven or eight mem-

bers of a provincial legislature to return a member of the Central Legislature, needs no emphasis from us."

Fourthly, "the system of electing the central legislature by the Provincial legislatures is bound to be extremely intricate and confusing with its combination of electoral colleges elected by enormous constituencies in some provinces, with election by the Provincial Upper Houses which are themselves elected in part by the Provincial Assemblies, in others."

"Finally, this form of indirect system involves reversing a system which has already been in operation for the Indian Legislative Assembly not unsuccessfully for thirteen years and which has the support of the great majority of Indian Political Leaders. We are, therefore, driven to the conclusion that the right basis for the constitution of the Federal House is that proposed in the White Paper, namely direct election to the Legislative Assembly from territorial constituencies by an enlarged but still restricted electorate, and indirect election to the Council of State from the Provincial Legislative Assemblies by the system of the single transferable vote. We think that this will produce that balance of representation at the centre between the provincial and national interests, which the history of other federations shows to be both desirable and to have stood the test of experience."

Curiously enough, the Government of India Act not only rejects the device of direct representation for the Federal Lower House and accepts indirect representation, but has provided for direct election to the Federal Upper House, a scheme which has no basis of historical experience or theoretical justification in its favour. Time alone can show how it will work. But it does not require much prophesying for me to say that, constituted as they are, the two Houses of the Federal Legislature are bound to be unrepresentative of the main currents of public opinion in the country. The peculiar difficulties of evolving a sound representative system for India are the size and population of the country, the vast illiteracy of the people, the absence of any alert public opinion, the non-existence of well-defined political parties with their rich heritage of experience of common working together, of a sense of discipline and of a burning faith in the policy and programme of the party, except the Indian National Congress. The need for the fight for the freedom of this country being carried on, is partially at least inconsistent with political programmes which are

based on the theory of a static order, as opposed to a dynamic society.

In order to evolve a proper representative system, which alone will guarantee the proper functioning of democracy in this country, we have got to evolve both in the Provincial and Federal spheres, legislatures which, by their composition, by the system of representation which elects representatives to them, and by the proper functioning of the electoral machinery, will gradually at least represent the main currents of public opinion.

The illiteracy of the people need not be an insuperable argument. An illiterate person is not necessarily incapable of voting aright. Often, he votes aright. Thanks to the modern inventions of the Broadcast and of the Radio, and the methods of quick communication, it ought to be possible to reach the illiterate villagers, in the remotest villages, by well-organised parties and their candidates. But, literate or illiterate, the question whether representative democracy will function aright in this country will largely depend upon the success of all concerned, in educating the voters aright, and in their choice of the right men and women to represent them in the legislatures.

This leads me on to the next difficulty, *viz.*, the absence of an alert well-organised public opinion in the country. I have already made a reference to the general attitude of suspicion and cynicism toward politicians on the part of people generally. That attitude is gradually changing, and will soon change more rapidly. But, we must look increasingly to the Press and the platform in the country, to create and keep alive a vigilant and well-informed public opinion.

Whether the working of democracy in this country will follow the British model of a two or three party system with cabinet responsibility, or will follow the continental system of more numerous parties forming temporary coalitions, and whether the executive will be parliamentary or Presidential, are questions which time alone can solve. But, considering the present political state in the country, one may well express the hope that the greatest need of contemporary politics to-day is the functioning of disciplined political parties, or rather the ceasing to function of all other parties, communal or sectional.

Of course, this is not wholly consistent with the political conditions of a country aspiring and working for its political freedom.

There is not much scope for patriotic men and women whose eyes are set on the freedom of the country, for evolving political programmes and ranging themselves on one side or other. It is only, when Swaraj is won, that conditions will become easy for the formation and functioning of political parties, according to the political beliefs and convictions of men and women. Meantime, we can only hope for the negative result that we shall at least achieve the goal of the ceasing of the functioning of parties which are not mainly political, or, in other words, of all parties which are communal, or sectional, or partisan in outlook.

The danger that land-lords and capitalists will dominate elections has been largely falsified by the experience of recent elections in this Province, and elsewhere. The Indian elector may be ignorant, may be illiterate, may be poor; but generally he has shown discrimination, patriotism, and wisdom. Granted decent conditions of political life, I have no doubt that he will rise to the full opportunities of his political life. There are dangers to democracy all over the world, and to-day the failure of democracy is writ large over the continent of Europe. But is this failure due to the inherent fault of parliamentary democracy, or, is it not, rather, due to the effects of the gigantic War which certainly was not the outcome of democratic rule?

The racial problem is a permanent challenge to democracy and it is a warning to the British Empire. As a recent writer puts it—"if we allow racial hatred at home or abroad, not merely as disturbing factors in daily life, but as biological laws which entitle certain strata to permanent superiority and compel others to permanent inferiority,—a growth of hatred on a scientific basis, democracy will not be safe." Again, democracy is wholly inconsistent with colossal wealth on the one hand, and colossal poverty on the other. It is impossible to bring about or maintain a state of affairs, "where the many have the votes, and the few have the wealth." Lastly, the world will not be safe for democracy, if it is divided into groups of countries, not only of unequal strength or unequal wealth, but of quite unequal opportunities. A state of affairs cannot last, where the great and undeveloped portions of the globe are a kind of trust, to be exploited for the benefit of a few Powers, who deny others access to this wealth. The Italo-Abyssinian conflict is a capital example in point, and the Italian answer to the British challenge—"physician, heal thyself"—is also unanswerable, from this point of view.

But democracy will never serve the needs of humanity, if it is treated merely as a question of form of government, and not as a question of spirit. If the spirit of greed, of materialism, and of violence, which has ruled large parts of mankind so far, is going to survive, democracy will not stand. In that case, it is scarcely worth while that it should stand. If we can get the better of it, if we can remember that the foundations of society must be based on justice, sympathy, and consideration, democracy will survive the present crisis.

James Mill called representation the grand discovery of modern times, supplying the key to all the difficulties both spiritual and practical, in the way of organising *good government*. Political scientists have yet to find the correct solution for the difficulties in the way of organising *good representation*.

KATYĀYANA AND THE MITAKSHARA LAW OF STRIDHANA¹

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(Continued from page 125 of Vol. VII, No. 2.)

VI

THE following Sanskrit passage is taken from the Mitākshara, and it gives the portions relevant to the subject under discussion :

इदानीं स्त्रीधनविभागं विस्तरेणाभिधास्यन्, तत्स्वरूपं तावदाह ।

पितृमातृपतिभ्रातृदत्तमध्यम्युपागतम् ।

आधिवेदनिकाद्यं च स्त्रीधनं परिकीर्तितम् ॥

बन्धुदत्तं तथा शुल्कमन्वाधेयकमेव च ।

पित्रा मात्रा पत्या भ्रात्रा च यदत्तं, यच्च विवाहकाळे अप्रावधिकृत्य मातुलादिभिर्दत्तं, आधिवेदनिकं अधिवेदननिमित्तं 'अधिविन्नस्त्रियै दद्यात्' इति वक्ष्यमाणं । आद्यशब्देन रिक्थक्रयसंविभागपरिग्रहाधिगमप्राप्तं, एतत् स्त्रीधनं मन्वादिभिर्दत्तम् ।

स्त्रीधनशब्दश्च यौगिको न पारिभाषिकः ।

योगसंभवे परिभाषाया अयुक्तत्वात् ।

यत्पुनर्मनोक्तम्.....स्त्रीधनस्य षड्विधत्वं

तन्मनूयसंख्याव्यवच्छेदार्थं, नाधिकसंख्याव्यवच्छेदाय ।

.....
किंच । बन्धुभिः कन्याया मातृबन्धुभिः पितृबन्धुभिश्च यदत्तं, शुल्कं यद्वृहीत्वा कन्या दीयते । अन्वाधेयकं परिणयनादनुपश्चादाहितं दत्तम् ।
.....इति स्त्रीधनं परिकीर्तितमिति गतेन संबन्धः ॥

It is apparent from this that Vignānēśwara gives to the word 'Ādya' in Yāgnāvalkya's text a very wide significance and

¹ Part of the work done as a research student in Hindu Law in the University of Madras during the years 1930-32.

includes within it property obtained by inheritance, purchase, partition, seizure and finding. The history of the law is clear evidence to show that in interpreting the word thus, Vignānēśwara was not carried away by his enthusiasm for the advancement of the position of women, but was only stating concisely and precisely the state of affairs in his own day. He had before him the text of Kātyāyana indicating the all-inclusiveness of woman's property, and chronologically he was very near to him. His statement that Strīdhana is etymological and not technical (स्त्रीधनशब्दो यौगिकः न पारिभाषिकः) is only another way of putting what Kātyāyana has already said with regard to woman's property (शेषं तु स्त्रीधनं स्मृतम्). He realised the full significance of Kātyāyana's statement of the law. If all items of property obtained by a woman belong to her, it follows without any difficulty that what is hers in etymology is also hers in law.

But before making a detailed examination of the view of Vignānēśwara it is necessary to mention certain observations made in reference to that view of the law by some modern scholars of high repute. They are:

- i. Vignāna's interpretation of the text of Yāgñavalkya is not correct because the word Ādya cannot bear the significance attached to it.
- ii. Even admitting his view to be correct it has not been accepted by other writers of his school, viz., Mādhaba and Dēvanna Bhatta.

Both these views proceed from a misconception and an improper understanding of the law on the subject, and they betray a woeful lack of insight into the history of woman's property. It is necessary to examine each of these views by itself. The origin of the first of them goes back to a time when British courts in India began for the first time to administer Hindu Law. As Bengal came under the British influence first, and as Colebrook happened to translate the Dāyabhāga before the Mitākshara, the early English judges were obsessed with the Dāyabhāga doctrine of a limited estate, and imported it into the Mitākshara law when they began to administer the latter. A second reason which stood in their way of appreciating the Mitākshara law of Strīdhana was that

in those days the British jurisprudence itself lagged far behind women. The mistakes of these early European judges may be pardoned to a certain extent because, they laboured under a language difficulty; and very few of them had any access to the original texts and commentaries. But the heresy once having started gained in strength with the advance of time, and eminent Indian judges like Sir Gooroodas Banerjea and great orientalists like Dr. Jolly became blind to the truth on the matter and helped the wider circulation of these wrong ideas.

Banerjea in his *Tagore Law Lectures* on 'Marriage and Strīdhana' first gave currency to the idea that Vignānēśwara's interpretation of Yāgñavalkya's text is not correct. His view is to be found at pp. 286 and 289 of the third edition of his *Marriage and Strīdhana* and it is unnecessary to quote the whole of it here. He says after mentioning various Dharma śāstra texts on Strīdhana; 'one thing is clear from the examination of these texts, namely, that the term Strīdhana is not used in its simple etymological sense, but has a technical meaning. If it were otherwise and if by Strīdhana were meant all property belonging to a woman, the enumeration of particular descriptions of property as coming under the denomination would be useless. And the last cited text¹ from Kātyāyana would go expressly to negative such a supposition. As for the term 'Ādya' (and the rest) in the text of Yāgñavalkya, apart from the authority of Vignānēśwara . . . there is nothing to show that it includes every item of property however acquired'. Banerjea's view may be shortly stated thus. Vignānēśwara's deduction that Strīdhana is etymological and not technical is a mere sophism, as the word 'Ādya' in Yāgñavalkya's text can only include items similar to those already mentioned; and the very fact that Kātyāyana excludes wealth earned by mechanical arts and gifts of affection from a stranger from Strīdhana, confirms the view that Strīdhana cannot be etymological.

¹ प्राप्तं शिल्पेस्तु यद्विक्तं etc. See pp. 111 and 118 of Vol. II, No. 7 of this Journal.

The following remark of Dr. Jolly may be noted in this connection. The technical nature of the term Strīdhana is further shown by the fact that it was considered to require a definition.

Dr. Jolly expressed a similar view in his *Tagore Law Lectures* for the year 1883. We find at p. 244 of the lectures :

'The Vishṇu Smṛiti in the analogous passage contains no Ādya. Granting that "Ādya" is the correct reading it does not follow that Vigñānēśwara interpreted it correctly. Ādya literally means "and the like" and occurring at the end of an enumeration can only be used to include such objects as are similar in character to those previously mentioned. *Therefore in the passage in question, it cannot mean any other separate acquisition as Vigñānēśwara contends; but it can only refer to such acquisitions of a woman as are similar to the other objects of which Strīdhana consists. It may mean, as one of the Southern commentators (Mādhava) explains, property purchased with what is given during the bridal procession, or other such acquisitions, or it may denote presents of another kind than those previously mentioned, or it may be a mere expletive word as Dr. Burnell supposes.*'

I have found it necessary to quote this long passage in order to show how closely Dr. Jolly followed Sir Gooroodas Banerjea. After the lengthy discussion in the previous sections it is not necessary to say much in refutation of these views. Though the Mitākshara purports to be a mere commentary on the Yāgñavalkya Smṛiti, it is in reality a comprehensive digest of law. When attempting to define the nature of woman's property, Vigñānēśwara could not but survey the rapid development of the law prior to his own day. He saw clearly that property obtained by inheritance or on partition was in no way different from that obtained by a gift at marriage or other occasions. He must have known the text of Kātyāyana above referred to though he does not quote it.¹ Thus he had ample evidence before him of the fact that Strīdhana was etymological and not technical. But as he made the text of Yāgñavalkya the basis of his discussion he had to find a place in it for the different kinds of woman's property which were not specifically mentioned therein. The term 'Ādya' was there, and even without his interpretation it bears a special significance as I have already remarked. He therefore made good use of it and in interpret-

¹ Perhaps, by the time of Vigñānēśwara even the exclusion of these two items had lost much of its significance.

ing it in such a wide manner, he only brought out its real significance. And the proposition of law which he stated, seemed so clearly transparent that he did not find it necessary to quote any Smṛiti texts in its favour.

All the suggested difficulties vanish if we keep our minds clear of the idea of a limited estate and reversionary succession. The law of woman's property started from slender beginnings and advanced until the distinction between man and woman with regard to their capacity to acquire and hold property became obliterated. It is this fact that Vigñānēśwara clearly brings out in the Mitākshara. In his explanation of the word 'Ādya' as property obtained by inheritance, purchase, partition, seizure and finding (आद्यशब्देन रिक्थक्रयसंविभागपरिहाधिगमप्राप्तम्), he had before him the text of Gautama on the causes of ownership. The text runs thus :

स्वामी रिक्थक्रयसंविभागपरिहाधिगमेषु ।

and it points out that ownership is acquired by inheritance, purchase, partition, seizure and finding. This text of one of the earliest of sages enumerated some of the most general modes of acquisition and in Vigñānēśwara's time, all these were available to women. Therefore 'Strīdhana' must be a general term including all property acquired in a legitimate manner by a woman. I have already shown how the nature of inherited property was understood from the days of Gautama. Yāgñavalkya recognises the right of certain women to a share on partition. Dēvala speaks of 'Lābha' which can be explained either as seizure, or as finding; and Kātyāyana himself has declared the independence of women to sell or make a gift of their Saudāyika property. It therefore follows that any property purchased by them thereby belongs to them alone. Hence the correctness of the interpretation of the word 'Ādya' in the above manner does not need any further argument in support of it.

But in spite of all this, there has been a good deal of wearying and unprofitable discussion on the question of this term 'Ādya' being ejusdem generis, or otherwise. During Yāgñavalkya's time there could have been no question of its signifying things similar to those already mentioned because, Yāgñavalkya knew nothing of a limited estate on the one

hand and allowed women the right of inheritance and the right to a share on partition on the other. Moreover ejusdem generis can have no application here because, Yāgñavalkya's text is not an ordinance but a mere statement of a well recognised fact. Again, the term 'Ādya' in Yāgñavalkya's text is followed by the enumeration of certain other items like the Bandhudatta and the Sufka, and this therefore makes it clear that it was not intended to signify items similar to those previously mentioned. Reference may be made to an alternative reading adopted by Jimūtavāhana who reads the text by substituting the expletive चैव for the suppletive आद्य, and takes the first two lines as a definition of Strīdhana, and the next two lines as denoting a line of succession to the items mentioned therein. But even he does not admit, that for a property to be Strīdhana it must be specifically included in that category by some sage: and the whole controversy as to whether the term Ādya is ejusdem generis, loses its point when it is noted that Aparārka who like Jimūtavāhana reads चैव for आद्यं च in Yāgñavalkya's text, interprets it in the same way as Vigñānēśwara. He clinches the matter by saying च शब्द आद्यर्थः, and instances as examples property obtained by partition etc. by a woman.¹

The latter half of Banerjea's objection is easily answered. The exclusion of the two items, viz., property obtained by mechanical arts and as a gift of affection from a stranger, by Kātyāyana does not militate against the etymological nature of Strīdhana. The reasons underlying the exclusion of these two items were mentioned on a previous occasion: they were based more on public policy and social considera-

¹ It is generally accepted that Vigñānēśwara and Aparārka are contemporaries. The fact that both of them, the one a Pundit attached to a king's court and the other a king himself, should have dealt with the nature of Strīdhana in the same manner, though accepting different readings of the text is noteworthy. This is what Aparārka says:

च शब्द आद्यर्थः । तेन च स्त्रीधनान्तरपरिग्रहः, तद्यथा । कार्याः पश्यः समाशिकाः, माताप्यंशं समं हरेत्, स्वात्वादंशाच्चतुर्भागं, मातुः पारी-
ण्यं स्त्रियो विभजेरन् । अन्यदपि यत्स्त्रीस्वामिकं तत् स्त्रीधनमिति मन्वादिभिः
परिकीर्तितम् ।

tions than on the logic of the law; and if they are exceptions at all they are exceptions which prove the rule.

VII

WE may now consider how far subsequent commentators of the Mitākshara school are in agreement with Vigñānēśwara's ideas about the nature of Strīdhana. Banerjea says in his *Tagore Law Lectures* that neither the Mādhaviya nor the Smritichandrika have accepted Vigñānēśwara's interpretation of the word 'Ādya', and that 'According to the Dravida school, therefore, the term Strīdhana has not that unlimited signification which it has under the Mitākshara, but it is used in a limited and technical sense.' This view of Banerjea proceeds from his failure to understand properly the Sanskrit passages concerned. Even a cursory glance at the discussion in the Mādhaviya clearly shows that Mādhava in his disquisitions closely followed Vigñānēśwara. The Smritichandrika is not so elaborate as the Mādhaviya on account of certain peculiarities in its structure which differs from that of the other Nibandhas; but there is no doubt that far from any conflict with the Mitākshara, it closely follows and supports it.

I will first take up the Mādhaviya and leave to the next section a consideration of the Smritichandrika view. Below is given the Sanskrit text in so far as it is necessary for the purpose:

स्त्रीधनविभागमाह याज्ञवल्क्यः ।

पितृमातृपतिभ्रातृदत्तमध्यग्न्युपागतम् ।

आधिवेदनिकाद्यं च स्त्रीधनं परिकीर्तितम् ॥

बन्धुदत्तं तथा शुल्कमन्वाधेयकमेव च ।

अग्रजायामतीतायां बान्धवास्तदवाप्तयः ॥

अध्यग्न्युपागतं, विवाहकाले अग्निसन्निधौ मातुलादिभिर्दत्तम् ।

आधिवेदनिकं अधिवेदननिमित्तमधिविन्नह्नियै दत्तम् ।

आद्यशब्देन अध्यावाहनिकरिक्थक्रयादिप्राप्तम् ।

तथा च मनुः—

अध्यग्न्यावाहनिकं दत्तं च प्रीति कर्मणि ।

भ्रातृमातृपितृप्राप्तं पद्धिधं स्त्रीधनं स्मृतम् ॥ इति

पद्धिधमिति न्यूनसंख्याव्यवच्छेदार्थः । नाधिकसंख्याव्यवच्छेदाय ।

अध्यावाहनिकं प्रीतिदत्तयोः स्वरूपं कात्यायनेनेक्तम् ।

.....

बन्धुदत्तं, कन्यामातृपितृबन्धुभिर्दत्तं शुल्कं, यद्वहोत्वा कन्या दियोते ।

अन्वाधेयकं परिणयनादनु पश्चादत्तम् । तदुक्तं कात्यायनेन ।

.....

पित्तादिभिः स्त्रीभ्यो धनादाने विशेषमाह कात्यायनः ।

पितृमातृपतिभ्रातृजातिभिः स्त्रीधनं स्त्रियै ।

यथा शक्या द्विसाहस्रं दातव्यं स्थावरादृते ॥

.....अर्थं च नियमः प्रत्यब्द दाने वेदितव्यः ।

अनेकाब्दे तूपजीवनार्थं सकृदेव दाने नायमवधिनियमः । नापिस्थावरपर्युदासः ।

.....अत एव सौदाधिके स्थावरेपि यथेष्टाविनियोगार्हत्व-
मुक्तं तेनैव ।

पतिदानस्थावरेपि विशेषमाह नारदः ।

भर्ता प्रीतेन यदत्तं स्त्रियै तस्मिन् मृतेपि तत् ।

सा यथाकाममश्रयोदद्याद्वा स्थावरादृते ॥—इति

पित्तादिभिर्पुण्यादिना दत्तं स्त्रीधनं न भवतीत्याह कात्यायनः ।

तत्र सोपाधि यदत्तं यच्च योगवशेन वा ।

पित्रा भ्रात्राथवा पत्या न तत् स्त्रीधनमिष्यते ॥ इति

उत्सवादौ धारणार्थं दत्तमलंकारादिकं सोपाधिदत्तम् ।

योगवशेन वचनादिनेत्यर्थः ॥

शिल्पादिप्राप्तं स्त्रीधनं न भवतीत्याह स एव ।

प्राप्तं शिल्पैस्तु यद्विस्तं प्रीत्या चैव पदन्यतः ।

भर्तुः स्वाम्यं सदा तत्र शेषं तु स्त्रीधनं स्मृतम् ॥

अन्यतः स्यादित इति यावत् । तदेतत् स्त्रीधनं दुहितृदौहितृपुत्रपौत्र-
रहितायां बान्धवा भर्तादयो गृह्णन्ति ॥

A mere glance at this passage is enough to show how unfounded the criticism of Banerjea is. Mādhava closely follows the Mitākshara and attempts to elucidate it wherever possible. As the compound पितृमातृपतिभ्रातृदत्तम् is self-evident, he proceeds to explain Adhyagni and Adhivēdanika. This naturally leads him to the word 'Ādya' and he interprets it thus :

आद्यशब्देन अध्यावाहनिकरिक्थक्रयादिप्राप्तम् ।

and this passage ought to have been correctly translated thus : 'The word Ādya includes Adhyāvāhanika property and property obtained by inheritance, purchase etc.' This is the same as what Vigñānēśwara has said except that Mādhava thought it unnecessary to repeat the words that Strīdhana is etymological and not technical in its significance. The addition of the term Adhyāvāhanika to the explanation of 'Ādya' is an improvement upon the Mitākshara because, it stands for those traditional kinds of woman's property which do not find a specific mention in the text. The words रिक्थ-
क्रयादिप्राप्तं are a condensation of the Mitākshara explanation रिक्थक्रयसंविभागपरिग्रहाधिगमप्राप्तम्), which, itself is based on Gautama's text as already pointed out. As this text on the causes of ownership is well known, and also the fact that Mādhava is enlarging upon the Mitākshara ideas, there was no necessity for him to repeat the whole of the Mitākshara explanation. This condensation, however, was unfortunate in the extreme as it led some scholars like Banerjea to misunderstand the law on the point.

Leaving alone the term 'Ādya' for the present, we may rapidly run through the rest of the disquisition and see whether it conflicts with the Mitākshara in any way. Mādhava defines Adhyāvāhanika, and as रिक्थक्रयादिप्राप्तम् is self-evident, he reverts to Yāñavalkya's text and explains one after another,

Bandhudatta, Sulka and Anvādhāyaka. He then notes a few peculiarities about the property given by the father and other relations and incidentally explains Saudāyika. This leads him to Nārada's text limiting the woman's powers over Bhartudāya of the immovable type. As he thus closely follows Vignānēśwara and endorses the view that all property in the hands of a woman is hers, he takes care to point out that property given to a woman for use on particular occasions, or for a particular object does not become her Strīdhana. This is really no exception because, such property is in the nature of a loan or a deposit rather than a gift. And finally he repeats the text of Kātyāyana about the exclusion of wealth earned by mechanical arts and the gift of affection from a stranger, and after emphasising the fact that the rest is woman's property he proceeds to explain the devolution of Strīdhana. There is therefore nothing in all this to conflict with the Mitākshara.

The interpretation of the word 'Ādya' may be now taken up. I have already remarked that अध्यावाहनिकरिक्थक्रयादिप्राप्तम् should be translated as Adhyāvāhanika property and property obtained by inheritance, purchase etc. Sir Gooroodas Banerjea errs in interpreting the passage in question thus: 'By the words "ādya etc." property purchased with what is given during the procession etc., is included.' Apart from the fact that such a translation is based on a complete misapprehension of the law, it is incorrect for a number of other reasons.

In Sanskrit law क्रय is generally used for purchase and विक्रय for sale, and hence अध्यावाहनिकरिक्थक्रयादिप्राप्तम् can only mean Adhyāvāhanika property and property obtained by inheritance, purchase etc. Banerjea's explanation, viz., property purchased with Adhyāvāhanika etc. is absurd on the face of it. Moreover, a reference to property purchased with Adhyāvāhanika Riktha is quite out of place in that context. Yāgñavalkya's text does not refer to Adhyāvāhanika; and Mādhava takes it from Manu to illustrate the meaning of 'Ādya'. As he refers to the question of woman's powers of disposal over her property later on while explaining Saudāyika there is no necessity for him to take special pains to indicate

that property obtained by expending Adhyāvāhanika belongs as well to the woman. If women have the power to dispose of certain items of property where is the need to say that they can purchase new items of property with their price? It should not also be forgotten that Banerjea's explanation leaves the nature of inherited property indeterminate, in the absence of a limited estate. Lastly it is beyond all comprehension why Mādhava should have specially picked up the property given during the bridal procession to indicate the woman's power to obtain new properties for old.¹

The fact is that the incorrect interpretation of the passage resulted from a certain prejudice against the correctness of Vignānēśwara's view. Banerjea like others, could not free himself from the notion of a limited estate in the Mitākshara

¹ Though it is unnecessary to say anything further on this topic I should like to draw attention to the following considerations as well.

क्रय is purchase and अध्यावाहनिकरिक्थक्रयादिप्राप्तम् can only mean, if we refuse to take it as a Dvandwa samāsa in the first instance, property obtained by the purchase etc. of Adhyāvāhanika property; and this is absurd on the face of it. We cannot split up the compound अध्यावाहनिकरिक्थक्रय into अध्यावाहनिकरिक्थेन क्रय, as it offends against the rules of grammar. To admit of Banerjea's meaning the passage should have read as अध्यावाहनिकरिक्थक्रीतादिप्राप्तम्, for the instrumental case and the past participle go together.

If it be urged that क्रय comes from the root क्रो signifying exchange of property or द्रव्यविनिमय, and that the passage may therefore be translated as property obtained by the exchange etc. of अध्यावाहनिकरिक्थ, there would then be no place for the repetition of the term आदि in Mādhava's explanation; for resort is then had to the extended meaning of क्रय derived from the root itself. There might have been some meaning in such a case if the passage stood as अध्यावाहनिकरिक्थक्रयप्राप्तम्.

It is also improper to couple the term रिक्थ with अध्यावाहनिक and interpret it as Adhyāvāhanika property, for we have the same sense even without compounding them and the word रिक्थ becomes redundant. Moreover in Sanskrit law the word रिक्थ usually means inheritance and not property in general, and Adhyāvāhanika riktha sounds strange.

law also, and in consequence thought that the Mitākshara view of Strīdhana was too idealistic to be correct. With this thought constantly before his mind he failed to understand the Mādaviya properly, and came to state that it gave a limited signification to the term Strīdhana.

As Dr. Jolly is a Sanskrit scholar and as he succeeded Sir Gooroodas Banerjea to the Tagore Professorship, it is not unnatural that we should expect him to correct these mistaken impressions. But he seems to have attached too great an importance to Banerjea's views, and to have followed him blindly in important respects as the italicised portion of the passage already quoted at page 176 shows.

VIII

It is perhaps unnecessary to examine Dēvanna Bhatta's views on Strīdhana after all that has been said on the subject, but for what Sir Gooroodas Banerjea has remarked about him. The following Sanskrit passage is taken from the Smritichandrika :

अथस्त्रीधनविभागविषयाणि ।

तदादौ तावत् स्त्रीधनमाह मनुः ।

अध्यग्न्यावाहनिकं दत्तं च प्रोतिकर्मणि ।

भ्रातृमातृपितृप्राप्तं वद्धिधं स्त्रीधनं स्मृतम् ॥

अत्र पूर्वार्थस्यार्थः कात्यायनेन विवृतः ।

.....

भ्रातृमातृपितृप्राप्तं यदाकदा वा जीवनार्थमिति शेषः ।

वद्धिधग्रहणमुत्तरार्थोक्तमेकमेव स्त्रीधनमिति अमापनुत्त्यर्थं कृतं न पुनरवधारणार्थं । अत एव पितृमातृपतिभ्रातृदत्तमध्यग्न्युपागतं आधिवेदनिकाद्यं चेति याज्ञवल्क्येनाद्यग्रहणं कृतम् । विष्णुना तु वद्धिधाधिकमुक्तम् । पितृमातृपतिभ्रातृदत्तमध्यग्न्युपागतम् । आधिवेदनिकं, बन्धुदत्तं, शुल्कमन्वाधेयकमिति ॥ आधिवेदनिकं अधिवेदननिमित्तम् । बन्धुदत्तमित्यत्र बन्धुशब्दः पूर्वोक्तपितृ-दिव्यतिरिक्तबन्धुषु गोबलिवर्दन्यायाद्वर्तते शुल्कान्वाधेययोः स्वरूपं कात्यायनेनोक्तम् ।

From this point onwards the discussion is similar to that in the Mādaviya, except that Dēvanna Bhatta refers to the text of Manu on the proprietary incapacity of the wife, the son and the slave, and explains it away either as meaning that a wife cannot ordinarily expend her Strīdhana without her husband's permission, or as denoting her incapacity to acquire property for herself by mechanical arts and gifts from a stranger.

The first point to be noted from the above is that the Smritichandrika neither denies the etymological nature of Strīdhana nor makes any statement to the effect that it is technical. Dēvanna Bhatta starts with Manu's text, but brings in Yāgñavalkya and instances the word 'Adya' as showing that woman's property is of more than six kinds. Unlike Mādaviya he does not attempt to give an explanation of that word. He does not at all refer here to property acquired by inheritance, and this lends colour to the view that he might have understood by Strīdhana certain enumerated items only. But a study of the whole of the Dāyabhāga chapter in the Smritichandrika leads to a different conclusion. The structure of the Smritichandrika differs from that of the other digests in law. Unlike the other Nibandhakāras, Dēvanna Bhatta deals with the topic of Strīdhana before he deals with the question of succession to the property of a person who dies sonless. As a consequence he leaves the question of the nature of inherited property to be dealt with in the chapter on inheritance. I have already pointed out that the Smritichandrika does not accept the interpretation ordinarily put upon the text of Kātyāyana which is the basis of the modern limited estate. In discussing the preference between the mother and the father with regard to succession to the estate of a son who dies issueless, he makes the following remarks :

तस्मादत्र पित्रोस्सद्भावे कः क्रम इत्यपेक्षायां वक्तव्यो विशेषः । यच्चूतं शंभुना—मध्यकधनत्वात् दंपत्योर्येनकेनचित् गृह्यमाणमिति न विशेषो वक्तव्यः । इति

[तद्युक्तम् । मात्रा गृह्यमाण मात्रार्थमेव,

अध्यग्न्यादिस्त्रीधनवत् नोभयार्थमिति

विशेषो वक्तव्य एव; सोऽभिधीयते ।]

न्यायाभावादत्त क्रमे वचनमेव ग्रणम् । वचने च प्रथमे पितुरेव
धनग्रहणेऽधिकारः ।

The underlined portion of the above passage is clear evidence that according to the *Smritichandrika* property inherited by a woman from her son is taken by her as her *Stridhana*; for it emphatically says that 'whatever the mother takes, she takes for herself like the *Stridhana* called *Adhyagni* and the like, and not for the benefit of both herself and her husband.'

Sir Gooroodas Banerjea took note of this passage in his *Tagore Law Lectures* but failed to realise its significance. In spite of its unequivocal nature he says that it is not clear whether according to the *Smritichandrika* property inherited by a woman becomes her *Stridhana*; and he proceeds to remark thus: 'But there is a passage in that work relating to the mother's succession in which it is said 'whatever the mother takes she takes for herself like the *Stridhana* called the *Adhyagni* and the like', and from this passage it has sometimes been inferred that inherited property does *not* rank as *Stridhana*.'

In a footnote on the same Dr. Banerjea doubts the authenticity of that portion of the passage which I have enclosed in brackets, as it could not be traced in the Bengal edition of the work but was to be found in the South Indian edition only. In this way he avoids the compelling inference from the passage that inherited property is *Stridhana*, and sticks to his wrong notions. As a matter of fact the South Indian edition of this work is necessarily more correct and authoritative than the Bengal edition. Moreover, if we eschew the portion objected to by Banerjea (and this is enclosed in brackets in the above quotation), there would be no connection between that which precedes or follows the excised portion, and the reference to what Sambhoo says becomes meaningless. This therefore is sufficient proof of the authenticity thereof.

¹ It is not clear what exactly Banerjea meant by saying that a negative inference is sometimes drawn from it. But Dr. Jolly who says that the *Smritichandrika* does not accept the etymological nature of *Stridhana*, takes the passage as indicating that the mother's right over inherited property stood higher than that of other females, and as showing that inherited property is not *Stridhana*. It is needless to add that there are no grounds for such a nice distinction.

As regards the mother's share on partition *Dēvanna Bhatta* takes the view that she is not entitled to a share of the inheritance, but only takes as much as is necessary for her maintenance. He takes a similar view with regard to the unmarried daughter whom he permits to take only a marriage portion sufficient to defray the expenses thereof. But in dealing with the incidents of *Stridhana*, he quotes the text of *Dēvala* which includes *Vritti* in women's property.

This, therefore, makes it clear why *Dēvanna Bhatta* had not explained the term *Ādya* but was content with its mere mention remarking at the same time that it denotes other items of woman's property. According to him property obtained by a woman by inheritance is her *Stridhana*, and so is that which she obtains on partition, the only difference being that what she gets in the latter case is not a share but a portion the extent of which is determined by the facts of each case for itself. As regards the nature of purchased property the position is just the same as in the *Mādhavīya* because a woman has the undoubted right to dispose of her *Saudāyika* property. *Dēvanna Bhatta* thus agrees with *Vignānēśwara* as regards the nature of woman's property.

It is not therefore correct to say that according to the Southern commentators, especially the *Mādhavīya* and the *Smritichandrika*, *Stridhana* has only a technical and not an etymological significance. Both *Mādhava* and *Dēvanna Bhatta* closely followed *Vignānēśwara* on this question of the nature of *Stridhana*, though they might have made some minor reservations here and there, the latter especially with regard to succession to woman's property.

CONCLUSION

THE view of *Vignānēśwara* that *Stridhana* is etymological and not technical, and that all property acquired by a woman belongs to her in the widest sense of the term is a correct proposition so far as the Sanskrit law of the *Mitākshara* school is concerned; and the fact that subsequent commentators of that school closely followed it enhances its value still further. A practical realisation of the various implications of that proposition of law and their application to the problems that arise in our courts from day to day, would go a longer

way in improving the status of women than any piece-meal legislation, and simplify the Hindu Law as a whole better than any attempt at codification.

I am highly indebted to Mr. K. V. Venkata Subrahmanya Iyer, Professor of Hindu Law in the Madras Law College, for suggesting this subject and for his kind guidance throughout.

PROBLEM OF THE PRIMITIVE TRIBES IN INDIA *

BY

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THE economic, cultural and political problems that crop up when peoples of different levels of development come into close contact are nowadays attracting the attention of the practical Anthropologist. The primitive tribes of India are undergoing changes, stresses, and strains as tribes in other parts of the world, but these processes of change, etc., are of a different order and are therefore, in many respects, peculiar to India. The Anthropologist is most often familiar with the contacts of cultures of very different and diametrically opposed natures, but here the dividing line between the lower classes of the dominant community and the aboriginals is a very thin one. In India the British Administration is a third factor, a mediator, between the two others, the dominant community and the submerged tribes, an influence which for historical reasons led to complications in the relationship between the native ethnic groups.

The aboriginal Indian tribes are the relics of prehistoric ethno-dynamic movements, the autochthones who have been slowly and unconsciously pressed into the malaria-ridden jungles and tablelands as the more hospitable and fertile areas were covered over by the dominant races. One can see the process going on even today of the men of the plains encroaching upon the kingdom of the jungle men converting it into fields and plantations. The epics of the Hindus speak of the *Kiratas* and the *Nishadas* (Hunters) with some of whom the Aryans came into violent contact. The impression one gains on going through those legends is that these children of the jungle were then certainly a power in their territories and had to be reckoned with by the rulers of the plains. Except the Nagas and to a slight extent the Bhils very few of the tribes retained this position till the coming of Europeans into India.

* A paper read at the meeting of the Royal Anthropological Institute, London, on March 18th, 1935.

Hindu political influences and Hindu religion did certainly extend to the tribes but we have no historical data to gauge the degree of these contacts.

The extremely slow process of culture contact and change was speeded up since the establishment of the British Power in India about 150 years ago. In the earlier days of possession the newly established administration proceeded with such reckless disregard and ignorance of the established usages of the country in matters like land-tenure, laws of succession etc., that the aboriginal and non-aboriginal natives were all affected some way or other. The evil consequences of English jurists introducing foreign concepts of law in Indian Courts became apparent later on and tenancy legislations nowadays are many of them directed to the end of straightening the tangle created in the earlier days. The opening of inaccessible regions of India, the natural retreat of the aboriginals, by railways and roads brought the men of the plains in larger numbers into close and daily contact with the aboriginal tribes. Even in the heart of the jungles, the departments of forests subordinated the tribes and made them aliens in their last shelter, with no sort of rights whatsoever. Tea, rubber, and coffee estates employing armies of men from the plains completed the conquest that began long ago. *Active interference* with the customs of the people began about a hundred years ago by the Government and later on by missionaries. The merry Khond was, at the point of the bayonet, asked to stop his ritual sacrifice of human victims—the meriahs. Similar punitive expeditions were led against the Naga to put a stop to his pleasant pastime of headhunting and against the Andamanese tribes to make them more friendly! As in every other place the missionary with the bible and the anthropologist with his anthropometre and calipers followed in the wake of the Tommies.

It was only at the Census of 1931 that an earnest attempt was made to obtain exact figures regarding the number of the primitives, a task by no means easy, and rendered difficult by the propaganda of high-caste Hindus to induce the tribesmen to return themselves as Hindus. The primitive tribes in India number 25,000,000 in round figures; that means that one in every fourteen inhabitants of the Indian sub-continent is an aboriginal.

The Round Table Conference and the Joint Parliamentary Committee on Indian Reforms had to consider a good deal about the

future of the tribes. But their deliberations were very much handicapped by the absence of reliable sociological data except for a few tribes. The impressions of administrators and men on the spot, though valuable as pieces of evidence, cannot be considered equivalent to scientific data. But such were the only evidence on which the Commission had to base their recommendations. An administrator in one province is very often unfamiliar with conditions elsewhere—and his generalisations are very often inapplicable to the population of another province. The only comparable data are the scientific ones; and an all-India aboriginal policy has to be based on scientific sociological considerations. In giving protection to tribes, an understanding of their conditions in comparison with other tribes and the neighbouring Hindus is absolutely necessary. One now finds aboriginals in one province who really require protection thrown into the wheels of new reforms, another tribe, strong and able to stand by themselves hedged in by safeguards and protective measures. The food-gatherer in some places is a voter; his educated neighbour in another province is politically a savage. The average Indian publicist knows nothing or next to nothing about the aborigines; so also every other group that ought to know better.

The Joint Parliamentary Committee recognised the need of giving special treatment to the backward or tribal areas in the Constitution and recommended that they ought to be excluded from the jurisdiction of the reformed legislatures and placed in the charge of the provincial governors as a special responsibility. Most of the provincial governments, however, were anxious to have as few special areas as possible in their territories because administratively they were a nuisance. The J. P. C. was actuated, it would seem, by a desire to protect the tribes from the neglect and the exploitation that would necessarily follow if they were under a democratic machinery run by the dominant people. The provincial governments' views were reminiscent of the post-war craze for thrusting reform wherever possible. The Reforms of 1919 were not extended to the tribal areas because "the material for building political institutions on did not exist there" though the ideal was tacitly accepted that only the ballot-box would bring joy and happiness to the tribes.

The Secretary of State for India, in the course of his examination, made it extremely clear that slow parliamentary government would be detrimental to the tribes, whose problems required

prompt action by executive orders, unhampered by political and party influences; that the Governor's special responsibility would be chiefly with regard to the question of tribal land; that wherever possible existing tribal institution, headmen, etc., would be made use of for the government of the tribe, in the place of the usual administrative machinery.

The necessity for providing against the application of standardised laws and a complex penal code for tribal areas was also clearly realised.

The political issues raised, which need not deter us long concerned only with the question of power and as to who should control and direct the destinies of the tribes, the question of wage-control on estates and plantations where aborigines were employed and the political education of the tribes.

The Anthropologist came in for his share of angry criticism. It would be useful for us to bear their criticism in mind and for that purpose alone I refer to them. The Anthropologist was accused of being anxious to have these tribes preserved as specimens for the museums; that was why he would not have their institutions interfered with. On behalf of the Anthropologist it was said that though he was a person to be dealt with carefully, because he was so one sided, yet he saw his own side, the tribal side, so clearly that he was less dangerous to the tribes than the politicians. Convincing the Committee of the correctness of the anthropological point of view in this matter was a triumph for Dr. Hutton who presented it so ably before the J.P.C.

The Constitutional prospects, so far as they go, are directed to the end of saving the tribes from standardisation for legal and political purposes and if the same wisdom that is at the back of the proposals prevails with the administrations that would work it, one can be hopeful of the future of the larger tribes of the scheduled tracts.

The smaller tribes who cannot be thus "excluded" from the provincial administration because of their smallness have been generally neglected. There is difficulty in dealing with them in all-India schemes like the ones with which the Royal Commission and J.P.C. were concerned. The Anthropologist, if he is not such a puritan as not to have human feelings will have to rouse public opinion on the sufferings of these tribes many of whom are heading towards extinction. They are now left uncared for, administered

for the benefit of the forest departments through their agents. A step-fatherly interest is taken in them in some provinces, e.g., by the Labour Commissioner in Madras, the Officer for the Backward and Depressed classes in Bombay, Cochin and Travancore. It is not generally recognised that these tribes have a claim on provincial funds, though they do not pay much by way of taxes, but critics have to be bluntly told that the tribesmen have been, without their consent, deprived of their rights in the areas where they are now on sufferance, because they were weak and did not resist. These scattered tribes are the weakest and the most non-vocal and helpless minority that cannot clamour for attention, which was a thing that even the Australian aboriginal did recently.

The proposed policy of excluding certain major tribal areas from the operation of the reforms has not met with satisfaction even in all non-political circles. Mr. S. C. Roy, Editor of *Man in India*, and a well-known authority on the Chotanagpur tribes, questions the wisdom of the excluding of Chotanagpur area. He is one who knows this area inside out and his opinion carries with it the authority of vast anthropological wisdom. His disagreement with the proposals brings out the necessity for thorough sociological enquiry into the condition of each area; and it also shows that generalisations that are true of one tribal area may not be applicable in another, because of the differences in culture and the degree of disintegration that has already taken place in the course of years of administrative interference and unchecked exploitation. Roy's arguments could in some other instances be reversed against the non-exclusion of some other areas. We shall follow Roy's arguments with profit:—

"Chotanagpur and Sambalpur were included among the scheduled districts under the Scheduled Districts Act of 1874. Though thus protected all the general acts of the provincial and Imperial Governments have been extended to Chotanagpur. So in practice it has been treated as an ordinary 'Regulation District' under the ordinary laws and high courts, etc. The Government of India Act of 1919, provided again that as a backward area the Governor-General may exclude it from any particular act or portion of an act. In the course of 15 years only one section of a provincial act, viz., the Local Self-Government Act of 1923 relating to the election of chairman of district boards was withheld from this area. Later on even this was withdrawn for some areas in the division.

"There was indeed a time three quarters of a century ago when, if timely protection had been given, the aborigines of Chotanagpur would have been spared much harassment and spoliation of property and loss of rights. But the then authorities followed a laissez-faire policy and took no effective steps for their protection so long as there was anything to protect. And by being thrown into the melting pot of a common law and standardised system of administration and thus allowed to sink or swim as they best could—though they have lost and suffered much—they have somehow managed to keep the head above water and have since been able to adapt themselves to the new conditions....."

"Now they have overgrown the stage of spoon-feeding and 'sheltered' political existence—they have been administering district boards, their men are found in all professions; the vagueness and uncertainty of the recommendations of the J.P.C. report with regard to the aboriginal areas is causing great anxiety and misgivings in the minds of the people of Chotanagpur."

These arguments may leave on one the impression that other tribes too are capable of standing on their legs, after having successfully withstood strains of contact and exploitation and administrative and judicial mishandling of their affairs. With many tribes the downward march has not reached a stage when belated efforts at helping them will be completely futile. By special treatment much of the past wrongs can be rectified promptly and future developments controlled scientifically.

I should therefore like briefly to point out the problems that face the aboriginal tribes generally and indicate how only by a policy of prompt and favoured action they can be solved.

1. LAND QUESTION

As one comes to closer grips with these questions, one sees that they are primarily economic and secondarily only cultural clashes. Wherever the Hindu or Mohammedan has penetrated into the jungles, he has enslaved the tribesman by lending him money at usurious rates and then grabbing his land the alienation of which still goes on in spite of laws against it in most provinces. In Assam, Dr. Hutton and Mr. Mills point out that the land-hungry peasants of East Bengal are coming in large numbers and settling down in clearings and multiplying at a prolific rate. The tribesmen are also growing in numbers, though less rapidly, but good land will certainly

not extend itself in a similar way, and in a land-grabbing race the Naga will be easily out-stripped but for the very forward policy of the Assam Government in stopping alienation of land marked out as tribal.

Alienation of tribal lands is fairly complete in Central Provinces. Another thing that happened here and in Chittagong and Chotanagpur was that tribal land passed into the absolute ownership of a few individuals, making the tribal democracy into autocracies, and the tribesmen into landless slaves. In Central India one finds the curious phenomenon of land lords of the Gond tribes, but without cultivating Gonds, who retreated into the jungle-lands.

The land-problem with many tribes is acute. Recently the tribes of the Shevroy Hills in S. India rose in armed riot, against exacting landlords. The Savara of the Madras Agency is clamouring for more forest lands, because his way of cultivating is rather wasteful and extensive. The Government is here the self-assumed landlord and wants the tribesmen to learn new trades to supplement his agricultural income, which will be affected as its afforestation policy proceeds. Here is the necessity for a compromise and adjustment and patience with the tribes. The tribesmen in the Travancore jungles are allowed to grow millet on revenue-free land, but here again, they are given no proprietary right. Many tribes have to pay a fee for grazing their cattle in areas marked as Government forests.

Lands Alienation Acts were introduced in most provinces but nowhere in time. Future possibilities of control of exploitation and a reasonable land policy will have to be considered in all the tribal areas.

2. TRIBAL INSTITUTIONS

One subject of which we are almost completely ignorant is tribal law and political administration. The village communities of India that stood solidly against the ravages of time and invasions because of the soundness of their internal organisation went rapidly to ruins during the last 100 years. Provincial governments are making feeble attempts at reviving some new modifications of them under the name of Village Panchayat. A solid village community will remain the heart of India. That is why we find the political

centre of gravity shifting now to the villages. It is therefore not difficult to convince ourselves of the utmost urgency of all efforts being made to conserve existing tribal institutions, legal and political, and making them the foundation of future administration. Alienation of tribal lands leads to the break up of village communities: the land and the village go together.

Hindu laws differ very much from tribal laws and the laws of the depressed classes. Some provincial governments have exempted the tribes from sections of various acts, e.g., the Gonds from the Indian Succession Act. Again in Central India the tribesmen used to be convicted for eloping which is tribal norm for marriage, but not of the Hindu jurists. The Hindu law prohibiting succession of daughters would have similarly caused confusion and impotent anger in hundreds of cases. Our ignorance of tribal law may be hampering these poor fellows in several other ways that we have not taken the trouble to understand.

The bachelors' and maids' halls in Assam, Chotanagpur, Madras Agencies, and Travancore are again very useful institutions that deserve to be conserved.

3. MEANS OF LIVELIHOOD

The larger tribes are taking to agriculture, but as was pointed out above, burning down forests and sowing grains broadcast with no more preparation of the soil than hoeing cannot go on longer.

Cereal food is supplemented by meat obtained by hunting small-game, but the game laws restrict this kind of activity to particular seasons. In thickly populated parts, small-game hunting cannot give the tribesmen any steady source of food supply. One of the deleterious effects of civilisation that is noticeable among some tribes is the growing partiality for rice in the place of the more nutritious yams and roots.

Many hundreds of the tribesmen are employed by the forest department who also represent the government in these areas. The question of wages which they get from contractors of the department has to be gone into. The collection of minor produce including honey and other valuable food is again a Government monopoly farmed out to contractors.

Many of the tribes have to be taught methods of supplementing their income in new ways. For example, the poverty of the Todas

is becoming everyday more squalid; the Co-operative department of the Madras Government induced some Todas, through their co-operative societies, to take to potato cultivation which is already being carried on, on a competitive scale by agricultural communities in the Nilgiris. The Toda is an aristocrat not accustomed to the plough and the soil. So he employed Badagas to do the work and did everything quite uneconomically. The attempt to make a cultivator of the pastoral Toda failed. The one kind of activity for which he has great aptitude, dairy-farming, has not been given a trial on a large scale.

4. ALCOHOLISM

The excise regulations of the provincial governments have hit many tribes hard and tended to make them ruin themselves physically and economically by forcing them to leave off their own rice-brewing (in Assam), or *mohua* brewing (in Madras Agencies) and take to costly and harmful liquors and drugs like opium. The excise revenue that is thus obtained from the tribes cannot be large. The Savaras and Khonds used to drink only when the *mohua* trees were in flower, but this harmless seasonal activity has been replaced by alcoholism. The Superintendent of Census Operations for Madras remarks how the Todas who were teetotallers have now become "initiated into the esoteric delights of alcohol."

In the extreme south, the Kadars were a "dry" people. But the Government of Cochin, otherwise very considerate to the tribe, has allowed a contractor to sell strong distilled liquor to the Kadars. For the sake of a very inconsiderable revenue, the State authorities are not heeding, I am told, to the protests made against the sale of liquor to the tribesmen. How opium reaches these people is another mystery, but opium dozing is a spreading evil, though less fashionable than smoking.

Modification of excise rules relating to drinks in some areas and temperance propaganda in others are alike necessary in the future.

5. DISEASES AND DEPOPULATION

Diseases communicated on the very first contact with civilisation threaten to exterminate the Andamanese. Not only in the case of the tribes of the Andamans, but also of India, medical aid is seldom within the reach of the tribes. Small-pox, for example,

is fatal to many of the tribes; the patient is merely left to his fate, the relatives running away for their lives. Small-pox inoculation has not been given a decent trial in some of the areas I know.

Though the larger tribes are increasing in numbers, the smaller ones, almost without an exception are deteriorating and heading towards extinction. The Andamanese have gone down 63% during the last thirty years. The Onge, a small Andamanese tribe, are also diminishing in numbers, but Dr. Hutton thinks it is possible to revivify them. The Kadars of the Madras Presidency have decreased in numbers by 32% during the last 10 years. The sex ratio among the Todas is 750 females only for 1,000 males. The average number of children in an aboriginal family in Travancore is 1.5 to 2 only. All these figures tell a sad tale.

6. PROSELYTIZATION

Christian missions are working amidst most of the tribes nowadays. But every administrator reports that the tribes are not taking kindly to Christianity. The success of Christianity in the south among the "depressed" classes is accounted for by the oppression by the caste Hindus. The aboriginal has at present no such trouble from which Christianity offers a way of escaping. In Assam the destructive activities of the Baptist Mission among the Nagas have been very severely commented upon by Dr. Hutton and Mr. Mills. Christianity demoralises the Naga, divides the tribe, and destroys tribal solidarity and the joy of communal life substituting for them the bleak protestant God. The Andaman Home policy of winning the savage to loyalty through evangelisation and education was, according to Von Eickstedt, the door of death for the Andamanese. There were certainly other ways of gaining friendship as are now tried with the Onges.

Christianity has made headway wherever the tribes have become more Hinduised. But they are, most of them, border-land Christians, as in the case of the Todas. A Toda Christian is a Pagan except in the immediate presence of the missionaries. If the object of the missionaries is service, they need not insist on the formal but inconvenient changes that should precede this charity. In influential quarters in India it is realised that with regard to the mission work in tribal areas, some kind of control is necessary for the purpose of conserving tribal life.

With regard to Hinduism things are on a different plane. Of course rapid Hinduisation will certainly be destructive; the

tribes however have a natural gravitation towards a vague kind of Hinduism. Hinduisation encourages cleanliness and sober habits, without introducing other clashes, as there is no necessity for formal conversion. Hinduisation is only a sort of promotion.

But the evil of the whole problem of Hinduisation consists in the pigeon-holing of the tribes in one of the "depressed" or lowest groups. Hinduised Gonds, Gandas, Pankas, and Chenchus add to the lowest Hindu ranks. They cannot claim a higher rank. In spite of the opinion held by the Kadars that they are not untouchables, the Government of Cochin have already lumped them into the "depressed" category. Child marriage, prohibition of re-marriage of widows and other evils against which the Higher Hindus are now fighting are blindly copied by the lower classes and with more of contact the tribes also would do that. Hinduised tribes are already inclined to think high of child marriage and practice it. On these points alone I think exclusion of the tribes from the medley of Hindus and control of culture change amidst them would be justifiable.

"The real solution of the problem would appear to be to create self-governing tribal areas with free power of self-determination in regard to surrounding adjacent provincial units."* It is possible for this purpose to remove certain provincial boundaries or district boundaries in order to form larger tribal units where tribes are now divided into separate and differently administrated categories on quite arbitrary and accidental bases.

*Hutton: Census of India, 1931, Vol. I, Part I, p. 507.

THE RELATION OF THE AGE TO THE LENGTH OF A FISH AND THE LENGTH OF ITS OTOLITH

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AN estimation of the age of a fish is a very difficult matter, and so far very little work has been done in India on this problem. Different organs of fish showing the zones of growth are generally used to estimate the age; and of all organs the number of zones or rings on the otoliths are generally considered to supply the most reliable data for determining the age. "The otoliths are the ear ossicles found inside the ear cavity more or less below the cranium." Seen in its natural position the otolith is a small flat disc-like body, and in fresh condition it is translucent. When it is mounted on a slide in glycerine, and examined under the microscope a central nucleus and a number of concentric zones are visible on it. Each otolith contains as many complete zones as there are completed years of the fish and the outermost zone is in various stages of incompleteness depending upon the number of months that elapsed since the last birthday. Hence the age in years of a fish lies between complete and the total number of zones.

From an examination of the several kinds of fish on the Madras coast "*Psettodes erumei*" was found to be suitable as material for work on age determination. The work was carried out by Mr. S. Ranga Rao, M.A., between October 1933 and September 1934, in the University Zoological Research Laboratory, under the direction of Prof. R. Gopala Ayyar, the Director of the Laboratory. On account of the scarcity of the material only 102 specimens could be collected, the greater part of which was collected in August and September, 1934, a period most favourable for the collection of this fish.

The specimens were measured for the length correct to 1 m.m. and the otoliths were measured correct to .5 m.m. Each otolith was mounted on a slide in glycerine as stated above and examined under the microscope and the number of zones (complete and incomplete) were noted. Out of these measurements 3 correlation tables were formed showing the correlations between (1) length

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of the otolith and length of the fish and (2) length of the fish and age of a fish, and (3) length of the otolith and age of fish.

The following tables give the frequency distribution of the different characters of the fish.

I. Frequency Distribution of the length of the fish.

Length in cms.	6.5	8.5	10.5	12.5	14.5	16.5	18.5	20.5
	—	—	—	—	—	—	—	—
	8.5	10.5	12.5	14.5	16.5	18.5	20.5	22.5
Frequency	1	1	1	4	12	17	21	28
Length in cms.	22.5	24.5	26.5	Total.				
	—	—	—					
	24.5	26.5	28.5					
Frequency.	11	2	4	102				

Mean length of the fish	19.578 cms. $\pm$ 0.241
S.D. " "	3.608 cms. $\pm$ 0.170
Coefficient of variation	18.429

II. Frequency Distribution of the length of the Otolith.

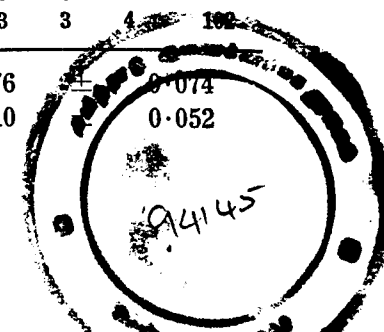
Length in mms.	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
	—	—	—	—	—	—	—	—	—
	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
Frequency.	1	2	1	—	1	3	4	10	17
Length in mms.	7.0	7.5	8.0	8.5	9.0	Total.			
	—	—	—	—	—				
	7.5	8.0	8.5	9.0	9.5				
Frequency.	25	21	8	6	3	102			

Mean length of the otolith	7.098 mms. $\pm$ 0.079
S.D. " "	1.182 mms. $\pm$ 0.056
Coefficient of variation	16.66

III. Frequency Distribution of the age of the fish.

Age in years.	less than 1	1	2	3	4	5	6	Total.
	—	—	—	—	—	—	—	
	—	2	3	4	5	6	7	
Frequency.	—	7	19	36	33	3	4	102

Mean age of fish	3.676 $\pm$ 0.074
S.D. " "	1.110 $\pm$ 0.052
C.V. " "	30.2



The total number of specimens is so small as about a 100, that it serves no useful purpose to fit curves to the above distributions. Hence attention can usefully be turned to correlation between these several characters.

Correlation between length of fish and length of the otolith obtained from the following equation :

In the calculation of the coefficients of correlation Prof. Karl Pearson's method of moments was employed. The coefficient of correlation between the length of the fish and the length of the otolith is found to be 0.886 ± 0.014 . In order to estimate the length of the fish from the length of the otolith the regression line is

$$y - \bar{y} = r \frac{\sigma_y}{\sigma_x} (x - \bar{x}).$$

r coefficient of correlation.

y length of the fish (cms.).

$\bar{y}$ mean length „

σ_y S.D. „ „

x length of the Otolith (mms.).

$\bar{x}$ mean length „

σ_x S.D. „ „

Substituting the respective values, the following equation is obtained :

$$Y = (3.2 X - 2.44) \pm 0.169.$$

Now for each of the 102 samples, the expected length of the fish is calculated from the length of the otolith and a F.D. of these values has been found. The following table gives the F.D. of the expected and observed length of the fish and the goodness of fit of the regression line.

IV. Expected and observed frequencies of the length of the fish.

Length of fish.	Frequency.		$(O - E)^2$
	Expected (E)	Observed (O)	
4.5—6.5	1	—	
6.5—8.5	3	1	
8.5—10.5	1	1	0.8
10.5—12.5	—	1	
12.5—14.5	3	4	0.3
14.5—16.5	14	12	0.3
16.5—18.5	18	17	0.1
18.5—20.5	24	21	0.4
20.5—22.5	21	28	2.3
22.5—24.5	14	11	
24.5—26.5	1	2	0.6
26.5—28.5	2	4	3.0
	102	102	7.8

$$N^1 = 7. \quad \chi^2 = 7.8. \quad P = 0.2546.$$

The fit is tolerably good, and is very bad only about the ends. So this gives a good fit for the middle value of the variable wherein we have got the largest frequency.

Age of the Fish and the length of the Fish.

Coefficient of correlation between the age of fish and the length of the fish is 0.783 ± 0.0025 .

Regression equation connecting age of fish and length of fish is $Y = (0.244 X - 1.22) \pm 0.275$ where Y is the age of the fish and X the length of fish.

As shown above a frequency distribution of the expected age of the fish is found and the following table gives the goodness of fit of the above equation.

V. Expected and observed frequencies of the age of fish.

Age.	Frequency.		(O - E) ² E
	Expected. (E)	Observed. (O)	
less than 1	1 } 3	- } 7	5.3
1 — 2	2 } 3	7 } 7	
2 — 3	20	19	0.1
3 — 4	38	36	0.1
4 — 5	35	33	0.4
5 — 6	6 } 6	3 } 7	0.2
6 — 7	- } 6	4 } 7	
	102	102	6.1

$$N^1 = 4. \quad \chi^2 = 6.1. \quad P = 0.1076.$$

The fit is very good except at the tails.

Age of fish and length of otolith.

Coefficient of correlation between age of fish and length of otolith is 0.725 ± 0.003 .

The regression equation connecting these 2 factors is

$$Y = (0.68 X - 1.1) \pm 0.351$$

where Y is the age of fish and X length of otolith.

VI. Expected and observed frequencies of the age of fish.

Age.	Frequency.	
	Observed. (O)	Expected. (E)
less than 1	3 } 5	- } 7
1 — 2	2 } 5	7 } 7
2 — 3	7	19
3 — 4	54	36
4 — 5	35	33
5 — 6	1 } 1	3 } 7
6 — 7	- } 1	4 } 7
	102	102

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The fit is very bad. It is due to the fact that the length of the otolith is measured correct to 0.5 m.m. only, and hence a slight difference in the length made the frequencies fall in the neighbouring classes. Hence to fit a regression equation between these 2 characters, the length of the otolith should be measured to the nearest .1 of m.m.

Though a fairly good estimate of the age of fish can be made from the length of fish, naturally a better and more accurate estimate can be made by a combination of the two factors, length of fish and length of otolith. Theory of multiple correlation enables one to find this regression equation.

If X_0 stands for the age of fish, X_1 for the length of fish and X_2 for the length of otolith, the required regression equation is given by

$$\frac{X_0 - \bar{X}_0}{\sigma_0} = -\frac{R_{01}}{R_{00}} \frac{X_1 - \bar{X}_1}{\sigma_1} - \frac{R_{02}}{R_{00}} \frac{X_2 - \bar{X}_2}{\sigma_2}$$

where $\bar{X}_0$ = mean age ; σ_0 S.D. of age

$\bar{X}_1$ = mean length of fish ; σ_1 S.D. of length

$\bar{X}_2$ = mean length of otolith ; σ_2 S.D. of length of otolith and R_{00} , R_{01} , R_{02} are the minors of the symmetrical determinant.

$$R = \begin{vmatrix} 1 & r_{01} & r_{02} \\ r_{10} & 1 & r_{12} \\ r_{20} & r_{21} & 1 \end{vmatrix}$$

where r_{01} is the coefficient of correlation between age and length of fish,

r_{02} coefficient of correlation between age and length of otolith,

r_{12} coefficient of correlation between length of fish and length of otolith.

Substituting the required values the regression equation is

$$X_0 = (0.216 X_1 + 0.096 X_2 - 1.363)$$

or approximately

$$X_0 = (0.22 X_1 + 0.10 X_2 - 1.4).$$

Age.	Frequency.		$(O - E)^2$
	Expected. (E)	Observed. (O)	
less than 1	1 } 3	- } 7	5.3
1 — 2	2 } 3	7 } 7	
2 — 3	20	19	0.1
3 — 4	38	36	0.1
4 — 5	35	33	0.1
5 — 6	6 } 6	3 } 7	0.2
6 — 7	- } 6	4 } 7	
	102	102	5.8

$$N^1 = 4. \quad \chi^2 = 5.8. \quad P = 0.1236.$$

The fit is very good except at the tails. Hence for the ordinary fish which form the largest percentage the above formula gives a very good fit.

Conclusion.

From a sample of 102 fish for each of which the length in cms., the length of the otolith in mms., and the age in years were recorded, three separate distributions of these characters were made and the following results were obtained :

1. Mean length of the fish	..	19.578	cms.
S.D. " "	..	3.608	cms.
2. Mean length of the otolith	..	7.098	mms.
S.D. " "	..	1.182	mms.
3. Mean age of fish	..	3.676	yrs.
S.D. " "	..	1.110	yrs.

Next these characteristics were taken two by two and their correlations calculated.

Coefficient of correlation between length of fish and length of otolith = 0.886.

Coefficient of correlation between length of fish and age of fish = 0.793.

Coefficient of correlation between length of otolith and age of fish = 0.725.

There is a very high positive correlation between the three factors.

A fairly good estimate of the age of the fish can be made from a knowledge of its length if the length is measured correct to the nearest m.m. The regression formula is given by $Y = 0.244X - 1.22$.

The regression equation between the age of fish and length of otolith gave a very bad fit because a higher degree of accuracy in the measurement of the length of otolith is required to obtain good results.

The regression of the age on the length of the fish and the length of the otolith gave the best results as is to be expected. The equation is $X_0 = 0.22 X_1 + 0.10 X_2 - 1.4$.

In conclusion, I have great pleasure in expressing my thanks to Mr. S. Ranga Rao, M.A., and Prof. R. Gopala Ayyar, Director of the Zoology Laboratory, University of Madras, for furnishing me with the data for the present analysis.

	Length of fish in cms.														Total.
	6.5 — 8.5	8.5 — 10.5	10.5 — 12.5	12.5 — 14.5	14.5 — 16.5	16.5 — 18.5	18.5 — 20.5	20.5 — 22.5	22.5 — 24.5	24.5 — 26.5	26.5 — 28.5				Total.
2.5—3.0	1														1
3.0—3.5		1													2
3.5—4.0			1												1
4.0—4.5															
4.5—5.0				1											1
5.0—5.5			3												3
5.5—6.0				3	1										4
6.0—6.5				8		1			1						10
6.5—7.0					13	4									17
7.0—7.5					3	13	9								25
7.5—8.0						3	14	3	1						21
8.0—8.5							5	3							8
8.5—9.0								4			2				6
9.0—9.5									1	2					3
Total.	1	1	1	4	12	17	21	28	11	2	4				102

Length of Otolith in mm.

Correlation between the length and the age of fish.

	Length in cms.														Total.
	6.5 — 8.5	8.5 — 10.5	10.5 — 12.5	12.5 — 14.5	14.5 — 16.5	16.5 — 18.5	18.5 — 20.5	20.5 — 22.5	22.5 — 24.5	24.5 — 26.5	26.5 — 28.5				Total.
1—2	1	1	1	3	1										7
2—3				1	11	7									19
3—4						10	20	4	1	1					36
4—5							1	24	8						33
5—6									2	1					3
6—7											4				4
Total.	1	1	1	4	12	17	21	28	11	2	4				102

Age in years.

Correlation between the length of the Otolith and the age of the fish.

Length of Otolith in mms.															
	$\frac{2.5}{3.0}$	$\frac{3.0}{3.5}$	$\frac{3.5}{4.0}$	$\frac{4.0}{4.5}$	$\frac{4.5}{5.0}$	$\frac{5.0}{5.5}$	$\frac{5.5}{6.0}$	$\frac{6.0}{6.5}$	$\frac{6.5}{7.0}$	$\frac{7.0}{7.5}$	$\frac{7.5}{8.0}$	$\frac{8.0}{8.5}$	$\frac{8.5}{9.0}$	$\frac{9.0}{9.5}$	Total.
1—2	1	2	1	—	—	2	1								7
2—3					1	1	2	8	6	1					19
3—4							1	2	10	17	4	1	1		36
4—5									1	7	15	7	2	1	33
5—6											2	—	1	—	3
6—7													2	2	4
Total.	1	2	1	—	1	3	4	10	17	25	21	8	6	3	102

THE HISTORY OF THE TAMIL-MALAYĀLAM ALVEOLAR PLOSIVE

BY

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THE literary dialect of the Tamil speech and both the literary and the colloquial varieties of Malayālam possess to-day alveolar plosive sounds which regularly correspond in a number of categories to other sounds of several Dravidian languages. The study of these sounds¹ from a comparative standpoint is of the utmost importance in illuminating the morphology and the inter-relationships of certain word-formations and grammatical types occurring in different Dravidian languages.

1. In the transliteration of sounds, I have used the following symbols for certain unique Dravidic values:

t'—breathed alveolar plosive.

d'—voiced alveolar plosive.

r—pre-alveolar (or post-dental) liquid (unrolled).

r'—alveolar liquid (slightly rolled) occurring finally in literary Tamil $\dot{r}$ and $\dot{r}'$ in South Indian evaluation. I have retained the symbol *r'* in transliterating $\dot{r}$ (*t't'r'*) and $\dot{r}'$ (*nd'r'*).

r—post-alveolar or cerebral liquid (rolled in a greater or lesser degree). This is the value given to the sound to-day. There are, however, reasons to think (see *infra*) that what is evaluated now as a cerebral *r* was evolved from an alveolar plosive at least in some instances.

n—alveolar nasal (Tam. $\dot{n}$).

n'—the dental nasal corresponding to the dental plosives *t*, *d*. This dental nasal is important in Malayālam, since all initial *n*-sounds continue in Mal. to have this dental nasal value and further since the Mal. group *n'n'* is a common one derived as it is from three sources: (i) older *n'd* (as in *van'n'*—corresponding to Tam. *van'd*), (ii) older *nd'* (as in *en'n'*—corresponding to Tam. *end'r'*), and (iii) Skt. *n'd* in adaptations (as in *gōvin'n'an* corresponding to Skt. *gōvin'da*).

Mal. cerebral *r*, as pronounced to-day, is perhaps slightly more trilled than Tam. cerebral *r*. Kurukh *r* is now evaluated like the peculiar New Indo-Aryan *r*; but as the *r* in the instances cited by me in this essay is derived from parent Dravidian *r*, I have retained the symbol for the Kurukh sound.

For the sake of convenience, I use in this essay only the symbol *u* for Tamil *m* and Mal. *e*.

TAMIL.						MALAYALAM		
South Indian evaluation of the literary sounds.	South Indian colloquial	Jaffna evaluation of the literary sounds	Jaffna colloquial	Certain "rude" dialects of Tamil	Evaluation of the sounds when old texts are read	Modern literary sounds	Colloquial values	
ṭṭṛṛ'	tt	ṭṭ'	ṭṭ' or tt		ṭṭ'	ṭṭ'	ṭṭ	
ṇḍṛṛ'	{dental] nn or ṇṇ	ṇḍ'	ṇḍ'	ṇḍṛ, ṇḍ [in Korava, Burgandi and Kaikadi]	ṇḍ'	[>n,n']	[>n,n']	
ṭṭ								
ṇṇ								

1. I understand that the traditional evaluation of these groups in Jaffna never permitted the incorporation of *r'* as in South Indian literary Tamil but that of late the South Indian values are being imitated when texts are read. In the Jaffna colloquial *ṭṭ* is brought out either as *t't'* or *tt* while *ṇṇ* is always *nd'*.

2. LSI, IV, p. 321—Korava Tamil *tindru* (having eaten); p. 326—*paṇḍri* (pig), *nindru* (remained); LSI, IV, p. 345—Burgandi (Tamil) *peṇḍring* (swine); LSI, IV, pages 341, 342, *peṇḍri* (pig), *nindisu* (remained).

(1) The literary dialect of Tamil possesses a geminated voiceless alveolar plosive in the group *ṭṭ* which is represented by the juxtaposition of two symbols for what is pronounced to-day as cerebral *ṭ*, and which is evaluated in regional South Indian² pronunciation as *t't'r'* and in Jaffna pronunciation as *t't'*. The voiced variety of the alveolar plosive occurs in literary Tamil in the group *ṇṇ* represented by the juxtaposition of the symbols for alveolar *n* and cerebral *ṇ* and evaluated in South India (when texts are read) as *nd'r'* and in Jaffna as *nd'*.

While the voiceless sound occurs geminated in *t't'r'*, the voiced plosive is short (i.e. ungeminated) in *nd'r'* and preceded by the nasal *n*.

The alveolar plosives are to-day met with in Tamil only in these two consonant groups *ṭṭ* and *ṇṇ*.

(2) The alveolar value of the voiceless plosive *t't'* is not preserved in the South Indian colloquial of Tam.; in the pronunciation of colloquial forms corresponding to literary Tam. *ṭṭ*, the South Indian value is that of a dental plosive group *tt*, without the *r'* sound that crops up in the evaluation of literary *ṭṭ* when texts are read. Early inscriptions occasionally show the colloquial dental-*tt*; and the early (11th or 12th century) commentator of *Viṇacōḷiyam* refers to colloquial instances like *cēttu-nīlam* and *āttu-k-kāl*, in his observations under *sūtra*, 12 of *Kṛiyāpaḍalam*. In Jaffna Tamil, however, the colloquial preserves *t't'* (without any *r'*-sound) or converts it to *tt*.

The alveolar voiced plosive *d'* is also not retained in the South Indian colloquial. In the colloquial pronunciation of words corresponding to the literary words with *nd'r'* *ṇṇ* this group appears as a long (i.e. geminated) alveolar *nn* (without *r'*) or as a cerebral *ṇṇ* in certain contexts and communal (and regional) dialects. In the colloquial of Tanjore and Trichinopoly I have heard

2. An "excrecent" *ṭ* appears in some of the "rude" dialects of Tamil dealt with by the LSI; see the table given above.

In Toda, the Dravidic dialect spoken by the dwindling aborigines of the Nilgiri hills, a plosive which has a purely alveolar value corresponds to the alveolar plosives of Tamil. In the gospel texts, these sounds are transliterated with the symbol for *ṭ*.

Toda *ṭd'* ~ Tamil *end'u* (having said),

" *ṇṭd'* ~ Tamil *nind'u* (having stood),

" *ṭṭd'* ~ Tamil *tind'* (having eaten).

nn being uniformly used in the proximity of front vowels, as in *enn-* (lit. *end'r'-*), *panni* (lit. *pand'r'i*). Occasionally, however, *nn* is also heard when this group is neighboured by back vowels, as in *onnu* (lit. *ond'r'u*), *mānu* (lit. *mānd'r'u*). In the colloquial of certain communities, on the other hand, *nn*³ is uniformly used in the neighbourhood alike of front and back vowels. The variations appear to be communal as well as regional.

(3) The Malayālam sounds corresponding to literary Tamil *t't'r'*, *nd'r* are represented in writing (as in Tamil) by the juxtaposition of two *r*-symbols (for the Mal. group corresponding to Tam. *t't'r*) and of the symbols for *n* and *r* (in the case of the sound-group corresponding to Tamil *nd'r'*). There are, however, very important differences between Tamil and Malayālam in the matter of the evaluation and the history of these sound-groups.

(i) The Mal. sound-group represented in writing with the two *r*-symbols juxtaposed, is always evaluated to-day as a long (or geminated) alveolar plosive *t't'* alike in the literary and the colloquial dialects of Mal. speech. The *r'*-sound appearing in the literary evaluation of Tamil *t't'r'* (as when literary texts are read) is never heard in literary Mal.; on the other hand, the colloquial of Mal. differs from the Tamil colloquial in retaining the pure alveolar value of *t't'*. Thus the Mal. sound represented by two *r*-symbols is always given the alveolar value of *t't'* both when texts are read and when forms containing the sounds are used in conversation.

(ii) The Mal. symbol represented by the juxtaposition of the symbols for alveolar *n* and *r* is found to-day only in two contexts: (a) in old Mal. poetry and old Mal. inscriptions, and (b) in the genitive ending *d'e* of singular nouns (or pronouns) having final "person"-denoting *-n* or the inflexional increment *-in* (as in *rāman-d'e* 'Rama's', *en-d'e* 'my', *mara-tt-in-d'e* 'of the tree', etc.). This Mal. symbol-group is evaluated to-day always as *nd'*, without being followed by the *r'*-sound as in Tamil literary *nd' (r')*.

The singular genitive ending *d'e* of Mal. is a unique development in this west coast speech, with no counterpart (with the alveolar) in Tamil. I have traced the evolution of this genitive ending in Mal. later on in the course of this essay, with the help of the evidence furnished by inscriptions and old texts; here I would

3. cf. the forms *innu* [< literary *end' (r')* 'having said'] and *ninnu*- (< literary *nind' (r')* 'having stood') used in an eighteenth century passage containing colloquial Tamil forms, extracted on p. 171 ff. in Vinson's *Manuel de la langue Tamoule*.

merely observe that this genitive ending of Mal. has been (from at least about the twelfth or the thirteenth century) as much the property of the literary dialect as of the colloquial and that everywhere the sound *d'* in *d'e* (singular genitive ending) is given the value of the voiced alveolar plosive.

Apart from this genitive ending, the symbol-group (formed of the juxtaposition of the symbols for *n* and *r*) is found only in old Mal. texts and inscriptions. Here, the symbol-group corresponds to Tamil *nd' (r')*; and the value in Mal. given to these old sounds (from at least the time of *Līlātilakam*) has been that of *nd'* without being followed by *r'*, when these texts are read. I have pointed out below that in the course of the evolution of the Mal. language, this old *nd'* underwent a change to the dental *ññ* (through a possible intermediate stage *ñd*) and came to be transcribed also with the proper symbols for dental *ññ*.

Both the literary and the colloquial dialects of Mal. preserve the pure value of the voiceless alveolar plosive in the group *t't'*, while the Tamil colloquial⁴ (having converted the literary *t't'* to the dental *tt*) has lost the alveolar sounds. It is true that when Tamil texts are read, *t't'r'* and *nd'r'* are brought out with the pure alveolar values for *t't'* and *d'*; but since the Tamil colloquial has lost these sounds, the alveolar plosives are felt as purely "literary" by the speech-consciousness⁵ of the Tamilian masses, while the Malayāli recognizes the sounds as familiar members of the sound-stock that he employs in every-day use. This familiarity with the alveolar plosive on the part of the Malayāli has enabled the English-educated classes to evaluate⁶ the English alveolar *t* occurring in the

4. In rare cases the alveolar *d'* is heard in colloquial Tamil also, as in *ēnd'ā* (alternating with *ennaḍā* meaning 'what, thou!').

5. It is a standing joke among Malayālis that Tamilian colonists in Malabar attempting to speak Mal. use the dental *tt* for the alveolar *t't'* and the alveolar *n* for the dental initial *n'* of Mal.

6. I give below a few illustrations to show how English *t* is transliterated and pronounced in Malayālam:

Eng. words.	Mal. value.	Tam. value.
Beatty (the name of the famous Admiral)	— <i>biāt't'i</i>	— <i>biātṭi</i>
Committee	— <i>kamit't'i</i>	— <i>kammiṭṭi</i>
State	— <i>st'ēt't'e</i>	— <i>stēṭṭu</i>
Andrews (name)	— <i>ānd'rūs</i>	— <i>āṇḍrūs</i>

but lottery is *lāṭṭari* (or *lōṭṭari*) and Cotton (name) is *kāṭṭan* (or *kōṭṭan*) in

neighbourhood of front vowels (as in English *bit*, *meeting*, *better*, *committee*) with a greater approach to correctness than is usual in other parts of Dravidian India. (In the pronunciation of English words like *butter*, *cut*, *boot*, *col*, where *t* occurs in the neighbourhood of back vowels and possibly has a slightly back value according to English phoneticians themselves, the Malayâlis also cerebralize the *t* to *ṭ*, like the people of other parts of India.) The voiceless alveolar plosive of Mal. (and of literary Tamil) approximates in value to the English alveolar *t*, and English words with this *t* in the proximity of front vowels are pronounced by English-educated Malayâlis with a fairly correct value for alveolar *t*, and transliterated (whenever necessary) with the Mal. symbol group standing for *t't'*. On the other hand, varying degrees of cerebralization occur in the enunciation of English alveolar *t*, among the English-educated people of other parts of Dravidian India. The absence in their respective colloquials of the alveolar plosive accounts for the English alveolar *t* being easily mistaken for the cerebral *ṭ* which perhaps is the nearest equivalent sound in their vernaculars.⁷

Mal., as the sound-group occurs in the neighbourhood of back vowels. (Even in correct evaluation of the English sound *t* neighboured by back vowels, a slightly back value, though never cerebral to the extent to which it is changed in Mal., is given.)

Further, we may note that initial *t* of Eng. words like *ticket*, *tiffin*, even when followed by front vowels is given the value of *ṭ* in Malayâli evaluation in Mal. as *ṭévis* and *ṭepuṭi*.

7. The chief abbreviations of the names of works from which citations (*ṭikket't'e*, *ṭiffin*), and that similarly Eng. *Davies* and *deputy* are pronounced are made in this essay are the following:

Tol., El.	—	Tolkāppiyam, Eḷuttadigāram.
Nann.	—	Nannūl.
Bhb.	—	(Kannaḍa) Bhāṣābhūṣaṇa.
Śmd.	—	(„) Śabdamaṇidarpaṇa.
Śś.	—	(„) Śabdānuśāsana.
Lil.	—	(Mal.) Līlātilakam.
RC.	—	(„) Rāmacaritam.
KR.	—	(„) Kaṇṇaśśa Rāmāyaṇam.
Bhg.	—	(„) Bhagavālgīta-p-pāṭṭu.
KG.	—	(„) Kṛṣṇagātha.
TAS.	—	Travancore Archaeological Series.
US.	—	Uṇṇunilisaṇḍēsam, Pūrvam.
	—	„ Uttaram.
SM.	—	Sivarātri Māhātmyam.
LSI.	—	Linguistic Survey of India.

II

THE PHONETIC VALUES OF THE TAM.—MAL. ALVEOLAR PLOSIVES.

The alveolar plosives in literary Tamil and in Malayâlam are produced by the tip of the tongue striking against the region of the upper gums. These sounds are definitely distinguishable from two other Tam.—Mal. sounds: the inter-dental or post-dental plosive (produced by a portion of the foreblade of the tongue coming in contact with the back region of the upper row of teeth or with the post-dental flesh), and the cerebral plosive also described as retroflex or cacuminal, produced by the tip of the tongue on the dome of the hard palate.

The voiceless alveolar plosive in literary Tam. *t't'* (*r'*) and in Mal. *t't'* is produced when the tip of the tongue strikes the back gums, while the voiced *d'* (in Tam. literary *nd'r*, old Mal. *nd'* of the texts when read, and unique Mal. genitive ending *-d'e*) has a more forward position of articulation is as much as the tongue-tip here comes in contact with the front gums before plosion. If Prof. Jespersen's alphabetic notation is employed for the description of the positions of articulation of these sounds, then the voiceless alveolar plosive would have to be symbolized by βo^f-g and the voiced sound by βo^e-f .

III

THE CATEGORIES INVOLVING THE TAMIL ALVEOLAR PLOSIVE AND ITS COGNATES IN OTHER SPEECHES.

I give below a table of the relevant categories with a few typical illustrations from each dialect. Exhaustive illustrations are given later on in the discussion of each category. I may note straightway that (wherever inter-dialectal correspondences exist) the phonetic equations are, generally speaking, the following:

Lit. Tam. *t't'* = Mal. *t't'* = Kannaḍa *tt* or *t* = Telugu *ṭṭ*, *ṭ* = Tuḷu *tt*, *t*.

Lit. Tam. *nd'* = Mal. dental *n'n'* = Kann. *n'd* = Tel. pre-literary inscriptional *nd'*, literary *ṇḍ* = Tuḷu *ṇj*, *n'd* = Kūi *ṇj*.

I have discussed these equations in detail in connection with each category, and traced the processes of phonetic change (with the help of the evidence furnished by texts, grammars and inscriptions, wherever available) at the end of this essay.

Categories.	Literary Tamil.	Malayālam.	Kannada.	Telugu.
1. Derivative Nouns.	<i>pand'r'i</i> (pig)	<i>pan'n'i</i>	<i>pandi</i>	
	<i>kand'r'u</i> (young one)	<i>kan'n'u</i>	<i>kan'du</i>	
	<i>māt't'r'-am</i> (change, etc.)	<i>māt't'-am</i>	<i>māt-a</i>	<i>māt-a</i>
	<i>tind'r'-i</i> (food) beside <i>tit't'ri</i> (meat)			<i>tiṇḍi</i>
2. "Inflexional" stems of noun-bases [with final -r(u)] of Tam. and Mal. and with final -r, -l of Telugu and Gōṇḍi.	<i>āt't'r'-il</i> (in the river)	<i>āt't'-il</i>		<i>ēti-lō</i> <i>iṇṭi-lō</i> (in the house)
3. <i>Samāsas</i> formed of words where the initial members are "inflected" as in 2 above.	<i>āt't'r'u-vali</i> (river-route)	<i>āt't'u-vali</i>		<i>ēti-kāluva</i>
4. Old compounds formed of the <i>guṇa vacanas</i> <i>kiṛ-</i> , <i>kuṛ-</i> , <i>ciṛ-</i> followed by words with vowels as initials.	<i>kut't'r'-uyir</i> (short life)		<i>kiṭṭ-aḍi</i>	<i>kuṭṭ-usuru</i>
	<i>śit't'r'-aḍi</i> (small feet)			
	<i>śit't'r'-eli</i> (small rat)			<i>ciṭṭ-eluka.</i>
	<i>śit't'r'-āḍai</i> (small garment)	<i>cit't'-āḍa</i>		
5. Word- <i>samāsas</i> in Tam. and in old Mal. with the first constituents having final -l, -n and the second constituents having initial t-.	<i>kat't'r'alām</i>	Old Mal. <i>kat't'alām</i>		
	<i>pot't'rāmarai</i> <i>pond'riḍu</i>	<i>pot't'āmara</i>		

Tuḷu.	Kūi	Gōṇḍi.	Kurukh.	Malto.	Brāhūi.
<i>pañji</i>	<i>paji</i>	<i>paddi</i>			
<i>kañji</i>			<i>xadd</i>	<i>xed</i>	
<i>māt-a</i>		<i>mānda-</i>			
		<i>paṛod-</i>			

Categories.	Literary Tamil	Malayālam.	Kannāḍa.	Telugu.
6. <i>Samāsas</i> in which final -l, -n meet initial c-, p-, k-.	<i>nāt'padu</i> [nārpadu] (forty)	Old. Mal. <i>nāt'padu</i> [nārpadu]		
	<i>mēt'ku</i> (west) [mērku]	Old. Mal. <i>mēt'ku</i> [mērku]		
			cf. <i>ērpāḍu</i> (arrangement)	<i>ērpāḍ-</i> (to become possible)
7. Ending of the Third Person Sing. Masculine pronoun in Tel., Kūi and Madras Gōṇḍi (Koi).				Inscriptional <i>vānd'u</i> [vānru], Literary <i>vāṇḍu</i> , <i>vāḍu</i>
8. "Oblique" base of the Third Person Neuter plurals.	<i>avat't'r'-</i> (obl. base of <i>avai</i>) <i>padit't'r'-</i> (of <i>pattu</i> 'ten')	<i>avat't'-</i> <i>irupadit't'-</i>		<i>vāṭi</i>
9. The Sing. Genitive ending of Mal. nouns or pronouns with final -n or with the increment -in-.		<i>rāman-d'e</i> (Rama's) <i>end'e</i> (my) <i>maratt-in-d'e</i> (of the tree)		
10. The numeral 'one' and 'three.'	<i>ond'r'u</i> (one) <i>mūnd'r'u</i>	<i>on'n'u</i> <i>mūn'u</i>	<i>on'du</i> <i>mūr</i>	<i>onṭ-, onḍ-</i> Inscriptional <i>mūnru</i> , Literary <i>mūṇḍu</i> , <i>mūḍu</i>
11. Verb-bases	<i>tōnd'r'-</i> (to appear) <i>vat't'r'-</i> (to be dry)	<i>tōn'n'-</i> <i>vat't'-</i>	<i>tōr-</i> <i>batt-</i>	<i>tōñc-</i> <i>vatt-</i>

Tuḷu.	Kūi.	Gōṇḍi.	Kurukh.	Malto.	Brāhūi.
	<i>a-v-añju</i>	Koi <i>vōṇḍu</i>			
<i>oñji</i>		<i>uṇḍi</i> ,	<i>onṭ-</i>	<i>onḍ-</i>	<i>asi</i>
<i>mūji</i>		<i>mūṇḍ</i>			<i>mūsi</i>
<i>tōñj-</i>	<i>tōñj-</i>				
<i>batt-</i>		<i>vatt-</i>	<i>batt-</i>	<i>batt-</i>	

Categories.	Literary Tamil	Malayālam.	Kannaḍa.	Telugu.
12. Causative bases from verbs with final -r, -l, -n.	<i>ētt'r'-</i> (to raise) <i>tītt'r'-</i> (to feed)	<i>ētt'-</i> <i>tītt'-</i>		
13. Present Tense affix-gind'r-	<i>ṣeygind'r'ān</i> (he does)	old <i>ceyind'ān</i> later <i>ceyin'n'ān</i> new <i>ceyyun'n'u</i>		
14. (a) Past stems of verbs with final -r.	<i>pet't'r'-</i> (having been born)	<i>pet't'-</i>		
(b) Past stems of verbs with final -l, -n.	<i>tind'r'-</i> [from <i>tin-</i> 'to eat'] <i>end'r'-</i> [from <i>en-</i> 'to say'] <i>vit't'r'-</i> [from <i>vil-</i> 'to sell'] <i>ṣend'r'-</i> [from <i>ṣel-</i> 'to enter']	<i>tin'n'-</i> <i>en'n'-</i> <i>vit't'-</i> <i>cen'n'-</i>	<i>tin'd</i> <i>end-, and-</i> <i>sand-</i>	<i>tint-</i> <i>ant-</i>
15. Past tense ending of Third Person "neuter" sing. of certain Tam. verbs.	<i>pōyit't'r'u</i> (it went) <i>naḍandand'r'u</i> (it walked)			
16. Indeclinables	<i>at't'r'u</i> (of that kind) <i>and'r'u</i> (that day) <i>and'r'u</i> (not-that) <i>pōnd'r'u</i>	 <i>an'n'u</i> <i>an'n'-</i>	<i>aṭu, aṭṭu</i> <i>an'du</i>	<i>atu, aṭṭu</i> <i>pōṇḍi</i>

Tuḷu.	Kūi.	Gōṇḍi.	Kurukh.	Malto.	Brāhūi.
	<i>tis-p-</i> (to feed)				
<i>tind-</i>	<i>tiñj-</i>	<i>tiñj-</i>			
<i>ind-, and-</i>	<i>iñj-</i>	<i>iñj-</i>			
<i>āṭi</i>					
<i>-and-, attu</i>					

CATEGORY 1.

I give below a table of derivative nouns, in which the Tamil instances (literary) show *t't'(r')* and *nd'(r')* containing the alveolar plosives.

Among these, Group (a) shows the following sound-correspondence : literary Tam. *t't'(r')* ~ Mal. *t't'* ~ Kann. *tt* ~ Tel. *nd(ṇṭ)* ; shows : *nd'(r')* ~ Mal. *n'n'* ~ Kann. *nd* (or *ṇ*) ~ Tel. *ṭ* ; Gr. (b) while Gr. (c) is constituted of Tam. derivatives with *-t't'(r')* and *nd'(r')*, which lack cognates in dialects other than Malayâlam.

GROUP (a)

Literary Tamil	Malayâlam	Kannada	Telugu.	Tulu.	Other Dialects.	Cognate Bases.
<i>êtt't'r'-am</i> (ascent)	<i>êtt't'-am</i>	<i>êtt-a</i>				south Dr. <i>êr-</i> (to rise)
<i>nâtt't'r'-am</i> (smell)	<i>nâtt't'-am</i>	<i>nâtt-a</i>		<i>nâtt-a</i>		south Dr. <i>nâṭr-</i> (to smell)
<i>mât't'r'-am</i> (change, exchange of things, of words, etc.)	<i>mât't'-am</i>	<i>mât-a</i>	<i>mât-a</i>			south Dr. <i>mâṭr-</i> (to change)
<i>têtt't'r'-am</i> (clearness)	<i>têtt't'-</i>	<i>têtt-e</i> [in Mysore proverbs]	<i>têtt-a</i>		cf. Kûi tiri (clear, shining)	south Dr. <i>têṭr-</i> (to become clear)
<i>ûtt't'r'-u</i> (fountain, spring)	<i>ûtt't'-u</i>	<i>ûtt-e</i> [Mys.] beside <i>orâte</i> [old]	<i>ûtt-a</i>	<i>ûju</i> , beside the loan <i>ûte</i>		south Dr. <i>ûṭr-</i> (to percolate)
<i>kât't'r'-u</i> (slice, bit)	<i>kât't'-u</i>	<i>kâtuv</i> , beside Tel. loan, <i>kâttu</i>	<i>gîttu</i> , <i>kâttu</i>	<i>kîttu</i>		south Dr. <i>kîṭr-</i> (to tear)

GROUP (b)

Literary Tamil.	Malayālam.	Kannāḍa.	Telugu.	Tulu.	Other Dialects	Cognate Bases.
<i>kund'r'u</i> (hill)	<i>kun'n'u</i>	rare <i>koṇḍa</i> beside more popular <i>beṭṭa</i>	<i>koṇḍa</i> , <i>guṭṭa</i>	<i>guḍḍæ</i>		south Dr. <i>kur-</i> (to be shortened)
<i>kand'r'u</i> (calf)	<i>kan'n'u</i>	<i>kan'du</i>	[<i>kandu</i>]	<i>kañji</i>	Kuṛ-Malto <i>radd</i>	Kann. <i>kaṇu</i> (calf)
<i>end'r'u</i> (the sun, sunshine)			<i>enḍ-</i> (to dry up), <i>eṇḍa</i> (sunshine)			Kann. Tam. <i>eḷ</i> (lustre, sunshine)
[cf. <i>eḷ</i>]		[cf. Kann. <i>eḷ</i> 'lustre' sun-shine']				
<i>nand'r'i</i> (good, benefit)	old <i>n'an'n'i</i> (good, benefit), new <i>n'an'n'i</i> (gratitude)	<i>nanni</i> (truth, affection)	<i>nanṭe</i> , <i>nanti</i> (affection)			south Dr. <i>nal-</i> (good).
<i>pand'r'i</i> (pig)	<i>pan'n'i</i>	<i>pan'di</i>		<i>pañji</i>	Kūi <i>pañji</i> , Gō. <i>paddi</i>	Dr. <i>pal</i> (tooth)??
<i>tind'r'i</i> (fat), <i>tiṭ'r'i</i> (meat)		Late Tel. loan <i>tiṇḍi</i> , beside popular <i>onasu</i> , etc.	<i>tiṇḍi</i>		Gōṇḍi <i>tiṇḍ-</i> , Kūi <i>tiṇ-b-</i> (to eat)	south Dr. <i>tin-</i> (to eat)
<i>piṇd'r'u</i> , <i>piṭ't'r'-ai</i> (afterwards)	<i>pit'te</i>	<i>piṇ'du</i> , <i>piṇ'tu</i>			Gō. <i>piñja</i> (behind) Br. <i>pada</i> (behind)	south Dr. <i>pin</i> (back, behind)

GROUP (c)

Literary Tamil.	Malayālam.	Kannāḍa.	Telugu.	Tulu.	Other Dialects.	Cognate Bases.
<i>aṭ't'r'-am</i> (ruin)	<i>aṭ't'-am</i>				Gō. <i>ark-</i> (to cut)	south Dr. <i>aṭ-</i> (to be severed)
<i>kuṭ't'r'-am</i> (deficiency)	<i>kuṭ't'-am</i>					south Dr. <i>kur-</i> (to be short, deficient)
<i>kūt't'r'u</i> (noise)	old <i>kūt't'u</i>					Tam., Mal. <i>kūr-</i> (to call)
<i>koṭ't'r'-am</i> (success)						Tam. Mal., Kann. <i>kol-</i> (to kill), Tulu <i>ker-</i>
<i>vend'r'i</i> , <i>vet't'r'i</i> (success)	old <i>vet't'i</i> ,					Tam., Mal., Kann. <i>vel-</i> (to gain a victory)
<i>śānd'r'u</i> (witness)	<i>ven'n'i</i>					Tam. <i>sāl-</i> (to lean towards)

GROUP (d)

Literary Tamil.	Malayalam.	Kannada.	Telugu.	Tulu.	Other Dialects.	Cognate Bases.
[cf. <i>uri</i>]			<i>uṭṭi</i> (swing-pot)		Kur. <i>ur-</i> (to grow thick, firm).	south Dr. <i>ur-</i> (to be steadfast).
[cf. <i>éru</i>]	[cf. <i>éru</i>]	North Kann. <i>étu</i> (prob. a Tel. loan) <i>tuttu</i> (mouthful)	<i>étu</i> (throw) <i>tuttu</i> , <i>tutte</i> (crowd)			south Dr. <i>eri-</i> (to throw). south Dr. <i>tur-</i> (to be cramped); Kui <i>trū-p-</i> (to cram in).

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(1) The Kannaḍa instances with *-t-* (North Mysore *ūte*, *kītu*, etc.) are Telugu-borrowed, the more popular and universal forms being *orate*, *kītu*, etc., with the dental *-t-*. The sound-correspondences, therefore, are (i) Tam. *t't'(r')* ~ Mal. *t't'* ~ Tel. *t* ~ Kann. *t*; and (ii) Tam. *nd'(r')* ~ Mal. *n'n'* ~ Tel. *ṇḍ*, *ṇṭ* ~ Kann. *n'd* ~ Tulu *ṇj*.

These equations will, generally speaking, emerge from the other categories also.

The cognates from central Indian and northern Dravidian speeches are few; they are discussed separately at the end of this essay.

(2) The bases with which these derivative nouns are connected have *-r*, *-l* and *-n* (see table above).

Derivative nouns are formed in the south Dravidian speeches with the help of a particle *-t-*:

Tam. *Koy-tt (u)* (reaping),
naḍa-tt-am (gait, walking),
keḍu-d-i (loss), *uṇu-d-i* (strength), *śey-d-i* (incident).

Kann. *aṛi-t-a* (knowing),
pogaḷ-t-e (praise),

Tel. *cēta* (action),
naḍi-t-i (conduct).

Tam. *-t't'(r')* of this category is due to the *sandhi* combination of final *-r*, *-l*, *-n* of the primary bases with a noun-forming particle *-t-*; cf., for the phonetic change, category 14 (amongst others).

nd'(r') of those derivatives of this category which are related to primary bases with final *-l* and *-n* is also the result of a *sandhi* change of *l*, *n* + *d(t)*; cf. category 14b for the phonetic change.

As for the *nd'(r')* of forms connected with primary bases having final *-r*, the origin of *nd'r'* need not necessarily have been due to the *sandhi* action of a noun-forming particle on this *r*, if this *r* itself was the development of an older alveolar **d'*. I have later on in the course of this essay discussed the possibility of at least some cases of *r* being traceable to the alveolar plosive **d'*. If this was so here, then *nd'* may have been simply a variant of original *d'* with the so-called "checking" nasal characteristically appearing

before *d'* as in Tam. *aḍ-* and *aṇḍ* (to approach). A full discussion of this problem appears later on in the course of my essay.

CATEGORY 2.

The speeches concerned here are Tamil, Malayâlam, Telugu and Gôṇḍi. The correspondence of sounds is represented by the equation: Literary Tamil *t't'(r')* = Mal. *t't'* = Tel. *t, ṭṭ* = Gôṇḍi *t, ḍ*. The parallelism between Tamil and Malayâlam on the one side and Telugu (and Gôṇḍi) on the other is not capable of being detected at a glance, as the grammatical rules embodying the circumstances of the occurrence of the forms are generally classified differently in these speeches. We shall see below that Telugu and Gôṇḍi reveal certain variations also; but the fundamental principle involved in all these speeches can be shown to be the same.

Tamil.

The consonant group *t't'(r')* is "substituted" for *-r-* in the "oblique" bases of the singular inflexion of Tamil neuter nouns with final *-r(u)*. These nouns are either trisyllabic, or dissyllabic with long vowels preceding *-r(u)*.

Sūtra 197⁸ of Tolkāppiyam, Eḷuttadigāram, treats about this phenomenon in "inflexional" positions, describing it as "gemination." An exactly similar change (in which the same principle is involved), affecting word-groups (*pada-p-puṇarcci*) is dealt with in Tol. Eḷ., 412 and in Nan., 183; this will be discussed by me later on.

The so-called "substitution of *t't'(r')* for *r* in inflexional positions of Tamil "neuter" words occurs only in connection with *-r(u)* and *-ḍ(u)*:

<i>ât't'r'-</i> , the oblique base of <i>âru</i> (river),	
<i>kalit't'r'-</i> , " " <i>kaḷiru</i> (young male elephant),	
<i>vayit't'r'-</i> , " " <i>vayiru</i> (belly),	
<i>[âtṭ-]</i> , " " <i>âḍu</i> (goat, sheep),	
<i>kâṭṭ-</i> , " " <i>kâḍu</i> (jungle)].	

I am of the view that the primary impulse for the production of *t't'(r')* was the *sandhi* action of a particle *-t-*. This view is borne

8. *neṭṭeḷuttimbar ot't'r'u miga-t-tōnd'r'um appān moḷigal alvaḷiyāna.*

in on me by the two facts: (i) a particle *-t(-d-)* appears as an inflexional augment independently in the following:

Tam. *mara-tt-*, the oblique base of "neuter" nouns like *maram* (tree),

Kann. *mara-d-*, the oblique base [except in Acc.] of *mara* (tree),

Gôṇḍi *pulli-t-*, the oblique base of neuter nouns like *pulli* (tiger).

(ii) the existence in Telugu of an unmodified dental *-t-* as an inflexional augment after *-y* in words like *cēy(i)* 'hand', beside *t* (corresponding to Tam. *t't'r'* of this category) after *-r*, both *t* and *ṭ* being classified in Telugu as *aupavibhakti* endings (see below).

For the production of Tam. *t't'* from *r + t*, compare categories 12 and 14 (a).

Malayâlam

A rule similar to that of Tamil exists in Malayâlam also. The "oblique" bases of "neuter" nouns with final *-ru* and *ḍu* show *-t't'* and *-ṭṭ-* respectively. The earliest grammar of Malayâlam written in the form of sūtras with vyākhyas (14th century) describes the change in III, 6: *ru-ṭwōr dwitwam ca.*

It may be noted that while in literary Tamil the change of *-r-* to *-t't'-* (and of *-ḍ-* to *-ṭṭ-*) in the circumstances detailed above, is obligatory, modern Mal. usage permits "ungeminated" oblique bases⁹ in forms like *cōr-il* (in cooked rice) beside *cōt't'-il*. Further, in modern Mal. we also have instances like *nīt't'-il* (in water) [as in Pancatantram] beside *nîr-il*, and *mōt't'-il* beside *môr-il*, where (since the nominal base has the post-dental *r* as the final) the rule never could operate according to traditional grammatical rules.

Telugu.

In a number of "neuter" nouns of Telugu (described in English grammars of Telugu as "irregular" nouns and by Telugu

9. *Kāḍ-il* (in the forest), *ār-in-d'e* (of the river) and similar bases where the so-called "gemination" is absent, are common in colloquial Mal. of the present day.

grammarians as *aupavibhaktikāntamulu*, the "oblique" bases show *-t-i-* in connection with the nominal endings *-r(u)* and *-ḍ(u)*, *-ṇi-* in connection with final *-l(u)* and *-n(u)*, *-t-i* in connection with final *-y(i)*, and mere *-i-* in the case of a few other "neuter" nouns. All these cases have been recognized as forming part of a connected group, and classified as such by the earliest Telugu grammar, *Āndhraśabdacintāmaṇi* (11th century) in the following sūtras :

aupavibhaktika samjñā varnāṣṭiṇṭyādayō bhavantiha |
ruvādērnāmnam syustēhi vibhaktau samāse ca ||

"*ṭi*, *ṇi* and other sounds are *aupavibhaktika* particles appearing in inflexions and samāsas in connection with certain nouns with *-r*, *-l* and other sounds."

aupavibhaktikanāmnam atwam syāt saptami tṛtīyārthē

"In the third (i.e., instrumental) and the seventh (i.e., locative) cases of *aupavibhaktika* nouns, *a* appears (instead of *-i-* after *-ṭ-*, *-ṇ-*, etc.)"

Early commentaries on the *Śabdacintāmaṇi*, like the *Bāla-saraswatīyam* and *Ahōbalapaṇḍitīyam*, have explained the implications of these sūtras ; a very clear and comprehensive exposition of rules and variations in the light of the literary usage of different periods is given by Pandit Mallādi Sūryanārāyaṇa Śāstri in his excellent grammar, *Āndhra Śabdānuśāsanam*.

These particles appear as *ādēśas* (and sometimes as *āgamas* as in *pagaliṇṭi*, *tollinṭi*, etc.). In some nouns they are optional, while in others they are constant. Certain nouns which used to embody these particles in the past have in later stages been inflected without them, and on the other hand a few which originally failed to have these particles, have later on come to incorporate them. Again, it is not all neuter nouns with *-r*, *-l*, *-n*, *-y*, etc., that embody these particles in the "oblique" cases ; there are several nouns of this kind which have failed to embody them at any period.

I give below the main¹⁰ types which are relevant for the present discussion :

10. The following are other important types in Telugu :

l < older *ḷ*—*mullu* (thorn)—cf. Tam. *mul(ḷu)*—Tel. inflexional *munṭi*, locative and instrumental *munṭ-an*.

n < older *ṇ*—*kannu* (eye). cf. Tam. *kaṇ(nu)*—Tel. gen. *kaṇṭi*-, loc-

<i>r</i> — <i>ēru</i> (river) cf. Tam.— Mal. <i>āru</i>	—"oblique" base <i>ēṭi</i> -, Instru- mental and Locative <i>ēṭ-an</i> .
<i>l</i> — <i>villu</i> (bow)—cf. Tam. <i>vil</i> , <i>villu</i> , Kann. <i>biḷ</i> , <i>billu</i> , Kūi <i>vilu</i> , <i>viḍu</i> .	—"obl." base <i>viṇṭi</i> , Instr. and Loc. <i>viṇṭ-an</i> .
<i>n</i> — <i>vennu</i> (back)—cf. Kann. <i>ben</i> .	—Old. Loc. <i>veṇṭ-an</i> .

The resemblances between Tam. and Mal. on the one hand, and Telugu on the other in respect of forms of this category are :
(i) neuter nouns with *-r(u)* [and with *-ḍ(u)*] are affected ; and
(ii) *ādēśa* sounds appear in "inflexional" positions as inflexional augments to which post-positions are attached.

The differences are the following : (i) while neuter nouns with *-r(u)* (and *-ḍu*) alone are affected in Tam. and Mal., in Telugu the *ādēśa* sounds appear in connection with certain nouns having *-l* and *-n* also ; and (ii) while *-t't'(r')* is the *ādēśa* in connection with *-r* in Tam., *-t-i-* occurs in Telugu in connection with *r* (and with *-ḍ*), and *ṇt-i-* in connection with *-l* and *-n*, the sound *-i-* involved in the *ādēśas* being peculiar to Telugu.

It can be shown that fundamentally in Tam.-Mal. on the one side and Telugu on the other, the *ādēśa* sounds are the outcome of an ancient *sandhi* combination of the final¹¹ consonants of the neuter nouns under reference and an inflexional increment *-t-* which appears as such in many Dravidian dialects.

instr. *kaṇṭ-an*.

ḍ—*kāḍu* (jungle)—cf. Tam. *kāḍu*—Tel. gen. *kāṭi*, loc.-instr. *kāṭ-an*.

[cf. with this Tel. inflexional base the corresponding Tam. inflexional base *kāṭṭ-* according to the general rule of Tol., El.]

y—*cēyi* (hand)—Tel. gen. *cēti*, loc.-instr. *cēṭ-an*.

[Final *-i* in words like *cēyi* (cf. Tam. *kai*, Kann. *kai*, *gey*) and *vāyi* 'mouth' (cf. pan-Dravidian *vāy*, *bāy*) appears to be an enunciative (cf. Mal. *vāya* 'mouth', *nāya* 'dog', *pāya* 'mat' with Tam. *vāy*, *nāy* and *pāy*).]

r—*ūru* (country)—gen. *ūr-i*, loc.-instr. *ūr-an*. *nōru* (mouth)—gen. *nōṭ-i* or *nōr-i*, loc.-instr. *nōṭ-an*, *nōr-an*.

l (preceded by long vowels)—*kālu* (leg)—gen. *kāl-i*, loc.-instr. *kāl-an*.

n (preceded by long vowels or when occurring as the final of dissyllabic words)—*cēnu* (field)—gen. *cēn-i* ; *kolanu* (tank)—gen. *kolan-i*.

ṛṛ (a unique group in Tel.)—*aṛṛu* (neck)—gen. *aṛiṭ-i*, loc.-instr. *aṛuṭ-an*.

11. Though in modern Telugu every final consonant (except *-m* in the colloquial) is followed by an enunciative *-u*, we know that in the earliest

The unique *-i-* appearing in the Telugu *aupavibhakti* particles *-t-i-*, *-ṇṭ i*, *-t-i* and independently (as *-i-*) in certain oblique cases of words like *kâl(u)*, *mrân(u)*, is a special development in Telugu with a "genitive" meaning. What remains, therefore, in the *aupavibhakti* endings is the sound *-t-* [cerebral], or *-ṇṭ-* or [dental] *-t-*.

(a) The "oblique" bases of words like Tel. *cêy(i)* (hand), *vây(-i)* (mouth,) which are classified by Telugu grammarians as *aupavibhaktikāntamulu*, show only the dental *-t-* as the *aupavibhakti* ending. This dental *-t-* occurs only in connection with nouns having *-y-*. According to the laws of Telugu (and south Dravidian)¹² *sandhi*, the dental *t* is not ordinarily affected in quality when preceded (in internal *sandhi*) by *y*. The occurrence of this dental *t* in connection with neuter nouns having *-y* would point to the fact that here we have the primary *aupavibhakti* particle unmodified in quality by any *sandhi* change.

(b) In Telugu internal *sandhi* we find instances where *n* meeting dental *t* results in the production of the cerebral group *-ṇṭ-*: the past stems of the verbs *an-* (to say) and *tin-* (to eat) are *aṇṭ-* and *tiṇṭ-*, while the dental *-t-* (unmodified in quality) appears as the Past tense particle normally in instances like *cēstini*, etc.

This would tend to show that *-ṇṭ-* may be the Telugu representative of an original consonant group which is the outcome of a *sandhi* combination of *n* and dental *t*.

In my discussion of the phonetic aspects of the correspondence of Tam. *nd'* (*r'*) = Tel. *ṇḍ*, *ṇṭ* (a correspondence which, I may state here, is attested by several categories discussed by me in the course of this paper), I have pointed out that a *sandhi* combination of the

stages of Telugu the sounds *-l*, *-n* and *-r* could be *halanta* (as in Tamil, Kann. and Mal.) in certain instances and contexts:

- (i) The druta *n* is essentially a consonantal *n*.
- (ii) *l* or *ḷ* is used as a final, without being followed by an enunciative in old inscriptions: *ūri swāmul*, *kond'ugal*, etc.
- (iii) Collocations like *vil-naraki*, *kal-drāvi*, *ēr-dāṭi* are permitted by S. 60 of the Halanta section of *Śabdacintāmaṇi*.

In Tamil and Mal., *l*, *n*, *r* among other sounds may occur as absolute finals (cf. Tol., El., 78); in old Kannaḍa also a similar rule prevailed (Śmd., 48).

12. Cf. Tel. *cēst-*, the past stem of *cēy-* (to do), Tel. *cēta* (doing) Tam. *śey-d*, the past stem of *śey-* (to do), *koy-d-* of *koy* (to reap), Kann. *geyta* (doing), etc.

nasal *n* and the dental plosive *t* or *d* would ultimately account for the Tel. developments *ṇṭ* or *ṇḍ*.

(c) As for *-t-* in connection with Tel. neuter nouns with *-ṛ(u)*, I may state here that the evidence of other categories showing the correspondence of Tamil *t't'(r')* = Tel. *-t-*, *-ṭṭ-*, in which a *sandhi* combination of *ṛ* and the dental *t* could be demonstrated, would point to the existence of a similar *sandhi* change being at the back of Tel. *-t-* (corresponding to Tamil *-t't'r'*) of this category also.

(d) The appropriateness of the *original* use of dental inflexional increment in connection with the neuter nouns of this category becomes all the clearer when we remember that a dental plosive occurs as such with the function of an increment in the "oblique" cases of many neuter nouns of Tamil, Mal., Kannaḍa and Gôṇḍi.

The fundamental affinity of the origin of Tam. *t't'(r')* and Tel. *t* of this category is thus clear. Telugu, however, seems to have extended the practice of associating the inflexional increment, to nouns with *-l*, *-n* also, besides those with *-ṛ* and *-ḍ* (as in Tamil and in Malayâlam). This extended use had become popular and fixed in Telugu even at the time of the earliest extant texts. A considerable number of words was thus involved, and all these were therefore grouped together as the *aupavibhaktikāntamulu* by the early grammarians.

Gôṇḍi

In this Central Indian Dravidian speech we note a cerebral plosive *-ḍ-* occurring as the inflexional increment in connection with neuter nouns having final *-ṛ-*, *-l*, *-ḍ*. Decerebralization of this *-ḍ-* appears to have occurred in some cases.

Sir Richard Trench (*Gôṇḍi Gr.*, p. 40) points-out that (i) "most of the numerous nouns ending in *l* or *r* have the key-letter (i.e. in the stem) *ḍ*", but there are also exceptions where dental *d* occurs instead of *ḍ*; (ii) nouns ending in a vowel have the "key-letter *-t-* or *-d-* as in *nai-d-*" ["oblique" base of *nai* (dog), *kai-d-* the "oblique" base of *kai* (hand)], *pulli-t-* [the "oblique" base of *pulli* (tiger)];

(iii) nouns ending in *-ṇḍ* have the key-letter *t*, as in *yēṭ-* from *yēṇḍ* 'this year'.

The cerebral *-ḍ-* in connection with the "oblique" cases of Gôṇḍi "non-rational" nouns with final *-ṛ*, *-l*, *ḍ* may be compared to

the Telugu *aupavibhakti* particle -*t*-; the appearance of the dental -*d*- in connection with Gôṇḍi nouns with final vowels (e.g., *nai-d*- of *nai* 'dog') may be compared to the dental -*t*- found as the *aupavibhakti* particle of the "inflexions" of Telugu "neuter" nouns with -*y*-.

CATEGORY 3.

This is directly associated with category 2 discussed above. While 2 refers to inflexional augments, the present category contemplates cases of word-combinations or *pada-samâsas* in which the first members [with final -*r*(*u*) and -*ḍ*(*u*) in Tamil and with final -*r*(*u*), -*l*(*u*), -*n*(*u*), etc. in Telugu] incorporate *âdēsa* sounds exactly as in the category 2 which has been discussed above:

Tamil: *ât't'r'û-nîr* (water of the river) [*ârû* 'river'],
vayit't'r'u-vali (stomach-ache) [*vayirû* 'stomach'].

Telugu: *êṭi-nîru* (water of river) [*êru* 'river'], *iṇṭi-kappu* (roof of the house) [*illu* 'house'].

The fundamental principle accounting for the *âdēsa* sounds of this category is the same as that operating in the instances belonging to category 2, since the relationship of the constituents of the *padasamâsas* of this category is in most instances of an "inflexional" kind.

Tamil

îreluttu-molियum uyirttoḍarmolियum
vêt't'r'umaiyâyin ot't'r'iḍaiyinamiga-t-
tôt't'r'am vênḍum valleluttu migudi.

Tol., El., 412.

"In *vêt't'r'umai* (case-relationship) word-combinations, the plosives (before final *u*) of the initial members (of these combinations) should be doubled, if these initial members are of the *îreluttu* or of the *uyir-t-toḍar* type (i.e., if the words have long radical vowels or are dissyllabic)."

neḍiloḍ-uyirttoḍar-k-kut't'r'ugaraṅgaḷut-
ṭa-ra-v-ot't'r'irattum vêt't'r'umai migavê.

Nannûl, 183.

"In many cases of *vêt't'r'umai* combinations, *t* (*ḍ*) and *r* preceding final -*u*, of dissyllabic words or words with long radical vowels, would be "doubled".

The *Nannûl* sūtra specifically refers to -*t* and -*r*, while *Tolkappiyam* speaks of *valleluttu* or plosives in general; when the two sūtras are interpreted in the light of literary usage, we find that

(i) *r* and *ḍ*(*t*) are always involved in *vêt't'r'umai* word-combinations, while other plosives are only rarely affected, as in *eruttu-māḍu* (ox) [*erudu* 'ox'], *verukku-k-kaṇ* (the eye of a male cat) [*verugu* 'male cat'];

(ii) the rule operates mainly in *vêt't'r'umai* word-combinations, a few rare exceptions like *kaḷit't'r'-i-yânai* (male elephant) [*kaḷiru* 'male elephant'], *varaṭṭ-âḍu*, etc., being explicable on the basis of the analogy of the *vêt't'r'umai* instances.

Fundamentally, then, this category is the same as 2 above; for, as it is *vêt't'r'umai* or case-relationship combinations that are chiefly affected by this rule, the *âdēsa t't'r'* of this category stands on the same footing as in the previous category.

Malayālam

The sūtra of *Lîlâtîlakam*, which I have already cited above, contemplates cases of word-combinations like *ât't'u-nîr* (river-water), *côt't'u-vellam* (liquid of boiled rice), *kayat't'u-muḍi* (bundle of rope), in which the first constituents have bases with final -*r*.

Telugu

The sūtra of *Āndhra-śabda-cintâmaṇi* which I have cited above in connection with the *aupavibhakti* particles, expressly refers to *pada-samâsas* as one of the two contexts in which these particles appear. Just as in Tamil, the character and the original function of the particles in word-combinations appear to be the same, alike in inflexional positions and in word-combinations since the constituents of these latter involve an inflexional relationship wherever the particles appear in Telugu.

Commentators of the sūtra of *Śabda Cintâmaṇi* have explained that, in actual usage, the occurrence of the *aupavibhakti* particles

is characterized by variations. The Ahōbalapaṇḍitīyam, for instance, says that these particles may

(i) appear in some instances both in inflexions and in *samāsas*, as in *ēti-ki* and *ēti-kāluva* ;

(ii) in some, only in *samāsas* ;

(iii) in others only in inflexions and not always in *samāsas*, as in *miṇṭi-* but *minnēru* (heavenly river); and

(iv) in yet other instances, fail to appear alike in inflexions and in *samāsas*.

Ahōbaliyam observes that, since such divergences exist in usage, the rule in each instance has to be determined from *prayōgam* and *sat-kavi-vākya*m.

Atharvana-Kārikāvaḷi similarly offers the counsel: *nidānam tatra sadvacaḥ*.

CATEGORY 4.

This category is constituted of word-compounds formed with the old bases signifying 'small, short':

Tam.	<i>kuṛ-</i> ,	<i>śiṛ-</i>
Mal.	<i>kuṛ-</i> ,	<i>ciṛ-</i>
Kann.	<i>kiṛ-</i> ,	<i>kuṛ-</i>
Tel.	<i>kuṛ-</i> ,	<i>ciṛ-</i>

The bases are all related structurally. In all the south Dravidian languages, intimate word-compounds formed with these bases and words with initial vowels show the *âdēsa* sounds: *t't'(r')* in Tamil, *t't'* in Mal., *tt* in Kannaḍa and *ṭṭ* in Telugu. When, however, the second constituents of the word-compounds have consonants in initial positions, then the *âdēsa* sounds do not crop up but on the other hand, the bases are retained with *r* followed by an enunciative *-u*.

I give below a table of instances illustrating the inter-dialectal correspondences in the treatment of word-compounds constituted of these bases and words with initial vowels:

Tamil.	Malayālam.	Telugu.	Kannaḍa.
<i>kuṭ't'r'-uyir</i> , <i>śit't'r'-uyir</i> (short life).	..	<i>kuṭṭ-usuru</i>	
<i>śit't'r'-eli</i> (small rat).	..	<i>ciṭṭ-cluka</i>	<i>kitt-ili</i> .
<i>śit't'r'-uḷi</i> (small chisel).	<i>ciṭ't'-uḷi</i> .		<i>kitt-uḷi</i>
<i>śit't'r'-aḍi</i> (small, comely foot).			<i>kitt-aḍi</i> , <i>kutt-aḍi</i> .
<i>śit't'r'-idaḷ</i> (small, inner petal).			<i>kitt-esaḷ</i> , <i>kutt-esaḷ</i> .
<i>śit't'r'-āḍai</i> (small garment, as that of a girl).	<i>ciṭ't'āḍa</i>		
<i>kuṭ't'r'-eḷuttu</i> (short vowel).			
<i>kuṭ't'r'-ēval</i> (menial service).			
<i>śit't'r'-il</i> (hut).			
<i>śit't'r'-inbam</i> (earthly pleasures).	<i>ciṭ't'-inbam</i> [Bh. G., V, 14]		
		<i>kuṭṭ-āvalu</i>	
		<i>ciṭṭ-aḍavi</i> (small forest).	
	<i>ciṭ't'-āru</i> (small brook).		
	<i>ciṭ't'-auṣadham</i> (slight medicine)		<i>kutt-aḷe</i> (small measure)

All the four dialects agree in showing the replacement of *-r* of the connected bases *kuṛ-*, *kiṛ-*, *śiṛ-*, *ciṛ-* (short, small) by the correspondent *âdēsa* sounds Tam. *t't'(r')*, Mal. *t't'*, Tel. *ṭṭ* and Kann. *tt*, when the second constituents of the word-compounds (following

kuṛ-, *kiṛ-*, etc.) have vowels as initials; it may also be noted that if the second constituents have consonants initially, then the *-ṛ-* or the bases is retained with *-u-* following, as in

Tam.	<i>kuṛu-nagai</i> (smile).
"	<i>ṣiṛu-têr</i> (small toy cart).
Mal.	<i>kuṛu-vali</i> (shortest way).
"	<i>œṛu-nîr</i> (urine).
Tel.	<i>ciṛu-navvu</i> (smile).
"	<i>kuṛu-gêlu</i> (small hands).
Kann.	<i>kiṛu-nage</i> (smile).
"	<i>kuṛu-daḍi</i> (short stump).

The early grammars of Kannaḍa expressly deal with the *âdēśa* sounds of Kannaḍa: Bhâṣâbhūṣaṇa, 149, treats about cases like *kitt-aḍi*, and 150 deals with the circumstances in which *kiṛ-*, *kuṛ-* may be retained with a following *u* [*tēṣām udantatwam vyañja-nēṣu*]; Śabdamaṇidarpaṇa, S. 181, refers to the same changes; and Sūtras 337 and 340 of Śabdānuśāsana cover the same points.

The early Mal. grammar, *Lilātilakam*, just indicates cases like *cit't'-ôlam* (small wave) in the general Sūtra regarding *sandhi* in the third Śilpam: *sēṣam prayōgât jñēyam*. Some Telugu grammarians¹³ treat the *bhâva-nâma* derivatives *kuṛu-ca* and *ciṛu-ta* as originals and derive from them the adjectival *kuṭṭ-* and *ciṭṭ-* (appearing before vowels) and *kuṛu* and *ciṛu* (before consonants). The terms in which the early grammars of Kannaḍa refer to these words also indicate the same perspective. This, I think, is to put the cart before the horse, inasmuch as the bases concerned here are *kuṛ-*, *kiṛ-*, *ciṛ-*, *ṣiṛ-* which are very old attributives or *guṇavacanas* from which several derivatives (both nominal and verbal) have been formed with suffixes and preserved in the south Dravidian speeches.

In connection with the treatment of *ṛ* of these bases in compound words, one may usefully recall here the parallel treatment accorded to *-ḍ* (*-ṭ*) ' of three other old attributive or *guṇavacana*

13. For instance, *Sitārāmacārlu* [Tel. *Śabdaratnākaramu*, p. 186] describes *kuṛu* as *vṛttiyaṇḍu-n-guṛuca śabdamaṇaku mīndi varṇamu lōpīmpa-n-gā migilina rūpamu*, and *kuṭṭ-* thus: *accu paramagucō ṛakāramunaku ṭakāradwāyam ādēśambagu*.

bases, viz., *kaḍ-* (strong) *naḍ-* (middle) and *niḍ-*, *neḍ-* (long). In word-compounds in which the second constituents have vowels as initials, *-ḍ* is replaced by *-ṭṭ* in all the speeches; while *-ḍ* is retained with a following *-u* when the initials of the second constituents are consonants. The Kannaḍa rules are given in Bhb. 147-150, Śmd. 181, Śś. 337 ff; while for Mal. the rule is hinted at in *Lil.*, III, 29. I give below illustrations from all the south Dravidian speeches.

I

II

Word-compounds in which the second constituents have initial vowels.

Tamil.

<i>kaḍ-</i>	<i>kaṭṭ-aḷagu</i> (great beauty). <i>kaṭṭ-aḷal</i> (raging fire).
<i>naḍ-</i>	<i>naṭṭ-ucci</i> (midday). <i>naṭṭ-āru</i> (central portion of a river).
<i>neḍ-</i>	<i>neṭṭ-uyir</i> (long vowel). <i>neṭṭ-uyirppu</i> (long sigh). <i>neṭṭ-uru</i> (learning by heart).

Malayālam

<i>kaḍ-</i>	<i>kaṭṭ-eṛumbu</i> (big ant).
<i>naḍ-</i>	<i>naṭṭ-ucca</i> (noon proper). <i>naṭṭ-iruḷ</i> (pitch darkness).
<i>neḍ-</i>	<i>neṭṭ-ōṭṭam</i> (long, swift run). <i>neṭṭ-āyam</i>

Telugu.

<i>kaḍ-</i>	<i>kaṭṭ-eṇḍa</i> (intense sunshine). <i>kaṭṭ-eduru</i> (right in front).
<i>naḍ-</i>	<i>naṭṭ-aḍavi</i> (middle of the forest). <i>naṭṭ-illu</i> (centre of the house).
<i>niḍ-</i>	<i>niṭṭ-ūrupu</i> (long sigh).

Kannaḍa.

<i>kaḍ-</i>	<i>kaṭṭ-āl</i> (strong, well-grown man). <i>kaṭṭ-avasara</i> (great hurry).
<i>naḍ-</i>	<i>naṭṭ-eluvu</i> (back-bone). <i>naṭṭ-iruḷ</i> (pitch darkness).
<i>niḍ-</i>	<i>niṭṭ-aḍavi</i> (unending jungle). <i>niṭṭ-oḍal</i> (long body).

Word-compounds in which the second constituents have initial consonants.

<i>kaḍu-vāy</i> (strong-mouthed, tiger). <i>kaḍu-m-bagal</i> (noon). <i>naḍu-k-kaṭṭu</i> (girdle). <i>naḍu-k-kuḍi</i> (middle house, chief dwelling). <i>neḍu-nāl</i> (long time). <i>neḍu mayir</i> (long hair).
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<i>kaḍu-kanal</i> (thick flame). <i>kaḍu-m-bacca</i> (dark green). <i>naḍu-k-kaḍal</i> (middle of the sea). <i>naḍu viral</i> (middle finger). <i>neḍu nāl</i> (long time). <i>niḍu vāl</i> (long sword).
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<i>naḍu mūkku</i> (centre of the nose). <i>naḍu rêya</i> (midnight). <i>niḍu mōmu</i> (long face).
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<i>kaḍu-gudire</i> (strong horse). <i>kaḍu-gāḷi</i> (violent wind).
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<i>naḍu-mane</i> (central hall). <i>naḍu-vagal</i> (<i>pagal</i>) (midday). <i>niḍu-dōḷ</i> (long arm). <i>niḍu-vayanam</i> (<i>payanam</i>) (long journey).

No sound other than *-r* (of *Kur-*, etc.), *-ḍ* (of *Kaḍ-*, etc.) and *-d* in Tam., and Mal., *mud-*, *pud-*¹⁴ is affected similarly in these circumstances in any of the south Dravidian speeches.

The replacement in the present category of *-r* by *t't'* (*r'*) in Tam., *t't'* in Mal., *ṭṭ* in Telugu and *tt* in Kannaḍa, and of *-ḍ* by *tt* in all dialects reminds us at once of categories 2 and 3 which I have discussed above. There are, however, four points (peculiar to the present category) which deserve to be noted:

(i) The bases of this category are original *guṇavacanas*, while, in categories 2 and 3, nouns are involved.

(ii) The bases here are short monosyllabic ones with short radical vowels, while in categories 2 and 3 the nouns involved are either trisyllabic or possessed of long radical vowels.

(iii) In the word-compounds of category 2, the *âdêsa* sounds crop up (followed by the enunciative *u*) in many cases where the second constituents have consonants as initials, while in the present category the bases are retained (with a following *u*) when the second constituents of the word-compounds have consonants as initials.

(iv) Kannaḍa shows representatives for this category but none for the previous one.

Though one cannot offer any definite explanation for Tam. *t't'* (*r'*) here, it is probable that the primary impulse was furnished by the action of a particle *-t-* (cf. *veḷ-u-tt-* 'white' from *veḷ-*, *kaṭ-u-tt-* 'black' from *kaṭ-* 'blackness') meeting *-r* of *kur-*, etc. The reason why the *âdêsa* fails to appear before consonants is perhaps connected with distribution of accent.

(To be continued.)

14. *-d-* of *pudu* (new) and *mudu* (old) in Tam. and Mal. appear to receive a similar treatment in the following compounds:

Tam. *putt-ōḍu* (new pot), *putt-an* (new person or thing), *mutt-aṇṇa* (eldest brother), Mal. *putt-ari* (new rice), *putt-illam* (new house), *mutt-accan* (grandfather), while before consonants *pudu* and *mudu* are retained with *-u-*.

A CRITIQUE OF NICOLAI HARTMANN'S ETHICS.

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

I

INTRODUCTION

Each cultural epoch brings its own contribution to the sum of human thought. The historian of the future will find the specific contribution of our age in its explicit recognition of the problem of value. The concept of value has begun to dominate philosophy. In the words of Windleband, 'We do not now so much expect from philosophy that which it was formerly supposed to give, a theoretic scheme of the world, a synthesis of the results of the separate sciences or transcending them on lines of its own, a scheme harmoniously complete in itself. What we expect from philosophy to-day is a reflection on those permanent values which have their foundation in a higher spiritual reality above the changing interest of our times' (*Introduction to Philosophy*). A theory of value, as Osborne put it, 'is no less a necessary part of the equipment of every competent philosophy than epistemology' (*Foundations of the Philosophy of Value*, p. 1). Again, as he observes 'a complete system of philosophy must ultimately be a philosophy of value' (*Foundations of the Philosophy of Value*, p. 22). We are indebted to Kant's philosophy for the independence of the problem of value apart from that of knowledge. He taught us the distinction between 'valuation' and 'explanation'. The problem of existence belongs to the sphere of science and that of value to philosophy proper. When we put the question 'is there anything valuable?', science says 'No'. The ancients believed that the earth was the centre of the world and man its favoured child. Copernicus and Darwin changed all that. To-day, science tells us that we are accidental and precarious tenants of a nobody's estate and that nature is blind to our dreams. Our literature is full of pity for man, of declamations, bitter and pathetic, and mostly resigned on the theme. J. S. Mill in his three essays on religion and Bertrand Russell in his 'Freeman's Worship' awakened us to a sense of our plight here. To Mill, nature is an enemy of man, against whom we are at

war. And that is why Huxley regarded morality as a deliberate counter-move against the cosmic process. There is nothing here or hereafter except, to use a phrase of Russel, 'omnipotent matter', 'blind to good and evil, reckless of destruction'. We are in a field of irresistible forces that tolerate for a moment 'man's vagaries'. Thought and consciousness, if they make any contribution at all, make one that is small beyond reckoning. Some eminent Physicists have even concluded that the universe is slowly running down like a clock and that the energies of our systems will decay soon leaving the glory of the human race a dismal disturbance in the primeval solitude. If the ultimate fate of the world is sealed in advance, Gods are doomed along with men. Michael Angelo, Shakespeare and Shaw, share the same fate and go down into the same bottomless pit as the sun and the moon. This is the new 'Gotterdammerung' of which Spengler speaks, perhaps, the twilight of our race.

SCIENTIFIC OUTLOOK AND ETHICAL RELATIVISM

The resulting outlook of this view for Ethics is disastrous as it cuts the very nerve of all valuable life. There are no values or morals, no good or bad except that thinking makes it so. The vices of one age are the values of another. The ideals of one school are the prohibitions of its opposite. When religions conflict and morals change, Ethics differs from man to man. Then, what is Truth? It is only that which is useful. What is Beauty? It is only that which lures our senses for a while. What is Good? It is only a code of prescriptions that the law imposes to govern large groups, who, if left to themselves, would like to undo all the laws that they publicly follow. Values are a vague projection of hope on the screen of the objective world. In short, science reduces values to mere means of personal gratification.

Then where is the question of certitude in ethics? In the congeries of ethical propositions, where is an axiomatic and self-evident truth? To use the language of Westermarck, 'the great diversity of opinion among moral specialists only shows that none of the various theories of normative sciences can be said to have proved its case' (*Ethical Relativism*, p. 44). Relativism tells us that none of the moral judgments possesses objective validity; there is nothing truly good or bad, right or

wrong. Moral principles express nothing more than the opinions of those who believe in them. The moral concepts which form the basis of moral predication, are ultimately generalisations of tendencies to feel either moral approval or disapproval with reference to acts (*Ethical Relativism*, p. 90). In a moment of great revolutionary zeal, Lenin expressed the view that morality is a deception. 'In our opinion morality is entirely subordinate to the interests of the class war, everything is moral which is necessary for the annihilation of the old exploiting social order for the unity of the proletariat. Our morality thus consists solely in discipline and in conscious war against the exploiters. We do not believe in eternal principles of morality and we will expose this deception. Communist morality is identical with the fight for the strengthening of the dictatorship of the proletariat' (*The Communist Manifesto*). The view is technically called ethical scepticism and derives its plausibility from the fact, that the world presents to most of us an untidy litter of things rather than a fine and peaceful garden of Epicurus, where we can live, love and laugh as we please.

THE LIMITS SCIENCE MUST ACCEPT

In all ages of scientific advance, there is a swing from Protagoras to Plato. The truths of yesterday are found wanting to-day. We are expanding in our ranges and our loyalties are widening. The picture that science drew is overdone. It only exhorted us to be bold and watch the last expiring pulse of the universe. But, all the historical religions and idealistic philosophies of the world have recorded their permanent protest against this blank-cheque-view of life. Its policy of clean-sweep strikes at the root of all problems of value by an unwillingness to see through to the end. Life is a persistent challenge; it demands an explanation. Now, the circle has run its full course and with a new turn, we are brought back to an era of sober questionings. Relativism and scepticism move from misunderstanding to misunderstanding and end by being misunderstood. The ideal of physical science is a system of logical sequences called cause and effect. It is an abstract scheme which precludes much that philosophy is obliged to include. Values pass out of its picture. The status of life and its meaning in the

world is the standing problem of philosophy and ethics. Science leaves us with the notion of an activity in which nothing is done. It is a mere formula for succession. It finds no individuality in nature, aim or goal in it. Dealing with rules of succession, it faces only one-half of the evidence deposed by our entire experience. Whether the world is born on a tortoise which in turn is carried by an elephant 'with legs reaching all the way down' or is the thought of a 'Jeans-like-God whose symbol is the square root of minus one' is not the question of questions. We are concerned with things which embrace the great dramatic and historical happenings that have shaped the destiny and direction of the human beings. What is meant by humanity and what is meant by the 'ought'? These are the questions that really matter to us. The 'ought' is a fact which mere fact cannot explain. Nor is it created or imagined by the human mind. Dealing with the daily life of human beings, now and ahead, in space and time of ordinary experience, its claims are enormous. The 'ought' is the official seal of values and enters into all the human actions and motives. In effect, values seem to be all and nothing less. The moral man who places his life at the call of duty, the artist who creates the perfect form and the prophet who provokes the people for their own good, are only moved by the force of an intangible metaphysical essence we call values. It is, then, not at all an accident that when we contemplate greatest events, the revolutions that have changed the face of the world, the rise of religions, the miracles of man's conquests over nature, we are drawn deep into the eternal human element that runs through the pulse of human history giving moment and meaning to it. When the full tale of our history comes to be told, it will be estimated as an adventure in the realm of values.

FAILURE ALL AROUND AND THE REVOLT AGAINST PESSIMISM

Pessimism is the 'forma mentis' of the age. We are getting vexed with its disintegrating trend. Science scandalises the purpose of life and casts us adrift on the waves of probability. We are tired of being told that we count for nothing and that the world is on the down-grade. The fashionable philosophies of the day are the creations of novelists and second-rate journalists that have turned pathological through an acute economic

crisis that needs a more dignified handling. It is a return to cynicism through the literature of Freud. Disillusionment, however manfully held at arm's length, devitalises life and kills the zest for living. In all paths of life, to-day, there is a persistent undertone of pessimism and defeatism. Science has been brought up short by its own success and ruthlessness. The knowledge which it gives us is not of values but of patterns drawn on the surface of the unknown. The world-view of an Aldous Huxley is the symptom of a new decadence that should be arrested in its spread. If science is to enrich human life, it must not intrude on the sphere of values. The balance of the forces that make for the good life must be kept going. The value-philosophy of to-day stands opposed to, and is a reaction against, scepticism, relativism, naturalism and pragmatism in ethics. As Prof. Julian Huxley put it: 'Science is without a scale of values: the only value it recognizes is the value of truth and knowledge. This neutrality of science in regard to emotions and moral and aesthetic values means that, while in its own sphere of knowledge it is supreme, in other spheres it is only a method or a tool. What man shall do with the new facts, the new ideas, the new opportunities of control which science is showering upon him does not depend upon science, but upon what man wants to do with them; and this in turn depends upon his scale of values' (*Science and Religion*—Broadcast lectures by various thinkers, p. 18). Modern science and the ethics of economic *Laissez faire* have conducted us into a world, in which, there are more sellers than buyers, doctors than patients, lawyers than clients, and above all more policemen and soldiers in uniform than dangerous citizens. The theatre is actually overrun by disruptive malcontents curious to know the happenings at the next corner. We need a large outlook, which at once does justice to the many paradoxes of the age beginning with poverty on one side and plenty on another and ending with the swing between dictatorship and democracy. We are perplexed, fascinated and repelled by this astounding medley of civilization and brutality, magnificence and meanness.

THEOLOGY OUT OF DATE

Can God help us in this situation? The post-war generation seems to have substituted values in the place of God. At any

rate, one section of the value-philosophers are in no way friendly to him. The Great War evoked great reactions. While it convinced one section of thinkers of the existence of God, it once for all weakened such a thing in others. While the Bishops prayed in churches, God did not choose to enlighten them. Hence, many thinkers turned to a world in which they thought there could be meaning, even though God is absent from it. When authority fails to appeal, Theology becomes a subject of pure joke. The ethics of values has come in at this juncture to play the new religion abandoning the old pose. Values are the corner-stone of the new structure. The real world, to use the modern phrase, is a 'Kingdom of values'. There is an intrinsic or absolute order of values different from sensuous existence constituting a self-governing colony of essences. In a word, there is no need even for God, provided values are recognised, not as mere self-expressions of individual or collective emotions, but, as relating to a permanent feature of reality. The kingdom of values opens up afresh the 'Socratic Pathos of wonder'. It is a new philosophy thought out afresh in the light of our new experience. These ultimate and eternal values are Platonic essences and are not merely attributes of God. They are the citizens of an eternal world, a spaceless sphere of pure essences (Cf. Santayana's *Realm of Essence*). In the new ethics, in the apprehension of these eternal values and in the earnest striving to co-operate with the moral world, lies the whole duty of man. This, perhaps, is the only part by which the moralist can claim his status in the eternal world. If the heart of religion is the source of peace it finds in the love of God, the secret of the new ethics is the security it seeks in the Kingdom of values, in the midst of the disquietude of the world. The value-philosophy of Hartmann is purely based on phenomenological experience and follows the logic of realism. It has not much in common with the 'philosophia perennis' or the Great Tradition, which Urban regards as the 'natural metaphysics of the human mind and the authentic point of view'. Value and reality in the philosophy of realism are not inseparably connected. Hartmann has nothing to do with the problem of divine immanence. The recognition of truth, beauty and goodness, need not prove that there is a God. God, to the new ethics, need not in his transcendent being be the source and origin of

all perfection. Nor does it approve of the concept of a 'super ego' in the ultra-personal will as the support of values (Munsterberg, *Eternal Values*, p. 385). In the ethics of Hartmann values are puny Gods brooking no sovereign or super-deity. They constitute a pantheon of immaterial essences. In a word, Hartmann offers you pure Platonism minus its traditional moral hierarchy and cosmology with the bottom knocked out of its theistic bearings.

THE LION IN THE PATH OF MODERN RESEARCH

The value theories of the century are the off-shoots of Platonic realism. They preserve, in some shape or other, his tradition, through all their modern re-statements. The whole line of German speculation, in this regard, is thoroughly influenced by the remarkable researches of Husserl in his *Phenomenology*, a movement directed against the Kantian tradition on one side and Eudaemonism on the other. The German ethics of values avails itself of the results already obtained in the field by Hartmann's notable predecessors. Meinong and Scheler are its forerunners. Modern ethics is a swing to and fro, between Eudaemonism and Kantian ethics. Eudaemonism bases its findings on empirical data. The speculations loyal to the Kantian tradition reject the same, in favour of a formalistic ethics on a priori principles for the sake of self-consistency. The theories which claim absolute validity for ethical principles are void of content and are merely formal and rationalistic. They fail to bring out the rich substance of ethical life. Emotional theories which discover moral value in material content and not in the empty form of the will, lack unquestionable footing. As such, they are prone to relativism and subjectivism. They derive value of the act from the end that they seek to attain, which is always a state of feeling. If that be the case, no external object has value, except in relation to sensitive organisms. In a word, ethics must be saved from the dilemma of an a priori, but purely formal and empty abstraction, and a concrete and empirical but merely relativistic theory. This is the difficulty that modern ethics has to face.

AXIOLOGICAL ETHICS

Axiological ethics tries to amend the drawbacks of both by making a philosophical defence of the objectivity of moral

values. The phenomenological discovery of a 'material a priori' overcomes the opposition by furnishing a theory of objective value, which is at the same time material. The false opposition between thought and sense perception set up by Kant is the mother of many errors. As a result of this dualism, perception, feeling and volition have been ascribed to sense dependent on the organism. Scheler and Husserl unearthed the prejudices involved in all subjective theories. Husserl held that these are 'alogical' aspects of consciousness which display an order of relations which is presupposed by an inductively established order. It is not borrowed from logical thought. Augustine and Pascal were the first to discover the idea of an ethics of feeling that is at the same time absolute and a priori. Hartmann took the cue from them and announced that there are other modes of experience which reveal realms of being to which pure intellect is as blind as the ear to colour or the nose to sight. The realm of value belongs to such an objective order, going towards the making up of a whole by itself. It is a separate sphere of being with its own laws and structures as absolute as those of mathematics or logic, apprehensible with the same degree of intuitive certainty. Ethics conceived as a general science of value should take up the task of exploring this domain. And it is this investigation the new ethics of values opens up.

EUDAEMONISM AND AXIOLOGY

Axiology is seeking the empirical basis for the value science of ethics. Eudaemonism has already preempted the principal items of such an empirical basis. Axiological ethics puts the theory of value on the basis of ethical judgment by pointing out that mere empirical experience is inadequate to understand the ethical phenomena. Eudaemonism makes goods as such, or the experience of enjoying the goods, the ultimate determinant of ethical predication. Value ethics holds that a genuine knowledge of values is given to us in some of our emotional experiences and that a choice or predication is right which squares with the value insight. The true values revealed in our emotional experience are of such a nature that we do not seem to be guided always by pleasure *per se*. Eudaemonism lacks the higher vision. It can never discover a

good which is not pleasant or a sorrow that is sweet and soulful. Value ethics declares that we attempt to realise or actualise higher values irrespective of their pleasing us. Such a proposition is a flat contradiction in Eudaemonism. Axiological ethics is based on plurality and subjectivity. Emotional experience reveals values possessing a normative force. The ethical judgments issuing from it transcend the immediacy of the emotion and put the agent in touch with an objective order that perdures side by side with the existential world. Value research has to meet another difficulty in making a claim of this sort. On one side, it has to face the task of expanding the range of empirical data on which it constructs, and on the other, it has to discover a unity within this data. Again, the unity sought for should not be a formalistic one imprinted by an ordering mind, but should be a unity that can stand up to scientific verifiability. In a word, the methods of the new research must conform to the spirit of the sciences.

AXIOLOGICAL ETHICS AND THE KANTIAN TRADITION

Though Hartmann keeps close to empirical fact, he has obvious leanings to rationalism. He insists that ethical valuations are a priori and this a priori he regards as empirical also. Though he is loyal to the main lines of Kantian tradition, he puts aside all duty ethics. Ethics is not casuistry to play the guide in particular situations. It does not pretend to tell you what to do in any given instance, any more than epistemology can tell what is true or false in a particular case. They only give us criteria of good and bad or truth and falsehood. The application of this criterion is in each case a minor problem. Instead of making the categorical imperative the main spring of value ethics, Hartmann makes ethics the general knowledge and pursuit of values. This viewpoint naturally leads him into a trenchant critique of the Kantian tradition. Kant regarded the moral law as a priori. To him, it was a subjectivistic and rationalistic product. Hartmann rejects Kant's conception of the a priori and refuses to recognise the dichotomy between the a priori and the a posteriori. The Kantian antithesis between the a priori and the a posteriori is not the same as that between nature and reason (vol. i, p. 60). Again, the Kantian categorical imperative is not an empty and

barren formalism, but is the ideal objective relationship, of which ethical consciousness gets glimpses regardless of its form (vol. i, p. 95). Applying Husserl's doctrine of an objective a priori to value, Scheler worked up a theory of ethical standards that are supposed to be at once concrete and absolute. Formalism can be made significant only by a profusion of axiological content. In ethics, transcendental subjectivism does not lead to the freedom of the will for the sake of which Kant introduced it (vol. i, p. 159). On the other hand it throws a whole cloud of suspicion on the will itself. Kantian subjectivism lies wholly in his conception of the a priori. He was unable to see an a priori which did not subsist in the subject as a function. 'But, must the subject add anything out of himself?' asks Hartmann and maintains that the content of what the subject discerns a priori is just as objective as what he perceives a posteriori. That the a prioristic contents are not to be extracted from the empirical manifold cannot in any way call in question their objectivity. Geometrical propositions cannot indeed be derived from objects or things, not even from drawn figures. They are none the less objective and have nothing to do with the functions of consciousness. So also is the relation between cause and effect which is never given to sense. 'Then, how can the categorical imperative be otherwise? It is, says Hartmann, also something purely objective and its content is an ideal objective relation which precisely as such hovers before the moral consciousness, independently of the degree of actualisation in real life. To confuse the empirical with the objective is an idealistic prejudice. This led to the nineteenth century subjectivism which submerged the whole sphere of ideal objects, long ago discovered by Plato. The universality, a priority and the categorical character of the principle has no need of a subjectivistic genesis. The moral consciousness meets the sensible world with another principle leading us to a self-existent ideal realm to which values are native. The ethical philosophy of the nineteenth century spent itself in an analysis of the moral consciousness and its acts. It was far from concerning itself about the objective contents of moral claims, commandments and values. Only in our day a new turning-point of the ethical problem has come to light. The supreme concern of the new phase is the 'substance of ethical being and

not-being'. The investigation of this is the task of the 'Phenomenology of morals' (vol. i, chap. xiii, pp. 176-80).

THE TECHNIQUE AND METHODOLOGY OF THE VALUE-ETHICS

The method of a research is of greater worth than its results. A scientific ethics has been a dream from Plato's time. Till now no momentous step in the direction was taken. Brentano, Scheler and Ehrenfels have essayed this critical task following the lead of Husserl. The method is all important. Though the Newtonian physics gave way before the more recent researches, even to-day it is admitted that no one has gone beyond his methods. The basic step in the Methodology of natural science is the survey of empirical data. You have to discover by accurate observation and analysis the unity in the same and then devise adequate methods for testing the validity of these unifying theories. The problem of ethics, as Brentano insisted, is not to make it 'autonomous' but to make it 'orthonomic'. In insisting on this feature of ethics (freedom from error) he has indicated the direction which axiological ethics is destined to take. The method that Scheler and Hartmann followed is technically known as the 'phenomenological method'. The method seeks to describe and grasp the full meaning of the contents of experience itself (Husserl's *Ideas*, pp. 7-12, 30, 41-9). For this method, the most complex psychological data, sensations, judgments, inferences, feelings and emotions may be 'simple', if included in one act of awareness, even though they have different time differences and are interrupted by other events. Thus, a friend, an injury received, are all suggested as examples of phenomena forming unities of experience determining actions or attitudes. Husserl claims to have undertaken a non-empirical investigation of knowledge, and in special, of the structure of the act of knowing with its content, exclusive of reference either to the subject or to the objects of knowledge as real existence, both of which, to borrow his phrase are 'bracketed'. The phenomenon which is the object of investigation is not an existent but only an essence (Husserl's *Ideas*, pp. 12-30, 41-9). His concern is only with the a priori character of act and content. Scheler followed this method in ethics and exhibited the phenomenological basis of ethics without hazarding a closed system of ethical science

bearing on concrete life (Mary Evelyn Clerk's Essay on Phenomenological Ethics, *Journal of Philosophy*, p. 144, 1932). He claims not to have transcended the range of strictly a priori concepts and relations. The Phenomenological import of these a priori contents is much more than formal. The denial of the formal character of a principle does not mean that it is empirical. Kant held that the opposition of a priori and empirical coincides with that of formal and material, but this is wrong. As Hartmann says, what is formal in one relation would be material in another. Material a priori truths are of utmost importance for ethics. Kant failed, as an ethical thinker, since he could not recognise the existence of material a priori truths.

Then what is a priori? Scheler defines as a priori 'those general meanings and propositions that can be directly apprehended without any assumptions as to the apprehending subject or its nature as a living being or as to the objects to which they may be applicable—thus, without any presuppositions concerning existence' (Mary Evelyn Clerk's Essay, *Journal of Philosophy*, p. 444, 1932). The opposition between real and unreal does not hold good here. If we call them phenomena, it has no reference to appearance. The apprehension of objects is the intuition of essence' or 'Phenomenological experience'. Essences as such are neither universal nor particular. (Cf. Santayana's *Realm of Essence*.) Only as applied to existents does their significance become manifest. An identical essence may be embodied in a number of individual objects, but there are also individual essences. Thus, a priori knowledge is derived from experience based on facts and facts only and can never be the product of arbitrary intellectual construction. But, our experience of it is a pure intuition of the essence, a sensing of the self-evident without any mediation. As such, it can never be endorsed or discredited by observation or inductive proof. And indeed, such processes always presuppose it. Experience is no chaos of sensuous material, upon which the mind puts the form and orders it to unity. Notions like thinghood, power, quality, motion, space, time, number are no more creations of thought than data of sense. Pure sensations are nowhere given. Essences and relations of essences are as much given as things or goods. This view of a priori is totally rid

of all subjectivistic prejudices which beset the Kantian ethics. The Kantian effort to vindicate its objectivity through its claim to necessity and universality is futile. Necessity is a negative criterion. An a priori judgement may be simply singular and need not be universal at all. This means that it need not necessarily be recognised as valid by one and all. Only one mind and only one race and not another may be capable of reaching such insight. Thus, it is clear, that our whole mental activity and not merely its rational aspect is subject to laws that are independent of and logically prior to its psychological organization and surroundings. Feeling, emotion, volition have an a priori content never derived from thought. Values are as much essences as objects of mathematical thinking. They exhibit a structure that can be intuited as a phenomenon as directly as an a priori of logic. But the valuational a priori is not given directly to thought but is given only to feeling as in our preferences in love or hate. The organ of value is not rational judgement which is only a subsequent act, but immediate valuational feeling. A purely intellectual mind may lose the intuition of value. Plato's 'Meno' gives us the clue to the knowledge of ethics. We seize hold on the ethical through 'recollection'. The seer with moral vision puts us into direct touch with our own moral nature by unveiling our moral capacity (vol. i, p. 58). Scheler had failed to unlock the 'Rich plenitude of the ethical cosmos'. With Nietzsche the same 'melted away into ethical relativism'. Firmly guarded against any such dangers by the phenomenological methods of his predecessors, Hartmann explores afresh the field of values, a preliminary effort at which was already made by Aristotle's 'Nichomachean Ethics'.

The burden of the new Ethics is solely on the a priori. Moral experience and a prioristic insight are inter-related. The a priori is never ready to hand but must be guided, aroused and stirred to activity by objective facts. Yet, none of these facts would be ethical but for the values that are at the back of them. These can be discerned only a priori in the context of experience. The values are apprehended in and through phenomena. They are in our experience but not of it. Valuational vision being a prioristic, apart from it, ethical life would have no meaning. All ethical science rests upon the a prioristic

insight, the primary consciousness, through which alone we know good and evil. 'Here enters a knowledge sui generis, with its own laws, and its immediacy, an a prioristic intuition which is independent of the posterius of actual phenomena and the part they play as guides' (vol. i, p. 104). It is an a priori order of the emotions and feelings like love and hate in entire independence of the logic of the intellect. This primal order of perception is the 'Ordre du coeur' of which Pascal spoke (vol. i, p. 177). The full significance of Hartmann's work can be understood only when we come to appreciate the fresh perspective that the new method affords. Realistic to the core, it remains close to its Platonic background. In opening up the new path, Hartmann has given a decisive turn to the ethical science by discovering afresh the inherent unity of ancient and modern ethics. It is one of his considered convictions that the ethical man must be nothing short of a seer, alive to the fulness of the values of life (vol. i, p. 45). In one hold, he tries to bring together, value and obligation, and make the science of ethics fool-proof against subjectivism and relativism. The task is big; and if it is faultless, it can aspire to be a complete philosophy by itself capable of being ranked as the ablest effort of the times to restore the distracted world once again to its Platonic moorings.

II

BACK TO PLATO

The sum total of movements that have arisen in history have their rise in the normal urgency of the human spirit. We require a philosophy however incomplete it may be. Until the all-round failure of the day, we went by the beaten tracks, wore our blinkers and set off in directions that ultimately brought us into the 'brave new world'. In political, commercial and undergraduate circles the question is put about the validity of set morals. We are literally living in an age of sophists, epicureans and cynics. A quick purge is needed to shift speculation and set out the basic content of ethical life. The confusions of moral standards and the failure of Eudaemonism and Kantian formalism led Hartmann into a move back to Plato. It is a commonplace that there is nothing that Plato

did not anticipate. After several centuries of metaphysical discussions, the great questions concerning conduct and life stand much as Plato left them. The growth of the scientific knowledge as Sir James Jeans has put it 'has done little more than negative the speculations of subsequent philosophers' (*The New Background of Science*). Many hold that 'out of Plato come all things that are still debated among men of thought'. Plato contended that the real world is a world of values. This is the salient fact of Plato's doctrine of ideas. The values of goodness, beauty and truth are of supreme importance in the cosmos. They are not merely regulative principles which we derive from experience. Nor are they sheer abstractions which indicate the purpose or types of human aspiration, which we agree to admire. They are absolute and not relative. We cannot create them; but as we specialise in Ethics they are more clearly sensed by us. The ideas of Plato are realities, existing in their own right. Plato called them ideas and Hartmann calls them values that are absolute. Plato was the seer that saw with mystical directness these essences, like the sages of the Upanisads. To him they must have been like the Gods, radiant, clear and immortal, however fugitive our common vision of them may be. To be called back from the Platonic ecstasy of the contemplation of essences into the society of material things is perhaps an ethical descent. What Plato means by 'ideas' or 'forms' is this. In his metaphysics such things as goodness, justice, beauty and truth are not mere concepts of the mind. Nor are they mere attributes, but real existents with a status of their own in the intelligible realm. The ideas are immaterial, supersensible, entities, general universal forms abiding in their own world apart from the treacherous changes of the existential world. They just are and do not become. Sense and thought are radically disparate, yet everywhere connected. Nature is the realm revealed by our senses. It is only half real, but it suggests a further reality which lies beyond itself. It is a system of symbols and we ascend to truth by learning to pass from the symbols to the nonsensuous realities symbolised. True science is that which ascertains knowledge of forms. These forms, values, ideas or essences are already there to be discovered, before the discovery is made. Knowledge, according to Plato, is the discovery of that which there is to be discovered

before the discovery is made. Goodness, beauty and truth belong to Plato's category of ideas apart from the physical forms that embody them. They are absolute realities independent of their apprehension by or manifestation in individuals. Man does not make values any more than he makes reality. The good formed the goal of all Plato's intellectual endeavour. It gave unity and system to the intelligible world harmonising the forms in one sovereign and universal purpose. As in the sense-world the sun is the source of light and of life to all created things, so in the thought-world the forms derive their rationality and being from the form of the good. Knowledge can be predicated only of forms. All else is mere opinion. The aim of philosophy is to take the soul beyond the bounds of sense to the world of 'pure forms'.

IDEAL SELF-EXISTENCE OF VALUES

Philosophy has shown little progress since Plato. The reason is that Philosophy is not the knowledge of the sense which is fleeting. Systems come and go and no one has a place in the end which will not vacate for the next. Genuine intuitions only remain as the keys which unlock the secret of reality. Despite the amazing advance of science in the last so many years, it is frankly difficult to see its bearing on the subject matter of philosophy which always originates in the Socratic sublimity of wonder. The key of the known has not opened the chapter of the unknown. There are no final interpretations in science and there can be none in things of the sense. Genuine knowledge of forms alone can be real knowledge, all else being opinion. Hartmann's whole thesis is a phenomenological affirmation of the central thesis of Plato. Value is only intuitively and a prioristically apprehended. With the overthrow of formalism and Eudaemonism, he has established that the value-consciousness is necessarily a material objective consciousness. This means that even the values themselves originally do not have the character of laws and commandments. Values are just Platonic forms and are concrete, material and objective. They are not existing patterns. Valuational structures are ideal objects beyond all being and non-being. They are even apart from the really existing feeling of value which only can intuit it (Cf. Santayana's *Realm of Essence*). As

regards their content they are material. Since they are not empty abstractions, they are capable of being actualised in so far as they are not already actualised. Because they are concrete in their nature, they are supreme determinants of the positive ethical life. That is why Hartmann calls his ethics 'a material ethics of values'. Plato was the first who announced the existence of another realm of being other than that of existence. The scholastics called this 'essentia'. The notion was lost in the fog of obscurities that the Nineteenth Century thought created. Phenomenology restored it once again to the realm of Plato. Ideas have a peculiar kind of being. In order to know what Plato means we may take the idea of redness. Redness is obviously not the same thing as a red object such as a rose or a picture. It is not the sum total of such objects since the collection of all red objects will not make redness. It is a form which bestows upon sensible qualities whatever qualities they are found to exhibit. Among Plato's ideas are found ethical principles. These are ideal virtues or values. In their mode of being, values are Platonic ideas and belong to the realm which can only be spiritually discerned. They are not for the crude gaze. In the language of to-day values, of which Hartmann speaks, are 'Essences'. They do not emanate from things or real relationships. Nor are they added out of the percipient. Naturalism and subjectivism fall short of their mode of being. They are not formal or empty structures but possess vital contents. They are materials and structures which constitute a specific quality of things, relations or persons. They can neither be invented nor apprehended by thought. They are at once discerned only by an inner vision like the ideas of Plato. This sensing of values is just what Plato calls 'Beholding'. The sensing of values is primal and is embodied in acts of preference, approval and conviction and is a proof of its existence. The a priority of this knowledge is an emotional intuitive one. There can be no reflective and intellectual sensing of values. Values are not only independent of the things that are valuable (goods) but are actually their prerequisites. They are what lend the character of goods to things. Things are valuable only through them. Goods, in so far as they have value, have it, through participation in ideal

values. We find value in an object or person. Again, we set up a person for a pattern only under the influence of this inner discernment of the ideal value (vol. i, p. 197). In this, it is only the ideal values that guide us and affect our conduct. As Kant put it, values in so far as they are connected with actual situations, are 'conditions of the possibility of goods'. The experience of goods tells us that one thing is agreeable, that another is useful and another beautiful. What is implied in this experience is a knowledge of the agreeable, the useful and the beautiful. They are obviously presupposed. One must possess the standards beforehand. From the start, things fall under these standards. We must have an elemental feeling which connects all things and relations that come within its range of vision with the value of life. Otherwise an eternal back reference becomes inevitable and we cannot explain why a thing is good. Not all the welter of empirical elements that enter here can affect the a priority of values which dominates the domain of goods. 'That things and their relations can be goods or evils; that striving can be directed towards them, that there are volitional ends which themselves are ideal and yet are really determinant for actions; that there is such a thing as approval and disapproval of human conduct, that a conscience speaks directly in the depth of consciousness accusing, imputing guilt, imposing responsibility—all this is conceivable only on the presupposition that values, as a determining prius control the attitude which man takes up towards life' (vol. i, p. 206). A thing can be and is valuable only in relation to a value itself. Nothing is ever loved, striven for, and yearned after except for the sake of some value immediately discerned. Thus, it is plain that values possess the character of genuine essences (vol. i, chap. xvi, pp. 217-30).

VALUATIONAL A PRIORITY AND ABSOLUTENESS

If we accept values a priori, are they not prejudgments or assumptions of the subject? The whole claim of the a priori may be a bias. Even the a priority of theoretical knowledge is under the suspicion of subjectivism. What is the special proof of its objectivity? The Kantian proof consisted in the exposition of the relation of the categories to objects of another order. He relates it to a posterioristic object. In the domain

of theory, the procedure holds good, because categories are laws which dominate all real experience. Values are not like categories, because they are ideals that are to be actualised. As such, the proof of their objectivity is not to be found in the agreement with the real. Any discrepancy with the real is no evidence against them. Here, there is the difference between theoretical and practical insight and the nature of the a priority involved. The theoretical a priority has only the significance of being an element in knowledge. This significance fails if objective validity is lacking to the a priori. It then becomes merely a mode of presentation without agreement with an object. As such, it has no cognitive value. A practical a priori, on the other hand, has not the merit of being a factor of knowledge. It is a determining factor in life. In the assessment of values, in taking sides, in longing for and turning away from things or persons, we discern it unmistakably. This, indeed, plays the rôle of the valuational a priori. The a priority of values is even more unconditional and absolute than that of theoretical categories. The whole responsibility of the valuational task falls on the sense of values which is the only possible source of knowledge in this regard. Values cannot be proved any more than the existence of things. We postulate the existence of things in the very act of perceiving. Thus, the belief in the ideal self-existence of values, according to Hartmann, 'stands entirely on the same level as belief in real self-existence'. To doubt the one is to doubt the other. The phenomena of the moral life presuppose 'a realm of values subsisting for itself—which exists beyond reality just as much as beyond consciousness—an ethical ideal sphere, not manufactured, invented or dreamed, but actually existing and capable of being grasped in the phenomenon of the feeling for values' (vol. i, p. 104). As the prerequisites of goods, converting things into goods, values are essences. As essences, they have a genuine and fundamental being, the being of ideality, super-temporality and are super-historical and unchangeable (vol. i, chap. xiv, p. 189).

CONSCIENCE AND ETHICAL A PRIORITY

'What the evidence of the sensing of values is, is a relevant question. The answer is, that the phenomena of accountability,

responsibility, consciousness of guilt—conscience, in a word, provides the sought-for evidence. The deeper we force our way into the heart of the ethical phenomena, so much the more evident it becomes, the all-dominating character of values as essences. The moral consciousness does not confine itself to the weighing of actions and dispositions only. It imputes, it judges and also condemns. It metes out guilt and responsibility to the doer after the deed. The moral consciousness is incorruptible. It is relentless in its cold impartiality and punishes even one's own ego. What is called 'conversion' and 'change of heart' are the moral work of this power. In the most sensitive points of our personal life, we find the force of this against which it is hopeless to pit our selfish interests. The interests of the ego cannot go counter to its decree after a certain point. The merely empirical person feels in it the presence of a super power brooding over his actions and ready to round him up if he misbehaves. If the a priori of values is anywhere perceptible, it is remarkably here. The idea of the moral self itself is built upon purely valuational materials. Moral personality does not exist if there is no pure a priori of values. The broad phenomenon of conscience is at bottom just this primal consciousness of value found in the feelings of everybody. The well-known way in which conscience speaks fits most exactly the emotional a priori of the valuational consciousness which appears unsummoned. The so-called 'Voice of Conscience' is a basic form of the primal consciousness of values. It is the most elemental way in which the sense of value gains currency among moral beings and is obviously a self-dependent power in man, set apart from his will. As a purer force it has the influence of a higher power; a voice from the ideal world of values. Thus, conscience is the revelation of moral values in actual consciousness, their entrenchment within the reality of human life and is the most primordial form of the sense of value. This is possible only because values themselves are an existent prius, the conditions of the possibility of conscience itself (vol. i, p. 220).

RELATIONALITY, RELATIVITY AND ABSOLUTENESS

Then, are the values sensed by the primal vision so absolute as they claim? The answer of Hartmann is that we should

know that the relationality of the values is not the same thing as their relativity. Every moral value is a value of disposition towards some person or a community of persons. As such, it has an object even where the act is purely inward without expression or overt deed. This relation inheres in the nature of the moral conduct in general, that is, of that conduct about the valuational quality of which moral judgments are concerned. This sort of relation to a subject is a part and parcel of the structure of the ethical content itself as marked off from that of the goods-value which goes along with it. The moral person stands behind his motivated acts. Values are attached to him as their bearer or carrier. This relation is not valuational relativity. It is native to the nature of the material itself and is inherent in the quality in which the matter of the value subsists. The substance of value always includes the reference to the person. It can come up for evidence only as an attribute or predicate of a person. This relationality is a part of the inner relational structure of moral values. The predicate throughout is drawn into the structure, though, in itself, it is absolute; it is the basic relational structure of the valuational content. Values are absolute as regards the subject who appraises them. All relationality to the subject affects only the structure of the content and not the value. The material is the concrete structure which has the value. Thus the moral worth of trust is not the trust itself which idea is the material. Its proper valuableness cannot be derived from anything else but is one that can be sensed only in valuational feeling. The valuableness is different from any given structure and every relation though it inheres in them. It is an 'ens sui generis', an essence of another sort. Thus, mere relationality is not capable of annulling self-existence and absoluteness. Whatever in its mode of being is not relative to a subject is absolute. Values simply confront the thinking subject as independent and immutable entities which he must take account of. They set up before him a self-subsistent regularity and possess an energy of their own. The point is clear that relatedness to a subject does not reduce values to relativity. The relatedness of goods to man is not at all a matter of thinking which can make a difference to the matter itself. Judgments of good and evil vary with the power of sharp and dull sensing of values. A person

cannot change the fact that a thing is good for him. Geometrical laws hold good only for spatial figures. Mechanical laws hold good only for real bodies. Physical laws apply only to organisms. But, in this form of relationality no relativity is implied in the categorical import of these laws. Similarly, psychological laws may be relative to psychic beings; but this does not mean that they exist only in the consciousness of these beings or that they can meddle with them at will. They are laws to which psychic beings are unconditionally subject. In the same way, the consciousness of good and evil is subject unconditionally to the laws of values and anti-values. In a word, the relatedness of these values to a human subject is not relativity to the subject. The difference between relationality and relativity must be grasped for a clear understanding of the status of ethical values. The relation of the value of goods to the subject is an absolute relation which is comprised in the content of their values. The thing and the subject here are objectively drawn into the structure of the valuational materials in the same way as cause and effect are included in the causal nexus. Values are not thoughts, visions or presentations. Knowledge of value is genuine knowledge of being standing on a par with every kind of theoretical knowledge. It abides unaffected by our beholding it and even in the act of beholding, the subject is a passive percipient and puts nothing out of himself. Values are patterns of the ideal ethical sphere which is a concern by itself with its own laws, orders and structures. The ethical ideal sphere of values is organically connected with the logical and the mathematical as well as with that of pure essences in general. In fact, it is a continuation of them however different their ideal structures may be from values (vol. i, pp. 51, 52, 189, 206-15).

LOGIC, MATHEMATICS AND ETHICS

If we ask the question what we do know, the casual reader of books will not find his path easy. If we go to Plato for the first time, we will be surprised to know that Plato found the keynote of the study of nature and philosophy in Mathematics. Plato is said to have inscribed on the door of his academy the words 'Let no one ignorant of Geometry enter'. The reason for this is not far to seek. The ideal sphere is

homogeneous in existence though varied in content. It overlies the whole sphere of being. The ontological and ethical ideal spheres are not isolated members from the rest of the spheres which mathematical and logical relations exhibit. Side by side is to be found a vast aesthetical sphere closely contiguous. Their mode of existence is a unity for knowledge since their patterns are known in all departments of a priori as in Logic and Mathematics. The being of values is parallel with them and the self-existence of all theoretical ideal forms. The actual and the real do not exhaust the whole sphere of being. The identification of actuality and being is a prejudice of the Nineteenth Century. Under the pressure of this prejudice, subjectivism crept in with the result that even Logic passed over into a psychology of thinking. Through the criticisms of 'Psychologisms' the meaning and standpoint of these sciences have changed. Logic or Mathematics or Ethics treats of a system of laws, dependencies and structures, which on their side control thinking. They are neither forms of thought nor can they in any way be infringed by thinking. Every study which phenomenology has opened up is essentially objective. There are ideal objects of knowledge which are just as independent of a knowing subject as real objects, inhabiting a sphere of ideal worlds. It is on a footing with belief in real self-existence which too cannot be proved but only perceived. The universality and necessity of the a priori of which Kant spoke are not something psychological only. No ideal object of a priori insight can be displaced at will or derived from the subject. Ideal objects offer a sort of resistance peculiar to their own nature. In this resistance we touch the objective ground of the ideal forms and the meaning of ideal self-existence in general. Take the proposition $a^0 = 1$. This does not mean that actually everybody knows it. In fact nobody can know it who has not an eye for the same. The mathematical training needed for its apprehension is a discipline that can give us the insight into its a priori truth. Yet, whoever has reached the level of that intelligence cannot think as he chooses to do. He must think that only what in itself is a^0 , necessarily and objectively is equal to 1. You can carry the analogy to ethics. The moral judgments of value which declare that a breach of trust is revolting, and a 'malicious' joy in

another's misfortune 'reprehensible' do not refer to mere personal sensations. They refer to universal feelings of revoltingness and reprehensibleness, apart from the subject. That not all are capable of seeing the point, is no proof against it. Whoever is capable of this ethical specialization should judge thus and not otherwise. It is clear from this that the realm of values is not a manufactured product or an evolutionary weapon of the human race. It is neither invented nor dreamed by a subject in the protean shapes of his ideation. Values form a world by themselves and are self-subsisting and self-sufficient. They invade occasionally the conscience of man and mould him into a God out of his inferior stuff. Their territory is not a single and isolated plane; it comprehends within its unfathomable depths the secret of all valuational experience (vol. i, p. 222).

RELATION OF VALUE AND REALITY

If the valuational world has its own laws and structures, in what way is it connected with the real world? This question arises legitimately as every kind of ideal being is somehow related to the real. Logical ideal structures, including the mathematical, and all discernible essences are to a great extent structures of real being. Real being has still other structures and substrata which do not concern the world of ideal being as such. In short, the ranges of the ideal and the real structures interpenetrate. All connection between them is one that passes into the sphere of coincidence only. The non-coincident parts are left free. Ethical ideal self-existence is not indifferent to Ethical reality which contradicts it. It approaches it with its own standards and sets up its own authority. The moral consciousness feels this opposition in the form of the 'ought'. Though the self-existence of values is independent of their actualisation, values are not indifferent to actuality or non-actuality. The value of things is not indifferent to things. Within the sphere of forms to which as vehicles they are connected, values are not lukewarm towards what is contrary to them. Indeed, they have quite a peculiar way of facing the opposition. As ideal forms, values have no power to cause an impulsion or nullification. But, in the tension and actuality of the ethical relationship, a real power is seized by them and

is committed to an ideal tendency. The ideal tendency passes forthwith into the shaping of the real. Every ideal sphere is thus provided with a complete set of axioms, laws and highest principles. Existential categories of the real are themselves real categories. In the same way, knowledge as a special sphere of the relation of the real to the subject has its own principles. Values are principles in which we recognise the character of 'conditions of possibility' of those of the ethical phenomena. The material content of values in every connection detaches itself as something purely ideal. Its fulfilment in the real is not something necessitated by the content as a principle. Valuational discernment, always, and under all circumstances, regards the content as something beyond reality and actualisation. Values throughout are ideal self-existents; in so far as they are principles, they are from beginning to end only laws of the ethical ideal sphere. They do not play the rôle of ruling powers in the actual world as the categories do.

They are to be sharply marked off from categories. The choice which pertains to the moral law constitutes the basic strength and weakness of values together with its primary difference from categories. Values are weaker in influence than categories as they are not absolute unconditional despots carrying all before them. They are at the mercy of man who must lend his helping hand for their dwelling in reality. This power is not always at their disposal and when at their disposal it is an actual one. On another side, values are stronger than categories. Their actualisation must be done on a stable structure already at hand. They have to bear down all opposition, declare null and void all that is contrary to their nature. They must build on the categorical realities of acts, a new and higher formation. In a special sense values are creative principles bringing forth being out of non-being. The 'generatio ex nihil', impossible elsewhere, is just possible here. That is why, all normal values have a tendency to creative achievement. And in this inheres their essence. They are principles of the ethical sphere of action. This basic difference between valuational principles and categories constitutes the special essence of ethical phenomena. If values are as autocratic as categories, the moral worth of man is annulled. They would be simply existential categories of a higher order into which man is

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pitch-forked as a part of his ethical make up. In a word, ethics will be washed out in a peculiar form of Ontology. The tension between the real conduct of a person and the idea of the right conduct in which alone lies the ultimate meaning of ethics would be lost in naturalism. The possibility of conduct contrary to value gives values their chance of pressing forward into the real. Through the actional sphere, values succeed in moulding the real within the radius of human history. Values, despite their inability to compel obedience, are in their own way more insinuating and persistent forces than categories. They have an energy and power of their own and swing with tension to oppose categories. The categorical world already formed waits for the sure touch from their hands. With its co-ordinated frame-work of higher structures, it polishes the real according to its patterns of ideal essences and lends a glimmer of meaning to reality (vol. i, pp. 98, 232, 251).

OUGHT AND VALUE

Then, how does the 'Ought' come to be recognised in value? Hartmann seems to waver between two positions for an answer. Sometimes, he gives the impression that values are pure entities, and sometimes, he regards them as forces moulding the morals of man. He says that 'Value and the Ideal-ought-to-be are indissolubly bound up together' (vol. i, p. 248). The ideal-ought-to-be is the value's own mode of being. Thus, moral values are inseparable from the obligation to realise them. The obligation is only a claim and not a coercion. Moral values only ought-to-be. But, from this ideal ought-to-be intrinsic to value, the 'positive ought-to-be' is different. The ought-to-be proceeding from values becomes positive 'where the ideal finds itself in opposition to reality' (vol. i, p. 249). It then takes on a positive force. But, if an ideal power is to work in reality, it must find a point of support, a fulcrum in the real world. The empirical actual subject, as known in man, is the only carrier of values. The ideal power seizes hold of it, and through it, the ought-to-be is transformed into a real tendency. But, Hartmann does not like to minimise the glory of values. The ideal ought-to-be as such, is indifferent not only to the subject, but also to every other existent. The positive ought-to-be is not so, because it solicits the aid of the subject and

entrenches itself in reality. From this it appears, that the ought, and through it ultimately, value, by the help of the subject, determine reality. The personal subject is the being who senses values and launches them in ethical events. At the same time it must be noted, that the hands of the subject are not tied to follow values as ordinances. He is free in relation to the values he discerns. In a word, values entail only a moral claim which may be honoured or dishonoured (vol. i, pp. 159-61).

MAN AND VALUES

The character of values as principles has its ultimate fruition in man and man alone. The ethos of man is no mere ideal form. It is not a mere essence petering out into essentiality. Values, as principles of the moral world, break the bounds of self-existence and clutch at the fluctuating world of actual events. Ethics is not merely an abstract science of values. It is the educator of man's spontaneous living which awakens the sense of value. The aim of ethics is to guide man in his advance towards full self-direction. Between value and reality man is the liaison officer, the grand mediator. And, if he fails to do his job the creation of the world is incomplete. Man is depicted as 'the colleague of the demiurge in the creation of the world' (vol. i, p. 31). If man fails to play his part, the world process must remain for ever incomplete. His cosmic littleness need not deter him from aiming at his metaphysical glory. Humanity's microscopic space-time dimension is not the last word of our thought. Ethics is super-temporal. 'The ought' transcends the very experience wherein it arises. The dominant Ought is pregnant with the vision of value. Ethics is regarded as the 'midwifery' of moral consciousness, whereby its implicit norms are made influential. Incessant strife can be reconciled only within an expanding system of ends and values. Without this, we do not know what good and evil are. 'Every age carries in itself dark seeds of ideas and no age entirely comprehends itself.' The self-existence of values 'overlies the whole sphere of being'. The ethical ideal sphere is only grasped by a being who is capable of the feeling for values. Ethical, ideal self-existence denies the real that contradicts it and stamps its own marks on reality. Herein arises man's tense awareness of the 'ought'. The force of the ought is implicitly contained

in the character of values as principles. The 'ought' adheres to the essence of ethical values, and forces slowly its way to the foreground even when it is dissuaded. The ought signifies direction to something. The value signifies the something itself to which the direction points. The good conditions the direction. Value is the content of the 'ought', its categorical structure. The ideal ought to be is the formal condition of the value. The value is the material condition of the 'ought to be'. The positive ought occurs where the ideal finds itself in opposition to reality. The real may be indifferent to the ideal. But, the ideal is always concerned about the real. The 'positive ought to be' is not an 'ought to do'. For, not everything that is not, but 'ought to be', comes into the domain of striving. The 'positive ought to be' presupposes in a given situation, the non-being of what 'ought to be'. As such, it is possible only in a real self-existent world deviating from the constitution of what ought to be. Values assume the form of principles and seize hold of the world of moral acts and change its outlines profoundly. They can transform non-being into being through man's unique position as the miracle of ethical phenomena. Man is a world-creator in little. Divinity as it were, leaves its cosmic throne and dwells in the will of man. Alone, among all the species of living beings, man only has the status of a teleological power. Hartmann takes care to reject cosmic teleology, which, in his opinion, would degrade man and destroy his dignity. In the upholding of the moral uniqueness of man he is second to none. Ethics is the training of man for his world-vocation, the demand upon him to be 'a colleague of God'. In any situation, what is at stake is always man and his power. He can lose it through folly or gamble it away. Hartmann rejects both the metaphysical personalism of Scheler and the 'as if' of Kant. For ethics as such, man singly alone is the moral being. The real ethical world is not that only of the moral subject with his acts. His loving creations and self-perpetuating works also came under its purview. Man widens and his moral nature expands as he participates in the valuational fullness of life. The clue to human existence is to be sought in man's proud vocation as the builder and fashioner of this world. As the mirror of being, he is the world's meaning. The sense of value must be awakened, the

grasp of it sharpened and refined for a fuller comprehension of life. 'The apathy of feeling for values bears on its brow the stamp of inner misery.' Life at hand always surrounds us with its munificence. 'The tragedy of man is always that of one, who, sitting at a well laden table is hungry, but who will not reach out his hand because he does not see what is before him.' The real world is one that is full and inexhaustible (vol. i, pp. 27-44, 37, 39). And then why go empty away without running riot in the splendours of its inexhaustible material?

VALUE THEORIES

Before going into a critical estimate of the work, it is worth keeping in mind some prominent value theories in the field today. Many believe since Plato that values are objective to human beings and are a character of ultimate reality. The position of the theistic tradition with regard to values may be summed up as follows. The real world is a world of values. Any faith in God is confirmed by all rightly interpreted experience that the values of goodness, beauty and truth are of supreme importance in the cosmos. God in fact is the source of them. Value theories may be roughly classified as naturalistic and non-naturalistic. The naturalistic theories resolve ethical characteristics without remainder into non-ethical. The non-naturalistic theories hold that value is an addition to the non-ethical qualities and their combinations. For instance, Prof. Alexander speaks of value as 'A tertiary quality'. G. E. Moore regards value as a non-natural unanalysable quality. In general, subjectivistic theories of value define it in relation to mental states which do not give us their objective reality. Objectivistic theories convert logical realism into ethical realism and confer on values an objective, epistemological status. The weakness of all subjective theories consists in their failure to distinguish between the peculiar quality of moral obligation in contrast to mere desires. The resulting relativism is fatal to ethics. Such theories are clearly outside the pale of validity which is vital to axiology. Social theories of value cross ethical relativity by going beyond the individual and placing the ethical norms in the good of the group. But how can even this give us an ought? To say that a thing is socially good is not the

same thing as saying that we ought to do it. Hartmann's ethics comes under the objective theories of value. Mr. Moore is the best British exponent of the same. To both values are super-temporal, timeless and transcendental. With this brief conspectus of ethical theories we can pass on to a criticism of Hartmann's ethics.

PART II

A CRITIQUE OF ETHICAL REALISM

I

Hartmann launches the first systematic and comprehensive statement of the ethics of realism. It is an impressive piece of scholarship with a grace of doing that deserves to be ranked as a classic. Everything about it is admirable except its lack of ultimate cohesion. It is a mathematically grounded ethics predetermined from being 'corrupted by philosophy'. But, by a sort of dramatic irony, the author slips step by step into speculations that ultimately poach on the preserves of metaphysics. In the end, the book gives us the impression of a work unfinished, and an adventure put off before its logical terminus. Absolute self-existence of values is the salient theme. Values are conserved, not because an omnipotent God sees to it that they are safe, nor because the Universe is such that they can hardly be missed, but because they are eternal and absolute in themselves. They have their headquarters in the realm of subsistence, where there is no variableness or shadow of turning. Moore gave the clearest exposition of this view before Hartmann. He believes that the good exists in spite of the non-existence of everything else and holds that for a thing to possess intrinsic value, means to possess a character which it would have in a world in which even causal laws are different from our own. Hartmann goes to the length of equating the moral proposition that 'a breach of trust is revolting' with the mathematical truth $a^0=1$. By the special standpoint he adopts, he places values beyond all the stars. This self-existent isolation in his view confers on values the dignity of immutable verities. Then, he holds, ethics would have a solid foothold in a changing world. Though the attempt is remarkable, the result in the end is not convincing.

1. To begin with, Realism in Ethics repeats the errors of Realism in Logic. It throws no light on the problems broached by Ethics. It defines the nature, locus and structure of the good, much in the same way as it does an external object. If Dualistic Realism is a false view in Logic, there is no need to accept it as true in Ethics. The pure percipient and the object perceived are abstractions that are set up beyond experience. It is wrong to isolate a part of experience and deem it as an absolute existent. The mind is not like a tiny switch, which when turned throws a flood of light on the external object in the act of knowing. The real is once for all a whole. Our world of experience is a concrete articulation in it. The mind cannot have its 'nose up against things'. The Percipient cannot go out of himself to saunter into a world totally strange to his essence. Two absolutely disparate realms of being can never hang together in a perpetual act of communication. The mind supplies what the world lacks and breathes into it ideal contents that are not merely personal sentiments. The Realist leaves the world as a brute fact. The Idealist looks at its value aspect and concludes that it is not a chapter of accidents, nor a haphazard heap of things and thoughts outside the divine sweep and its partly intelligible and partly unintelligible ends. He comprehends facts under the standpoints of values and thus transcends the Dualisms that the Realist perpetuates.

2. Hartmann assigns only a subsistential reality to moral propositions. Subsistence is used to describe the being that belongs to propositions. Facts and mental processes are said to exist rather than subsist. The Realist theory tries to convince us that fantastic and impossible objects of thought such as unicorns, round squares, Alice's tea party with the March Hare and the Mad Hatter, have an independent being. Russell, once an exponent of this realism gave it up declaring: 'Logic, I should maintain must no more admit a unicorn than Zoology can' (*An Introduction to Mathematical Philosophy*, p. 169). This logical error persists in the ethical outlook of realism. Is it possible to turn propositions into self-subsistent entities? The Conceptualists like Kant believe that propositions have their reality in a mental act of conceiving or meaning. Without this they have no being even so thin as subsistence. One

can distinguish propositions as objects of thought from thinking itself and yet hold that there could be no such objects without thought or no thought without such objects, just as one might distinguish the size from the shape of a physical object and yet know that there could be no size without shape or shape without size. The Realist believes that the immutability of truth demands the self-subsistence of logical and mathematical entities. In a word, before mind was, truth is. Thus all propositions are locked up in reality to be discovered by the various sciences. The Conceptualist holds that this is a desperate attempt at turning abstractions into realities. Mind is the vehicle, the all-inclusive medium in which the propositions dwell together in their eternity and immutability. Without this assumption, explanation fails. If the values are immaterial, supersensible entities, how can they interact with gross physical bodies? If true being is ascribed to what we speak of as the good, the just, the true and the beautiful, the question arises, can the empirical man be one thing, and that in him which stands for goodness, justice, truth be another thing, existing absolutely and yet inseparable from him? Are both forms—the material and the ideal—actually and truly existent realities, the one apprehended by sense perception and the other not so, but nevertheless really subsistent? If the values are to be understood they must be somehow fixed in the nature of things, whose nature also is unchangeable. This means that they are rooted in reality as an eternal order of rightness and wrongness. The Realist mistakes a word for the thing itself. The Platonic flaw consisted in the simple act of attributing substantial reality to our general notions and ideas. To attribute substantial being to common relations in which existence is exhibited is a fallacy. It would be truer to regard being itself as the expression of the union of matter and form which are coeval and co-ordinate. They are distinguishable but never divisible like the word and its meaning. That is the reason why values can never be regarded as neutral, simple, quality-less essences. They are vibrant with life and concrete with force. The death of Socrates, the crucifixion of Christ and the episode of Bruno clearly indicate their power in history.

3. The whole ethics of Hartmann stands or falls with the

notion of the material a priori. The a priori self-existence of values and the intuitive character of our moral perceptions are assumed as self-evident. Though phenomenological method is everything in Value-ethics, it is regrettable that Hartmann has not added any note on it. If the phenomenological essences are given immediately and intuitively, the ethics of Hartmann differs very little from intuitive ethics. Nor has he made clear the notion of the essential, the phenomenal and the a priori. He only says that the a priori is something self-given and not a function of the subject. Subjectivistic and functionalistic a priorism is a confusion and a misunderstanding of the originally objective character of everything knowable a priori (vol. i, p. 164). The values themselves as objects of a prioristic insight pertain to the subject matter and not to the subjective form of the ethical consciousness (vol. i, p. 169). This is intuited through a special mode of apprehension capable of experiencing unities or totalities of meaning as facts of an essential or phenomenal order. That is to say, the essences cannot be seized by any reflective thought but must only be sensed in the valuational feeling. Value-ethics is thus primarily based on valuational feeling. This is a roundabout way of saying that the ethical phenomenon is a subject of pure intuition. The difficulty is, on principle, it can neither be proved nor disproved. There is no way in which either the existence of the intrinsic value or the intuition of it, in any given case, may be tested or verified. Even supposing that we have intuited a particular value, it proves no necessary connection between the intuited quality of value and the moral obligation which is a peculiar power in the human conscience. If values are simple subsistences, they serve only as objects of aesthetic contemplation. But, for morality, they must signify an 'ought'. The 'ought' element is the concrete force which installs value in existence. This means that the 'ought' is to be regarded as a further intuition intuited on the intuition of a value. This will reduce ethics as the outcome of a process of three distinct intuitions :—

- (a) There should be an ineffable transcendental quality of value.
- (b) Any given case should be intuited as an instance of that.

- (c) A connection must be established between such a quality and moral obligation through a final intuition.

This will only lead to a needless multiplication of intuitions for a simple act of conscience which commands in an imperative mood to do or not to do a particular thing, in all known cases of moral conflict. This is the 'moral law within' which Kant set off against 'the starry heavens above' in the same act of wonder.

4. The valuational *a priori* of which Hartmann speaks is only a feeling. In this respect it is surprisingly close to the Intuitionist school of ethics. But the question is: is the consciousness of right and wrong really knowledge at all or merely a kind of feeling. If one identifies it with any kind of feeling, it may ultimately involve the total destruction of its objective character. Feelings, as Sidgwick put it, vary from A to B without either being in error. On this account, it is better to use the term 'reason', as he suggests, to denote the faculty of moral cognition. If mere feelings are the informants of moral judgments, they represent nothing more than our likes and dislikes. Then, how can there be objective truth about matters of right and wrong? That is why Sidgwick maintained that the moral faculty is rational. The moral side of our nature belongs to the intellectual part of life rather than the merely emotional one. The mere distinctiveness of a feeling cannot give it superiority over other feelings. If ethics is based on feelings, morality will only mean what I feel about my conduct, or more correctly what others feel about my conduct. Conscious reflection always adds its value to any given point of moral tension. The question then concerns not so much the existence of any self-evident propositions as their ultimate validity. Hartmann may intuit the moral principle: 'Telling lies is bad'. The question is, 'how are we to settle the matter when we begin to doubt this in a given case?' The doubt also, it must be admitted, is as intuitive as the principle doubted. Thus, ought I to speak the truth to a deliberate assassin? What light does Hartmann's Ethics throw on this? If moral intuitions are so self-evident, how can he account for variety and contradictions in them? To the ancient Spartan, stealing was a virtuous act, to the medieval Christian, religious

persecution was a duty. In these two instances, they relied only on what they deemed to be self-evident intuitions. The fact is, moral propositions actually collide with one another and Hartmann himself admits final antinomies in the realm of values. The precepts of humanity may go counter to those of veracity. It seems self-evident that I ought to speak the truth at the cost of life or save a life at the cost of a lie. What am I to do when I can only speak the truth at the cost of life or save a life at the cost of a lie? No expedient so far imaginable can resolve these antinomies in moral life. In most moral matters there is an elaborate process of reasoning ending in a personal commitment. Immediate self-evident guidance is missing even in apparently simple cases of love and hatred. The moral feeling unless grounded in reason will be arbitrary. A rational moral sense with conscience in the chair, cannot neglect consequences on which the Utilitarians laid so much stress. Where conscience is satisfied, the case always turns out to be the best under the circumstances. Few people will agree with Kant as to the duty of disclosing to a deliberate assassin the whereabouts of his intended victim, if the truth can be suppressed by a lie. What is a moral act without its consequences? If a lie turns out to be the saviour of humanity, there is no point in asking it to seek the truth which may be a disvalue after all. Behind moral values, there is always a consciousness of consequences, by virtue of which alone, acts are, in general, regarded as good or bad. If from the moral act all the consequences it involves are abstracted, it is only a simple event irrelevant for moral purposes. The Valuational *a priori* loses its worth if it is only a way of feeling towards things. The real moral reason is a way of conscience with an awareness of consequences. There is no point in asking a man to go dry if drunkenness does not make him thick in speech, unsteady in gait and irrelevant in talk. Even in bad cases of moral turpitude, we do not find—on principle of course, the self-evidence required. For example, mankind has established a convention that lawful killing is no murder, and that compulsory taxation is no robbery. Here language plays us false. But how can any sort of killing or compulsory relieving of lawful property be removed from the category of murder or robbery? On purely theoretical grounds, there is hardly a case

in which our intuitions can give us an unmistakable lead without the aid of reason, which always insinuates the idea of well-being into a moral situation. Reason is the divine element in man, and an intuition that is not grounded in it rings false. An ethic that regards it as secondary tends to be self-centred. There is a danger in the new ethics. It has a disdain for the more positivist philosophies of August Comte and John Stuart Mill based on principles of benevolence and sympathy. A priori ethics is right in holding that our moral values are ultimate and un-analysable intuitions. But it is totally wrong in bringing to bear the a priori scale alone without any reference to consequences of an act, which is as important a feature of moral life as intuitional discernment. Eudaemonism is right in insisting on this part of the ethical life. It only erred in identifying the good with happiness though happiness is a distinct component in the good. Thus, an ethics of conscience with a concern for consequences, on the broad basis of universal welfare will give the rational checking needed for any one-sidedness of outlook.

5. When we begin to doubt the so-called self-evident propositions in ethics, the force of Hartmann's contention weakens. What is the meaning of saying that the ethical values have the same ontological status as mathematical or logical truths? Take his examples. 'A breach of confidence is revolting'. 'To gloat over another's misfortune is contemptible.' Now, a logical truth is a truth the denial of which is unintelligible. We cannot deny the same in one breath and talk sense in another. But do ethical propositions bear this mark? That a breach of confidence is revolting or to gloat over another's misfortune is contemptible are not self-contradictory propositions. Ethical life lies only in the violation of such rules, perhaps in the presence of principles which are more imperative. Often ethical life arises in a tense conflict between values which have the same unconditional claim. Hence, the view that ethics has the same ideal status as logic is false. The case is much more unfavourable when compared with mathematics. Take a class of six students. If a sum be given for answer to them, all will admit that only one answer can be correct. The six boys cannot give six answers and maintain that all the different answers are right. But in ethics,

the same question may be put, for which, different answers may be returned. Suppose Hartmann is interviewed by a Press representative and asked the question: 'Is Hitler right in getting rid of the lives of certain ring-leaders to save Germany in good time?' To be sure, his phenomenological intuitions do not throw any light on the point that can be regarded as self-evident. After a deep deliberation, he may give an answer which plainly leaves room for other alternatives. The fact is, moral life has an objectivity peculiar to it which runs concurrently with an incurable relativism. Ethics is not of the same stuff as mathematics or logic. The objectivity involved in it is of a different sort. The relationship between moral life and communal well-being is very close. Our blood boils when injustice is done. We crave for retribution when we are wronged. The best of us only want a tooth for a tooth and nail for a nail when we are needlessly hurt. Our moral energies are roused at the sight of injustice, cruelty and disgrace. An act of kindness is universally applauded. Moral life consists in guiding these primitive feelings in the light of reason. Moral life itself contains a hint of the primordial constitution of the world in which the moral agent lives and against which transgression may amount to moral ruin. All the moral values have their locus neither in the heavens above nor in the earth below, but in the human heart which speaks with the double voice of conscience and reason. Values have their roots in a reality in which man also participates. Morality is a form of cosmic well-being, a tendency for balance, synthesis and wholeness at the core of all being. What Schopenhauer calls 'Sympathy' is the chief source of it.

6. Ethical realism holds and implies that ethical consciousness is an epi-phenomenon. The reality of ethical values is neither qualified, modified nor determined by human or divine consciousness. This is a short-sighted mishandling of the problem involved. If we can conceive of a world totally rid of consciousness—the most impossible thing of course—where is the distinction between 'higher' and 'lower'? It is only in and through consciousness that existence is uttered as a value. In a world in which all the lights are gone, A cannot be distinguished from B, nor B from the rest. The mind—some mind—holds the rules-book of the play. The actuality

of value itself is prehended only by a mind. The world of fact is an actualisation of one of the countless possible patterns of values that exist in a being prior to everything else. To divorce ethical consciousness from ethical reality is again an error which makes no meaning.

7. Hartmann places values beyond the glory of the earth. They simply hang in the air because they are rooted neither in consciousness nor in existence. They are transcendental beacons that dread the mortal touch of man and time. If so, how are they manifested in time and in the actual lives of *A* and *B*? Are they mere possibilities? If they are possibilities, how do they become actual? If they are mere essences, how can they become existents? These difficulties being obvious, one has to admit that the actual world itself is the meeting point of value and fact which are organically related. The existence or non-existence of the world and its inhabitants makes a profound difference to the content of values. If values are cut adrift from the actual world, they die a lonely death until resurrected by a human or divine mind. Existence is significantly comprehended under value. As such, a value in itself, for itself, and to itself, has no value for ethical purposes. When we ask, what are the things that are good and is there anything that has intrinsic value, Hartmann gives us the whole realm of values as having absolute worth. But this cannot be. All the values scheduled in part 2 need not necessarily possess intrinsic worth. If a man shows fine courage and firm love, what is it that is meant by calling these values absolute? This is a mistake. He assumes that all values have intrinsic worth. What is good is what is good for something or some one. It is only by subsequent reference that we come to recognise that such mediate goods must have reference to some ends to which they are means. And so, we are, by a process of deliberate reflection, led to the conception of some good, which is not instrumental but is valued purely for its own sake. There can be only one such value. Most of the values outlined in the book have only instrumental worth. The fact is, what is good first signifies a means to some desired or desirable end. Ultimately, it leads to the ideal itself implied in all desiring and as such the wholly desirable. This, we call, the supreme good, which Hartmann has no right to set aside. The highest wisdom of life lies in the

pursuit of the ideal or the highest value, at the gates of which all the auxiliary values should be thrown up. This aspect Hartmann has not brought out.

8. There is a fundamental mistake in the very conception of value Hartmann presents. Values are neither conative drives nor lures of feeling to him, but simple ontological subsistents that somehow pull the strings from afar. This is wrong. Desire is the most vital ingredient in every value-situation and without it nothing has a value. In a typical value-situation three factors are witnessed:—

(1) A thing that is valued, (2) the subject that values; (3) the relation between the two, which itself is what is meant by value. To cut out two items in the complex and set up one of them as absolute is a piece of illogical thinking. If these elements go to make up a value-situation, then values would be no longer transcendental entities, but just real relations that are found in real situations. We cannot separate value from desire because it is the nature of the human mind itself to exercise acts of preference, to declare for or against. As such, value can only be a relation between the ontological world and a desiring subject. About values which function in a vacuum we know next to nothing. Any object, any situation or any event has no value until it is desired. That is why when we speak of a thing as good we also put the question, good for what or good for whom? Theoretically, every object, perhaps has an intrinsic value which pertains to the object as such and a value it has for an appraising subject. But what the worth of an object is, in and for itself, no one can ever know. It would be in the same metaphysical position as thing-in-itself. At least for human purposes, values have their worth through the desire which precedes them. But, if the character of values is such that all people desire them, then, there will be no point in saying that we ought to desire them. We value things related to some one or another, though, this relatedness does not lead to subjectivity. In all our doings, we do not stand off from the main stream of life and enjoy a contemplative spree. In every valuation, we are coming into vital touch with events that are falling into personal points of view, at the back of which the energies of desire are ready to hand. The whole problem of the relation between

desire and value has not received due consideration from Hartmann.

9. Hartmann's ethics is tinged with a high degree of egocentricism, as is evidenced by his radical restriction of teleology to man and the denial of the divine hand. In the whole world, to him, neither God nor nature counts but only man. Alone among all entities, he has the proud privilege of value-sensing. If this is the case, all other creatures except man should miss the value of being. This would mean, there is no worth in being outside man. This is a mistake which amounts to megalomania. The whole of existence is set round an axiological framework embracing different grades of being ranging in different degrees of evolutions. We can only be misled by paths of technical scholarship if it lacks a synoptic vision, a mastery of the whole in idea. All reality is a synthetic unity. At any focal point, it is only an organisation of its minutiae with the power of interpenetration. Nature, God, space-time are simple isolates from a primordial matrix laden with the riches of possibility, actuality and necessity. Man is not the only being, disengaged from his organic interconnections. There are refinements, subtleties, beauty spots, depths of comedy and tragedy within this being, accessible to different grades of insight. Real being is a fabulous plenitude of ideas, sensations, feelings and dramatic episodes shot through with meaning. Our ideas of this being are as varied as our contacts with it. There are wholes within wholes, parts within parts, and spheres within spheres, each with its own globe of values and desires accessible to some grade of living agents or other. In a broad sense, we are all different aspects of one grand enterprise of the divine mind. Even at the low animal level, there are flashes of aesthetic insight, noble feeling and maternal affection. The song of the nightingale is an expression of some elemental value that is felt at the core of its being. Man also, is of a piece with the whole of nature, which word has never been understood by many philosophers. In human beings, the various modes of functioning display a variety of adaptation to special subtleties of circumstance. They are only more complex, interwoven and meaningful. To make man the hub of the universe is to lose the sense of proportion needed to keep a firm hold on life as a whole. Too much concern about ourselves only makes

us more ridiculous in our own eyes. And for the objectivity of ethics, it is not necessary to deny the worth of all except man. All life is impregnated with the principle of value as the prius of the world order.

10. Finally we have to face the ancient feud between Idealism and Realism. It is a mistake to regard Idealism as the deduction of the world from certain a priori principles. All idealism is only a criticism of life and an interpretation of experience through a scale of values. All theories of explanation must be ultimately framed only on its broad basis. The mind longs for ideal completeness and ultimate coherence. A story that does not give it is felt as false. If Hartmann puts the question why, we can only answer 'because it is a priori'. Just as there is an Ethical a priori, there is an 'Idealistic a priori' working at the bottom of all enquiries which Phenomenology has to take note of. Idealism is not committed to the theory that values are made by us. It only presents the case for a more thorough-going relationship between the realms of value and fact. Realism does not believe that spiritual values have a determining vote in the constitution of the universe as organising principles. Man accidentally happens to realise values that are discovered by him, because he cannot help it. His existence or non-existence, as such, makes no difference to these immutable essences. They go on with the game even when the players fall asleep. On this view, whatever connection there is between value and fact, is only a chance coincidence. Some gigantic fluke occasions their contact and as soon as they come together, they happen to work as if by a pre-established harmony. The question is, even if some chance were to bring them together, how can it generate the 'ought' or moral obligation with which the whole science of ethics stands or falls. The Idealist eschews chance and establishes a more rational relation between values, the valuing agents, and the theatre in which these operate. Health, virtue and courage are not values in the abstract. Only the healthy person, the virtuous conduct and courageous deed are valuable. Idealism is the sworn foe of all abstractions. The Realist does not believe in the concretion of values in a consciousness. The Idealist cannot conceive of them as otherwise. The fact is simple to understand. When we put the question

'what is it that has value?' one has to admit that it is after all certain states of consciousness and nothing else. The artist, the poet and the philosopher are only capturing certain phases of consciousness that are of absolute value. If consciousness is abstracted from the process what is it that remains? There can be no enjoyment *per se* existing in *abstracto*, out of touch with personal consciousness.

Throughout the masterly survey of the subject, the motif of Hartmann's research is an unmistakable search for a centre as a stable background for civilisation. He finds Theism inadequate and realises the meaning of life in the worship of eternal values. In admitting that in spite of everything changing, there is something which does not change, he has gone half way to meet the idealistic thesis. This shows how imperative is the need of grasping the permanent element in life as the one that remains in the midst of mutations. A mere *a priori* ethics, however, cannot set right the balance in an age when everything has failed to stir us to new enthusiasms. The hiatus it creates between fact and value is fatal to its ultimate cohesion. The attempt to pose an ethics without the strength of metaphysics and Theology, though not unsuccessful in theory, cannot be regarded as of much positive use in the end. The greatest ethical dynamic of life is that which issues from the conviction that virtue wins at last and the good triumphs. He who does not feel this is an utter stranger to the real strength of a great personality. It is not mere sympathy with values or their *a priori* intuition, but full faith in their efficacy as spiritual principles that can save us. Goodness may be perfectly good but if it lacks power, goodness will only mean little more than an ultimate irony fit for scathing satire. It is the union of goodness with power that can ever hope to inspire the spirit of man. To buy relief from a theoretical difficulty by the complete elimination of the absolute in ethics is no compliment to it. It can only undermine its foundations in the long run and corrupt an entirety of outlook with a fatal scepticism. A theistic pattern always helps the moral life and puts heart and hope in human endeavour. When we set up relations with it, we feel new strength and courage in facing the tasks of life. God somehow touches our universe of discourse as a persistent fact in self-consciousness. The idea is all important, though, we do

not know wherefrom we got it. To reckon without it is to impose a serious limitation on the natural course of ethical life itself, though it is by no means, a postulate of ethics.

II

PROBLEMS UNSOLVED

1. The inalienable quality of values in ethical realism is their eternity. The new faith in values takes the place of the old faith in a heaven. The glory of man is overshadowed by the superior character of the values he discerns. Man's highest values are to be fulfilled here and here alone. Goodness, truth, beauty and love have their expectations here, in this planet. In reaching these ideals, man's highest dreams are realised. This is a mood of ethical optimism, a modern counterblast to the philosophy of Schopenhauer. On principle, it is always possible to challenge cosmic optimism by disclosing the reverse side. Not all the conquests of science can ensure for man more than a brief spell of enchantment. Within the period of actual birth and actual death, if we eliminate, all the hours that we spend in sleeping and securing the elemental needs of existence, the period that remains over for the preliminary task of getting rid of our deep-rooted prejudices against the good life itself, is comparatively negligible. Even the most fortunate man on this planet, and under the present conditions of civilised human life, cannot aspire, for anything more than a limited realisation of his ideals, which only produces unlimited discontent, for the part yet to be accomplished. Even a round of lives is too little to give us deep insight into the highest values here. One of the telling ironies of life is, that, just when we are about to settle down into some sort of convictions, we are removed from the scene against our will. What the wisdom of an ant seriously puts together, the wind of an accident wafts away in the twinkle of an eye. Then, does not the highest wisdom consist in living like the cow grazing on the green pastures or the gymnosophists of a forgotten civilisation, with a generous contempt for all effort and a large pity for great passions? At last, we see the signs of decay, and succumb to the fun that the molecules of our body poked at us for a time. Beauty ends with youth. The good life is a tragedy of high

intentions self-defeated or the vanities of a race of mortals who pay their last adoration to Seraphius, the God of Death. A. E. gives us some fine lines on this aspect of sadness evident in the good life.

'The flame of beauty far in space—
Where rose the fire: in Thee? in me?
Which bound the elemental race.
To adoration silently?'
'Ah! but they vanish; the
Immortal train laden with adoration,
Forth from this heart the flow that all in vain
Would stay the proud eternal powers that flee
After the chase in burning exaltation.'

It is the values and not the valuers that are eternal after all. If this is the last word of our life there is a downright vanity in all our aspirations. All our 'isms' and 'ologies' are but tales imagined to amuse our eternal childishness, perhaps,—who knows—we divert ourselves with values as we do with the stories of the ass, the tub, or the Decameron. Life is short and art is long. Values are shy angels that charm us in our golden moments and leave us to our fate after getting their recognition. On Hartmann's view, in technical parlance, the alleged eternity of values is not descriptively or phenomenologically identical with the immortality of the cognising self. The new ethics suppresses the eternity of the self to supply permanence to values. But, do values subsist outside the real nature of the self? Hartmann has not at all given a convincing metaphysical account of the self, on the validity of which alone, a scientific ethics can be planned. The eternity of the self must be postulated along with the eternity of values to complete the conditions demanded by the moral science. Values are the rock-bottom of the self, which is the source of all essences.

2. Hartmann has not reviewed his main point in all its bearings. If abstract universals are not simple 'as ifs', how can they be real except as the manifestations of the supreme spirit? Ethical realism requires a theistic basis for its materials to be overlaid. Moral life is intelligible only on the postulate of moral perfection by virtue of the significant order permeating the universe. A healthy faith in the general integrity of the cosmos and of man's fundamental ontological demands

is the great step needed to ward off scepticism in the ethical undertaking. The theists expressed this basic faith in terms of God, the naturalists in terms of instinct and the mystics in terms of the absolute. Without an initiation into this sacred act of primordial mysticism, the sets of premises that follow lack the distinctive tang of truth. Wonder continues to be the worship of wisdom also, because even the greatest man of Athens said that he knew nothing. Though the work of Hartmann is the most important ethical pronouncement of the century, its philosophical idiom fails to deliver the valid viewpoint.

III

THE CONTEMPORARY MOOD AND THE SIGNIFICANCE OF THE NEW ETHICS

Today, a generation is growing to maturity, which, to all intents and purposes, is drifting in a vacuum. The educated world finds it impossible to accept the old world view of religion. A time has come when talk of religion is done with a blush. Value is the new God which is commissioned to fill the void caused by the passing away of the old Gods. During the past three decades, a great deal of literature has appeared on the subject of value. Time is not yet ripe for the final computation of its worth, but there is no doubt that it has become the key-word of progressive thought. The exchange of the term value for the good is the signal of the general movement in thought towards a 'thickening up' of the categories. As Prof. Urban put it 'the new orientation in value releases us from all those inhibitions which arise from narrow and ex-parte definitions of reality and truth and that sets free the deeper intuitions of the soul' (*Intelligible World*, p. 177). Hartmann is not a follower of the 'Great Tradition', though to him, values are eternal. He keeps his exposition within bounds of reckonings that are borne out by ethical consciousness. He discountenances the religious underpinnings of neo-Platonism and Christianity alike in the interests of the ethical argument. He accomplishes his enterprise with evident fullness of knowledge and mastery over materials. It is a really complete and systematic setting forth in fine literary form—thanks to the noble exertions of Dr. Stanton Coit—of the ethics of realism.

Nietzsche was the first to make the momentous call for the transvaluation of values and explode the myth of the tree of knowledge. The myth of the tree is the point around which centred the traditional ethics of western Christianity. Nietzsche disclosed its startling inaccuracy and made the clear discovery (1) that values are many, and (2) that we know neither the entire manifoldness nor its unity. The prophecy of the serpent is the great deception. Even today, man does not know good and evil. But Nietzsche went beyond limits in his craving for the morality of power and beauty which ultimately upset his discovery with an incurable relativism. All the same, the discovery is epoch-making and gave its present turn to ethics. He has once for all shown that the metaphysics of morals has lacked the foundation which is the phenomenology of values or axiology of morals, which is the first and chief concern of ethics. The realm of values contains the secret of good and evil. Not until we know it as a whole can we know it in parts. The real fruit of the tree of knowledge can only be tasted after we know its manifoldness and fulness. But, in this piece of discovery, Nietzsche overshot the mark. His notion of transvaluation implies the relativism of values which undoes his work. He failed in the joy of his new discovery to see that value is a fresh field of being exposed to view calling forth a critical sifting of ethical contents. The task of the new ethics is to achieve a synthesis of the two fundamental concepts which historically grew up in sharp contrast, the Kantian a priority of the moral law and the original manifoldness of moral values. A reunion of these factors and a rediscovery of their inherent connection is the outstanding merit of the new ethics. It gives back to ethical a priorism its original richness of content and sets up the authenticity of the primal consciousness of value as the very foundation of the ethical science. The work is inspired by a critical spirit and offers a religion without God. The disposition of the time is curiously confused; it is a compound of feverish restlessness and blunted discouragement, a fearful presage and hang-dog renunciation. There is neither depth nor insight in our pursuit and we are overtaken by an uncanny feeling that our whole modern life has missed its meaning. The tranquillity and love of contemplation that characterise the moral beauty of a nobler life are lost. We are living neither a life of select

sensations nor of noble thoughts. Our meditative power has become shallow through a craze for 'nonstop' sensations. We are restless, precipitate, dull and blasé and have lost the genius to be astonished. We have 'grown up in a somewhat false alienation from light and beauty. Ere we are half way through our adventure, we have an ironical smile for the life before. When we cultivate the pose of resignation in the wake of this defeatism, as a virtue we put the fool's cap on this great irony. What can Hartmann's ethics tell us in this age of grim humour? The question is natural, because the book is pretentious under cover of modesty. Though many ethical questions are left out unsolved, the major thesis of Hartmann, after all, seems to be the only intelligible alternative to civilisation, if it is to reject religion at all. He has embarked on a renaissance of the great ethical tradition of ancient Greece and the modern Christian world to stir an age of prose and common sense to the heights of moral beauty. Why set the heart in our limited toy-world and its transitory prizes? The real world around is a kingdom of values outside all the municipal limits, rich, affluent and replete with glory. An awakening of the sense of value is the only way of reviving the classic taste in the life around. The esoteric wisdom that forms the gate-way to moral beauty enables us to enter vividly into life and relish to the full all the delicacies of its intercourse. We are today caught up in an atmosphere of crisis faced with an existence so gaudy and overdone, and yet, so intolerably empty. The best spirits of the age are only brooding over a world's disillusion. Can the sense of value give us the light? The philosophical ethics of today stands at the parting of the ways between the old and new kind of philosophising and is taking the first initiative in the rediscovery of the forgotten realm of value once sighted by Plato. Its goal is noble and is animated by a new kind of love and devotion for the task on hand, though, its enthusiasm, in the end, is diluted to the point of an ultimate disappointment. The idealism of the new ethics has lost a good deal in its failure to raise the moral argument to its logical height. In ruling out religion from its range, Hartmann spoiled its lasting appeal. Everything is admirable in the work except its Philosophical settings. A well-rounded ethos settled in religious and aesthetic culture is the very pink of good taste

in its most finished form. Hartmann has not carried the moral argument to this height of beauty. But, with all its great faults, it is one sober, high and grand way of thinking that is bound to exercise a signal influence over the future of ethical research.

(To be continued)

UNIVERSITY NOTES

History of the Tamil Lexicon

DR. G. U. POPE had correlated Winslow's Dictionary of the Tamil Language with Rottler's Dictionary and added notes of his own to both those works ; and after his death, the Rev. J. S. Chandler, M.A., D.D., proposed, in January 1911, to the Government of Madras, the publication of a Standard Tamil Lexicon based on the material left behind by Dr. G. U. Pope. The total cost of the production was estimated at Rs. 1,00,000 ; and the work was expected to take five years. This proposal was approved by the Government of Madras ; and at their instance, the Government of India addressed the Secretary of State recommending the sanction of the expenditure on the ground that the need for a new Tamil Lexicon was a 'matter of urgent public importance.' The Secretary of State for India cabled on the 21st August, 1912, according his sanction to the proposed expenditure. General control and supervision of the preparation and the publication of the Tamil Lexicon was entrusted to the University of Madras. The Syndicate of the University constituted a Committee of its own for this purpose, besides the Tamil Lexicon Committee constituted by the local Government.

The work of the Tamil Lexicon Committee was begun in January 1913, at Madura. The Editorial staff consisted of the Rev. J. S. Chandler, the Chairman of the Committee, and three pandits. An additional pandit was appointed in 1915. The office of the Tamil Lexicon Committee was removed to Madras in May 1915.

The Tamil Lexicon Committee discussed the plan of the Lexicon ; and a few specimen pages were printed and circulated to leading scholars for their opinion and suggestions. The discussions related mainly to the necessity for and the mode of transliteration, the giving of derivations and cognate Dravidian words, the arrangement of meanings of words and of compound words, and the treatment of homonyms. It was decided that the Lexicon should be more or less encyclopaedic in character, helpful also to Tamil scholars who had little or no acquaintance with English, that it should bring out the philological affinities of Tamil with other languages and that it should be an accurate, complete and up-to-date dictionary, including the words used in spoken Tamil.

In the meantime, the collection of words for incorporation in the Lexicon was being pushed on by the Editorial staff; the Tamil public were invited to co-operate and several gentlemen sent in collections of words. Expert advice was obtained from specially qualified scholars, who acted as Honorary Literary Associates. The Rev. J. S. Chandler, the Editor, visited Jaffna for the purpose of collecting and defining accurately Tamil nautical terms and local words in use in Ceylon. When he went to America on furlough, he consulted several authorities including those who were connected with the great Oxford New English Dictionary. The collection of words was completed by the end of 1916 and it was about 82,000. Out of this collection, nearly 8,800 words were edited and made ready for being sent to the press.

At this stage, the Syndicate of the University reviewed the position, and examined the collection of edited words. It felt that if the Lexicon was completed on those lines and with the existing staff, it might not come up to the required standard and that it would surely disappoint both the student of Tamil literature who seeks in it for a full account and accurate definition of Tamil words and the student of language who looks to the dictionary for scholarly information on the sound value, origin and relationship of those words. The Syndicate felt the need for strengthening the Editorial staff; and it also felt that if the University should be held responsible for the Lexicon, its powers and responsibilities in relation to the Lexicon Committee and its Chairman the Editor should be clearly defined.

Thereupon, the Government of Madras threw all further financial responsibility on the University, empowering it from time to time to appropriate necessary sums from the recurring grants; and replaced the then Lexicon Committee by a new Committee with Sir P. S. Sivaswami Aiyar, K.C.S.I., C.I.E., as Chairman to function under the control of the Syndicate.

In 1919, Sir P. S. Sivaswami Aiyar, K.C.S.I., C.I.E., ceased to be the Chairman of this Committee and the Hon'ble Mr. Justice T. V. Seshagiri Aiyar was appointed to the vacancy by the Syndicate. On his death in February 1926, Rao Bahadur K. V. Krishnaswamy Aiyar was appointed Chairman.

In December 1921, the Rev. J. S. Chandler resigned. The revision of all words beginning with the Tamil vowels was over; and the Syndicate resolved on publishing this revised material as the first volume. Mr. S. Anavaratavinayakam Pillai was appointed

Editor. The manuscript matter was sent to the press. But owing to the delay in settling the form of the Lexicon and the terms of the contract with the printers, only 128 pages could be printed by the end of 1923.

Mr. S. Anavaratavinayakam Pillai resigned from January 1924 and Mr. C. P. Venkatarama Aiyar, M.A., L.T., succeeded him and was editor till October 1926. The first volume containing 632 pages and 17,015 words was published on 26th June 1926, and Volume II Part I consisting of 160 pages and 4,312 words was published on 20th October 1926. In November 1926, Mr. S. Vaiyapuri Pillai, B.A., B.L., was appointed Editor.

Rao Bahadur K. V. Krishnaswami Aiyar, the Chairman, in consultation with the Editor and with the other members of the Lexicon Committee inaugurated a detailed scheme of vigorous work for the speedy and at the same time careful preparation and publication of the Lexicon, part by part. The active co-operation of a number of scholars was secured and they were constituted Honorary Referees.

The contract with the original printers, the Diocesan Press, came to an end in April 1927 and thereupon the Madras Law Journal Press were appointed printers. The Editorial staff was gradually strengthened and reconstituted. This staff, besides defining the words already collected as carefully as possible and editing them for the press, collected many new words. Glossaries were prepared for books not already dealt with and inscriptions were studied and words collected therefrom. Books on Jaina, Saiva Siddhanta and other systems of Indian Philosophy were examined and words selected. Special words used in legal documents and proceedings and land tenures, in architecture, music, painting and dancing, in medicine, words prevalent in particular communities or localities were all assiduously collected. A large number of words, literary, colloquial, regional and technical, were received in response to circular letters sent to various specialists, and gentlemen of local influence and public bodies. These words were scrutinised, and where they related to the unpublished parts of the Lexicon were incorporated in their proper places. Words relating to the parts already published were set apart for inclusion in an Addendum Volume. The progress made in the publication of the Tamil Lexicon can be gathered from the fact that while 792 pages and 21,327 words (most of which have been edited already from 1918 to 1923) were published in the three years ending October 1926, the remaining

3,136 pages and 83,078 words (not edited before) were published and the Lexicon completed on 20th March, 1936. The extent of the addition to the original collection of words is also obviously large. The original collection of about 82,000 words increased to over 1,04,000 words; and there was a collection of about 10,000 words for the Addendum Volume.

On the financial side, the total cost of preparation and publication of the Lexicon since its commencement in January 1913 is about Rs. 4,10,000; and the excess over the original Government grant of Rs. 1,00,000 having been found by the University, the Government of Madras have, in consideration of the University supplying them with 250 sets of the Lexicon and in view of the University undertaking all further financial and other responsibilities, relinquished the copyright in favour of the University.

This brief history of the Tamil Lexicon cannot be more appropriately concluded than by referring to the letter of M. Jules Bloch to the Editor on the completion of the great undertaking:

10th June, 1936.

DEAR SIR,

Through the generosity of the Madras University, I am now in possession of the last part of the Tamil Lexicon. May I, to my very hearty thanks, add a word in expression of my no less hearty congratulations for the completion of that tremendous work, which will honour the Madras University and the successive Editors with their staff, the last of those Editors in particular, as his duration of office has been the longest, and as to him was incumbent the final work.

* * * *

Yours sincerely,
(Sd.) JULES BLOCH.

Owing to the change of press, there has been some delay in the publication of this issue.—EDITOR.

REVIEWS

THE ANCIENT WORLD. By SIR I. TENEN, M.A. Macmillan and Co., London, 1936. Pages 276. Price 3/6 net.

Every teacher of history will welcome this sound text book which gives in a short compass a reasonably complete view of the history of the Ancient World. After a terse sketch of pre-history in the introductory chapter, three chapters comprising altogether less than eighty pages deal with the early civilisations of Egypt, the Near East and the Aegean. The rest of the book (from p. 102) contains three chapters, one each on Hellas, the Roman Republic and the Roman Emperors. The history of Greece and republican Rome is treated rather more elaborately than the other periods, and this is as it should be. The contrasts between the spirit of Greece and that of Rome on the one hand, and between these and the earlier civilisations which preceded them are throughout very well brought out. Emphasis is laid on the most significant and outstanding facts of political history, and valuable hints are thrown out on the interrelation of the history of the different countries. The narrative is continuous without being heavy, and the treatment of the social and economic aspects is instructive and stimulating. The large number of very well chosen illustrations adds greatly to the vividness of the descriptions, and aids the correct understanding of the details of cultures much unlike our own. Maps and time charts and a very serviceable index are other features which enhance the usefulness of this excellent little book.

K. A. N.

A STUDY OF ECONOMIC DEPRESSION IN RURAL KISTNA.
By CH. SITHARAMA SASTRY AND C. SRIRAMANARASIMHAM. The Madras Provincial Co-operative Union, Royapettah, Madras.

This little book of 60 pages is the result of a rural survey conducted in the Kistna District by a research student of the Andhra University under the guidance of Mr. Sitharama Sastry, Lecturer in Economics. The first chapter deals with the crop distribution in certain villages of Kistna District, and comes to the conclusion that "though agricultural production as a whole is very inelastic and very slow to adjust itself to the conditions of trade and business, constant changes are taking place at the margins of different crops according to the relative values prevailing in the market." In the

next chapter a comparison in the fall of prices in the primary products is made, with its effects on the foreign trade of India. The next four chapters deal with the economics of cultivation during the depression, land values and rural indebtedness, agricultural labour and village artisans. They contain useful information about the net income per acre from various crops, the effects of the depression on large and small landholders, the comparatively heavier fall in the price of wet lands, the subtle effects on agricultural labour and the great suffering the depression has caused to goldsmiths and other artisans. The last two chapters are perhaps the most important. In the first of them Hawtrey's theory of adjustment in foreign exchanges is applied to the conditions in the village, the process of adjustment being the subsistence on capital and fall in standard of living. In the concluding chapter an account is given of the measures taken in America and Europe and a suggestion is thrown out of a rural equilibrium in the distribution of crops with a view to improving rural economy. The need for a variety of crops in the deltaic tracts which largely depend on a single crop is emphasised.

A rural survey of this kind ought to have given opportunities to the authors to give a full analysis of the actual economic conditions in Kistna District. But such opportunities have not been fully utilized; and here and there details of recent economic policies in European countries have been given. One therefore feels after a perusal of the book that the subject is rather meagrely dealt with. The authors have done well in giving some graphs, but unfortunately some of them are lacking in clearness. The table on p. 2 would have been more useful had actual figures been given. The graphs facing p. 7 are unintelligible as the key is missing. In spite of these blemishes the little book is a useful contribution to the study of the effects of economic depression in rural areas, and it is hoped that the authors will continue their work and publish a more detailed treatise on the subject. The Madras Co-operative Institute ought to be congratulated on publishing this timely little book.

P. J. T.

THE NATURE AND GROUNDS OF POLITICAL OBLIGATION IN THE HINDU STATE. By J. J. ANJARIA, M.A., with a Foreword by Prof. P. A. Wadia, M.A. Published by Longmans Green and Co., Ltd. (1935). Price Rs. 7/8.

The book under review forms the second of the Studies in Hindu Polity in the series of monographs embodying the results of re-

searches conducted by the Bombay University School of Economics and Sociology. It was submitted to the University of Bombay for the M.A. Degree in 1932. In this work, as the Editor remarks, Mr. Anjaria attacks a specific issue of Hindu Polity, namely, the Problem of Political Obligation. Here an attempt is made to understand and interpret the Hindu conception of the grounds of Political Obligation by correlating them to the rest of life led by the ancient Hindus. In this study Mr. Anjaria has pressed to his service the various political theories and maxims of statecraft as could be gathered from the *nīti* and *dharma* literature of ancient India, and has considered them in detail in eight chapters. First he examines the Divine Right theory in Hindu political thought and finds it inadequate to explain political obligation. Secondly, the contractual theory is dealt with. Thirdly, there is the theory of force and here it is concluded that *danḍa* is not an end in itself but it has to be correlated to *dharma*. Next he speaks of the organic theory but it is difficult to accept the statement that the conception of the state as a moral organism is not really present in Hindu thought. The elements of this theory are seen from the Rig Veda to the *Sukraniti-sāra*.

The last four chapters are devoted to a study of the nature and the end of the Hindu State in general and it is rightly concluded that the end of the Hindu State is the maintenance of *Dharma*. Incidentally the conception of *svadharma* is explained as well as the relation between the State and the Individual. In discussing the constitutional position of the king in the polity it is stated that the basis of power was autocratic though its actual exercise may not have been arbitrary; but this can hardly be accepted. The book is well written and well printed. It will be a valuable addition to the already good stock of books on Hindu Polity.

V. R. R.

HEAT, LIGHT AND SOUND. By R. G. MITTON. Dent's Modern Science Series. Price 4s.

This book under review seems to be a very pleasant little volume covering the subject matter in the title in an entirely novel and modern way reaching the standard of our Intermediate in these subjects. It has the distinction of being quite modern in that some of the illustrations are of modern scientific triumphs and hence of

a very suggestive character to the keen student of science. To mention but a few : the frontispiece is of the 74 inch reflecting telescope of the British Columbia, turbines are illustrated by a picture of the rotor of one of the turbines of *Queen Mary* the latest wonder ship. The casting of the large 200 inch diameter glass disc for the largest reflecting telescope, its cooling and annealing, the edging, grinding and testing of a 74 inch reflecting telescope mirrors are other suggestive illustrations in light. In sound one comes across sound pulse photographs and condenser microphones.

Thus these provide excellent opportunities for the keen student to exercise his curiosity and imagination upon, and in that way the book is an inspiring example. This is a factor of great importance so often lost sight of by most of the text-book writers who confine themselves to an unrelieved presentation of absolutely dry textual matters of examination importance.

However the fact remains that most of the teachers of this standard especially in India brought upon books and traditions of the old standard and fashion might find these novel items quite incomprehensible. They might complain that the text is not sufficiently detailed to make these new ideas quite intelligible not only to the student but to the lecturers themselves. A typical example of this is the illustration of the Hartmann test on page 275. Concentrating as they do so much in coaching their students to meet examinations on specific syllabuses they are likely to be of the opinion that these are all beyond the syllabus and hence to be omitted.

It is at the same time quite a wellknown fact that if Indian science has been so barren of useful results the cause is to be traced to this textual teaching of the sciences so common in India as it leaves most of the students untouched and uninspired. In the circumstances a very desirable change will be the adoption of such modern books that will certainly act as a good corrective.

The get up of the book is good and there are many numerical examples worked out and given as exercises. The worked out answers to the problems given at the end of the book, is a useful feature and the chapter on musical instruments given under sound though short is very much to the point.

H. P. W.

A CLASS BOOK OF MAGNETISM AND ELECTRICITY. By H. E. HADLEY. Messrs. Macmillan & Co., Ltd., London. Price Sh. 6/6.

Mr. Hadley's more advanced text-book of magnetism and electricity for students is a well-known and popular volume. The advent of his new book is sure to be welcomed by all connected with the teaching of electricity to junior students at the university. The incorporation into the book of much information regarding the practical applications of electricity, and the history of the subject, makes it valuable, as it is the only way to create an interest in the subject in beginners. The principle of proceeding from the familiar to the less familiar and abstract, is not new to the teachers, but is all too often thrown aside. Instead they often start from some theorems, without making it quite clear that they are the product of much experimental work, and proceed to build up the rest of the subject thereon. This method, though it may satisfy the demands of logic, and though it may be satisfactory from the examination point of view, is hardly capable of giving students a real grasp of the subject as a living, changing and growing science. The book under review avoids this mistake.

The arrangement of the chapters is judicious, and the results of much modern research have been incorporated, bringing the book fairly up-to-date. The chapters on static electricity, electrolysis, etc., gain greatly by the introduction of modern ideas of atomic structure. The time-honoured hydrostatic analogy for electrical potential has been wisely abandoned in favour of the gravitational analogy. The historical part of the book is extremely interesting, and shows considerable industry and research on the part of the author. We find in the historical notes on page 41 that the author does not credit the Chinese with an early knowledge of the directive property of the lodestone. But, if as the author states on p. 43, the legends of lodestone mountains arose as a sort of primitive attempt to account for the variation of the compass, there seems to be some evidence in the Arabian Nights and other Eastern tales, that the variation of the compass, and hence, the directive property of the lodestone, was known to Chinese and Near Eastern mariners if not in remote antiquity, at least long before it was generally known in Europe. On p. 26 we come across the statement "the imaginary line joining the poles, is termed the magnetic axis of the lodestone." It would have been better to have avoided the use of the word 'imaginary' in this connection.

The book is clear and readable. The illustrations are good. The later chapters on the more advanced modern applications of electricity are well written and full of interesting and informative matter. The volume can be heartily recommended for the use of Intermediate and B.A. (Pass) students.

R. N. S.

"A TEXT-BOOK OF PHYSICAL CHEMISTRY." By SYLVANUS J. SMITH. Publishers,—Macmillan & Co., Ltd. 5s. 6d.

The list of text-books on elementary physical chemistry is not too large to make Mr. Sylvanus J. Smith's "Text-Book of Physical Chemistry" an unnecessary or unwelcome addition to it. According to the author, "the book is intended primarily to provide a course of physical chemistry for students in advanced science courses preparing for the Higher School Certificate examinations" (in England). The range of subjects covered in this little book, however, is sufficiently wide to make it a useful guide to the third year student in our colleges.

The account given of the usual topics such as molecular weights, abnormalities, properties of gases and of solutions, mass action law, catalysis, colloids, etc., is simple, concise and clear. Nearly a third of the book is taken up by the ionic theory and electro-chemistry and the subject has been treated very fully though in an elementary manner. It is noticed that while the newer concepts such as activity co-efficient, complete ionisation of strong electrolytes, dipole moments, etc., receive, perhaps justifiably, only a passing mention, the electronic theory of valency has been treated in greater detail.

The dictum that physical chemistry is better understood by working numerical examples has been borne in mind by the author. An interesting feature of the book is the collection of questions and numerical examples at the end of each chapter which is calculated to make the book more helpful to the beginners. The mathematical formulæ used and the calculations based on them are also easy to follow, higher mathematics being hardly requisitioned at all.

While admitting that in an elementary treatise as this it is not possible to deal with all the physico-chemical principles, it may be mentioned that a few paragraphs about the Parachor and Refracti-

vity would have materially enhanced the value of the book. This omission, it is hoped, would be made good by the author in the next edition.

The book is well got up and moderately priced, and the publishers are to be congratulated on their having placed within easy reach of the student of elementary physical chemistry such an excellent summary of the main themes.

B. B. D.

BOOKS RECEIVED

The following books were received from Messrs. J. M. Dent & Sons, Ltd. :—

Heat, Light and Sound. By R. G. Mitton. 4s.

Mechanics and Hydrostatics. By R. G. Mitton. 3s.

Rome Republic and Empire—Vol. I—The Republic. By H. W. Household. 3s. 6d.

Physics : Mechanics, Properties of matter, Light and Sound. By G. T. P. Tarrant. 8s. 6d.

Selected Essays of Havelock Ellis. Everyman's Library.

From Messrs. Macmillan & Co., Ltd.—

A Text-book of Physical Chemistry. By Sylvanus J. Smith. 5s. 6d.

Mathematics for Technical Students, Part II. By F. G. W. Brown, 3s. 6d.

The Elements of Analytical Geometry—Part III—Conic Sections. By J. T. Brown. 2s. 6d.

Introductory Biology. By E. Stenhouse. 4s. 6d.

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

The Problem of the Indian Polity. By Pratapagiri Ramamurthi. Rs. 10.

The Vaishnavas of Gujarat : Being a study in methods of investigation of social phenomena. By N. A. Thoothi. Rs. 15.

The Nature and Grounds of Political Obligations in the Hindu State. By J. J. Anjaria. Rs. 7-8.

From the Popular Book Depot.—

An Introduction to Politics. By Pratapagiri Ramamurthi. Rs. 2-8.

THE HAND-LOOM INDUSTRY
IN
SOUTH INDIA

BY

K. S. VENKATARAMAN, B.A. (HONS.), B.L.

(SIR PARASURAMBHAO COLLEGE, POONA)

*"There is only one way of seeing things
rightly and that is seeing the whole of them."*

MADRAS

PRINTED AT THE DIOCESAN PRESS, VEPEERY

1936

APPENDIX I

A study of the census of hand-loom in Salem District

Sources of information

There are four distinct sources from which we can gather information regarding the distribution of the hand-loom industry in each district. First come the village statistics published along with the census reports. They refer to the number of weavers in each village. But this reference was omitted since 1901. There is no separate grouping of weavers in the present village statistics. By the discontinuance of this practice we are deprived of a very useful source of information regarding the migration of the weaving community. At the time the writer commenced his work he was told that the original returns 'were destroyed as soon as the Census report was completed as they were considered to be of a confidential nature'.

The second source of information is the returns on the minor industries which the Tahsildar is asked to make at the time of the *Jamabandhi*. (*Ref. Taluk Office Manual*.) But these returns are seldom made and, even where they are submitted, they are rarely reliable.

Thirdly comes the village register maintained by the village officers. They enumerate from year to year the population of the village, the classification of the land, the extent of land cultivated etc., all with reference to the revenue administration of the village. Returns are also noted as to the number of artisans as blacksmiths, weavers, carpenters etc., and also the number of indigo vats, country oil presses, sugarcane presses and hand-loom. The village registers are a very satisfactory source of information regarding the revenue administration of the village but they are thoroughly unreliable so far as the agricultural stock, the industrial returns and other things not directly connected with the collection of revenue are concerned. Many village registers do not contain returns under these heads at all. To cite an instance of how returns are entered by the village officers: the sum of the number of hand-loom returned in the two previous quinquennial censuses is mentioned as the present number of hand-loom. No attempt is made to verify these figures. The village officers are not to blame; they have neither the intelligent guidance nor the practical training in the collection of statistics.

Fourthly come the quinquennial cattle census returns. They are no better than the village register, being returned by the same village officers. The higher revenue officials do not scrutinise the returns

In many cases the forms are not even completely filled up. We cannot expect anything better in the returns in the near future unless the status of the village officers is improved and their strength is increased. Many of the village returns are not even available in the Taluk Office.

Considering all this the writer proceeded to take a census of the hand-looms in each Taluk with the help of the Revenue Inspector of the firka. But that was an uphill work for a single person. He was just then informed that a special hand-loom census was taken by the Weaving Superintendent in 1926. The writer is much obliged to him for the copy of the returns he had given him. The returns were made in the form prepared by the Director of Industries.

The following remarks regarding the conditions of the hand-loom industry in Salem District are based on the returns of the Weaving Superintendent.

THE NUMBER OF HAND-LOOMS

Nearly all the villages in the district made the returns except the villages in Hosur Taluk and some in Harur Taluk. The working of hand-looms—cotton, silk, kora, and kumbli—is reported in 245 revenue villages. There are 29,052 hand-looms of which about 1,600 looms are reported to be idle. The distribution of looms according to the census of the Weaving Superintendent and according to the returns of the Statistical Atlas of the Madras Presidency, 1921, and the density of the population Taluk-wise are given below :—

Taluk	Density of Population per sq. mile	Number of hand-looms	
		Census of the Weaving Superintendent	Statistical Atlas, 1921.
Hosur ...	153	496	1,082
Krishnagiri ...	255	364	355
Uttangarai (Harur) (Harur firka only) ...	168	200	287
Dharmapuri ...	229	1,439	1,483
Tiruchangode ...	552	5,550	3,000
Rasipuram ...	439	5,502	8,674
Salem ...	472	10,846	4,467
Omalur ...	420	3,090	3,052
Namakkal ...	470	1,564	1,049
Attur ...	276	...	441
Total ...	—	29,051	23,890

It is evident that nearly 80 per cent of the looms are found in the Taluks of Salem, Omalur, Tiruchangode and Rasipuram. The difference in the number of looms noted in the two censuses

cannot be explained. But the concentration of the industry in that belt is striking, and may be explained by the following facts :—

1. concentration of population and hence a local market ;
2. proximity to Salem which is the trading and financial centre for the industry.

IMPROVEMENTS ON LOOMS

More than 55 per cent of the looms are fitted with flyshuttle sleys. The localisation of the industry also leads to its rationalisation. In other taluks looms are most primitive and crude. They are mainly pit looms with throw shuttles.

Number of looms with and without flyshuttle sley.

Taluks	Number of looms fitted with flyshuttle	Number of looms with throw shuttle	Percentage of flyshuttle looms
Hosur ...	7	489	1.5
Krishnagiri ...	58	306	16
Harur ...	64	136	32
Dharmapuri ...	706	733	48
Tiruchangode ...	3,344	2,206	60
Rasipuram ...	3,265	2,237	58
Salem ...	6,526	4,320	60
Omalur ...	1,526	1,564	49
Namakkal ...	454	1,110	27
Attur ...	...	...	...
Total ...	15,950	13,101	56

Many looms in the taluks of Salem, Tiruchangode, Omalur and Rasipuram are manufacturing fine fabrics and solid bordered cloth ; therefore throw shuttles are used.

The village officers do not note returns of dobbies and warping mills in use. These are not generally working in the industrially backward taluks. There are many in operation in Omalur, Salem and Rasipuram but no returns are made. Satisfactory returns are, however, available for the taluk of Tiruchangode—at least so far as the Tiruchangode firka is concerned—where the Superintendent himself directed the collection of data. On the whole, 74 warping mills and 273 dobbies are noted. Their introduction is due to the indefatigable propaganda of the Weaving Party. Of the 74 warping mills, 34 are of the vertical type. 55 looms are fitted with weaver's beam which economises space occupied by the loom and saves time and labour involved in the shifting of lease rods and the arrangement of threads under the old system. Besides, 18 warping mills in Namakkal and 5 in Harur are also noted. But it is surprising that no warping mills, or weaver's beams or dobbies are noted in Salem. Salem is

easily the first and foremost in weaving industry. And it was here that the Department of Industries tried its experiments in hand-loom factories with all the modern equipment, and one would naturally expect there a large number of time-saving appliances in use. But no returns are made regarding this. This is an obvious error of omission. It is reported that there are only 24 dobbies in Salem Taluk. Salem weavers make special designs on the body and border of the cloth and they are exactly the province of the doobby and the jacquard harness. It is possible that the prohibitive initial cost of the jacquard harnesses might stand in the way of their adoption. But the failure to introduce simple and cheap dobbies in the draw-boy looms is unaccountable; perhaps they were not properly and carefully noted. In this connection it must be said that a local weaver of the Mudaliar community who is an expert in textile designing, has made a simple and cheap harness for elaborate design weaving. The country chain harness is cheap and therefore everywhere in use. The introduction of the new harness will benefit the industry.

THE NATURE OF YARNS USED

The Counts of Yarns Used.—Details of yarns used by looms are available for 20,500 looms. No information regarding the kind of yarn employed is noted in the case of 8,500 looms in Salem Taluk. It may be safely assumed that Salem being the centre noted for fine cloths, the count of yarn generally employed is above 30s. Of the 20,500 looms, 11,760 are using yarns of 40s and below, while many of the rest employ yarns varying from 20s to 100s. It is not definitely known how many looms are actually engaged in weaving cloths of count above 40s. But it is estimated that about 30 to 35 per cent of the looms manufacture fine cloths.

The Extent of Colour Yarn Employed.—13,887 looms are employed in manufacturing coloured fabrics. They use colour yarn wholly or partially. Only about 6,600 looms are using pure grey or bleached yarns. It is in the latter case that more fine counts are employed. A careful analysis indicates that the survival of the hand-loom is in no small measure due to the kind of fabric it manufactures. It employs more coloured yarn and manufactures such fabrics as are intended to suit local tastes, and as are not produced on power-looms. The looms using coloured yarn are mainly looms manufacturing sarees.

The Classification of Looms according to their Employment of Silk or Artificial silk or Cotton alone.—This classification is made in order to understand how much of hand-loom production is directly

competing with mill product. Power-looms cannot compete so successfully against the hand-loom in the manufacture of mixed or purely silk fabrics. It is also said that hand-looms survive because they have now taken to the manufacture of silk or rayon.

The returns under this head are as usual incomplete. The writer is aware that there are at least 50 looms in Rasipuram which employ silk alone; but nothing is mentioned about silk looms there. Again, many looms employing both silk and cotton are manufacturing the celebrated Salem *Gundanjo* which has a narrow silk border. Again, it is not mentioned how many looms are manufacturing solid bordered cloths which are not generally produced on power-looms. The village officers who have noted returns do not seem to appreciate what is meant by 'solid border'. Imperfect as these returns are, certain facts are worth noting. 66 per cent of the looms employ cotton alone while others employ silk, or silk and cotton, or rayon and cotton.

TALUKWAR DISTRIBUTION OF LOOMS USING DIFFERENT KINDS OF YARN

Taluk	Number of Looms Using Yarns of						
	40s and below	Above 40s	Grey yarns only	Coloured wholly or partially	Silk alone	Cotton only	Mixed silk, cotton, rayon
Hosur ...	465	...	77	388	...	105	360
Krishnagiri ...	240	...	12	228	...	100	140
Dharmapuri ...	1,332	20	84	1,268	...	1,110	242
Harur ...	200	...	55	145	...	200	...
Namakkal ...	1,680	480	312	1,248	...	1,146	414
Omalur ...	2,137	853	1,453	1,537	...	1,890	1,100
Tiruchangode ...	4,155	1,291	1,708	3,738	...	3,895	1,551
Rasipuram ...	1,926	3,636	2,705	2,857	...	3,635	1,927
Salem ...	251	2,326	199	2,378	72	1,423	1,154
Total ...	11,786	8,606	6,605	13,787	72	13,504	6,888

Finer count is used more in the Taluks of Rasipuram, Salem, Tiruchangode and Omalur. Looms manufacturing grey cloths employ more fine count yarn than looms manufacturing sarees. It is remarkable that in this district the extent of lungi and kaili manufacture is limited. And where fine count is employed it is used for the manufacture of laced cloth. Most of the saree looms are manufacturing sarees for peasant women. Looms manufacturing high class saree and urumal are found in Salem and Rasipuram and in a few other centres.

The Range of Fabrics Woven on Looms in Salem District.—The range of fabrics woven on hand-looms in Salem district is

wide. In pure grey cloths, dhoties with or without border, towels, duppaties and shirtings are important. There are laced and silk-bordered cloths also. Sarees with or without solid border, cloth for bodice, angavasthrum or upper cloth, urumals, peethambaram, are some of the important silk fabrics. The celebrated *Mayilkan* (peacock's eye) for which there is a craze among well-to-do Hindus is a staple article of manufacture in Salem town and Ammapet. Carpets, bedsheets, jamakkalam, sarees with or without solid border are some of the prominent manufactures of pure coloured cotton. There is now a demand for certain kinds of cloths made of mercerised yarn and artificial silk thread, and their manufacture is now expanding.

CLASSIFICATION OF LOOMS ACCORDING TO FABRICS MANUFACTURED.

The looms can be classified under the following heads :—looms manufacturing 1. sarees or other mainly colour fabrics, 2. veshtis or other cloths, mainly grey, and 3. both grey and colour cloths about which there is no definite information.

Information under this head is available for 20,500 looms, of which 55 per cent are employed in the manufacture of coloured cloths of some kind or other. The manufacture of the coloured cloths of the kind in demand in rural parts is the province of the hand-loom, and this accounts for its survival. The remaining 45 per cent of the looms, except so far as they manufacture solid bordered and laced cloths, compete directly with power-looms.

NUMBER OF LOOMS IN EACH TALUK ACCORDING TO THE KINDS OF FABRICS THEY USUALLY MANUFACTURE.

Taluk	Number of Looms Manufacturing		
	Sarees only	Grey or bleached cloths only	Both coloured and grey
Hosur ...	388	77	...
Krishnagiri ...	162	12	66
Dharmapuri ...	925	84	427
Harur ...	93	55	52
Namakkal ...	487	299	774
Omalur ...	1,076	1,453	560
Rasipuram ...	1,069	2,787	1,706
Salem ...	1,524	241	884
Tiruchangode ...	2,941	1,918	598
Total ...	8,645	6,926	5,067

N. B.—Details for 8,200 looms are not available in Salem taluk. There are about 5,000 looms in Salem alone. Roughly speaking, the whole of Arisipalayam is manufacturing silk bordered grey and bleached cloth for men

with yarns of counts 40s. to 80s. There are about 500 such looms. In Gohai there are about 2,500 looms and all of them employ colour yarn. They manufacture carpets and sarees. Here is the big colony of Devangas. In Ammapet there are 200 pure silk looms worked by Kaikolar Mudaliars. They manufacture costly cloths with silk and cotton and gold lace, sometimes with beautiful patterns. In Salem town there are nearly 1,000 looms and 60 per cent of them manufacture silk and rayon fabrics. There are a few saree looms which prepare very costly cloths, say from Rs. 150 to Rs. 500 sometimes.

THE SIZE USED

The census of hand-looms indicates that the weavers use no special size for the warp. They prepare their own size with the locally available materials as ragi or rice with sesame oil.

CASTES OF WEAVERS

The investigation reveals that nearly 85 per cent of the weavers are weavers by caste and by hereditary occupation. The important weaving castes are Kaikolar Mudaliars, Devanga Chettis and Naidus and Jedars. The following groups are not weavers by caste :—Padayachi, Siveyar, Sembadavar, Pulavar, Lingayats, Vellalas, Muslims, and Adi-Dravidas. The Sourashtras are weavers by caste, and they are found in Salem and Rasipuram towns only. There are about 300 to 400 families of Sourashtras in the two centres. The following table shows the distribution of certain weaver-castes.

Taluk	Number of families of				
	Devangas	Kaikolars	Jedars	Adi-Dravidas	Kurumbars
Hosur ...	360	...	...	6	...
Krishnagiri ...	78	...	...	...	...
Dharmapuri ...	231	1,069	...	41	...
Harur ...	...	130	...	55	...
Omalur ...	1,250	1,600	...	...	...
Tiruchangode ...	1,338	1,550	986	36	...
Rasipuram ...	859	2,650	...	...	...
Namakkal ...	700	810	...	87	...
Salem ...	1,425	...	...	...	...
Attur ...	...	...	...	...	...
Total ...	7,542	7,809	986	225	...

The census of the castes of weavers is very imperfect. But some conclusions are possible. The caste weavers account for 80 to

85 per cent of the weaving population, the Devangas and the Kaikolars being the two important sects. The Sourashtra and the Jedars come next. The Thogatars weaving dupatties, the Padmasales weaving sarees, and the Kurumbars weaving kumblis are important weaving castes found in Hosur, Krishnagiri and Dharmapuri Taluks. Adi-Dravida weavers are found in non-weaving taluks e.g. Harur, Namakkal and Dharmapuri. They are the relics of the old village communities.

Caste Specialisation.—Thus far we have proceeded on the basis of the hand-loom census. But certain features of the industry are not brought out by the census which can be gathered only from personal investigation. The first thing that strikes one is the fact that there is a conventional caste specialisation in the manufacture of products. The Devangas and the Sales generally manufacture only coloured goods such as sarees, jamakalams, etc. The Kaikolars specialise in the manufacture of grey and bleached goods, dhoties, towels, dupatties and towels. The Sourashtras mainly manufacture costly cloths of silk. There is very little specialisation among other castes.

As in fabrics, so in the counts of yarn employed there is some sort of specialisation. The Sourashtras and the Kaikolars employ fine count yarn, silk or lace. The Devangas and other communities use coarse and medium count yarns for dupatties, sarees and carpets.

Another factor worth noting is that there is a sort of local specialisation also. Salem and Rasipuram are noted for their high class fabrics: silk and cotton cloths with lace, dupatas, angavasthrams, sarees, etc. Dharmapuri is noted for its sarees for the middle class people. There are many villages where generally a particular variety of cloth alone is manufactured. There are certain advantages in this local specialisation: e.g., in the purchase of yarn, in the preparatory processes etc.

Tendency of the Industry to Localise

The next important feature of the industry is its tendency to localisation or concentration in a particular locality. The tendency is getting stronger now. Scattered artisans are now coming to towns or some semi-urban centres. With the passing away of the self-contained nature of the village and its isolation, the village weaver and the oil-monger are the first to come out of the village for they are not directly dependent on the agricultural industry. The carpenter, the blacksmith and the cobbler are necessary and indispensable artisans in the agricultural community—the carpenter must repair the plough or the mhote, the blacksmith will have to replace the worn-out parts of some agricultural

implements, the cobbler must provide the hide for the pickkota and keep it in proper repair. And for doing all this their immediate presence is necessary. But that is not the case with the weaver or the oil-presser. The demand for their services is neither so continuous nor so urgent as it is for the service of the primarily rural or agricultural artisans.

Besides, the weaver is attracted to the town or to the place where there is a weaver colony, for two other reasons: 1. There is economy in the preparatory processes in large weaving centres where they are done by classes of workers who specialise in each process. The advantage is that firstly, the cost of preparatory processes is reduced and secondly, some time is saved. This enables the weaver to increase his earnings by increasing his output. 2. The presence of the capitalist, specialising in cloth trade and financing the industry and trade, attracts the impecunious weavers who suffer for want of work and lack of capital. There are other advantages incidental to localisation: easy availability of the accessories to weaving such as flyshuttle, reeds, healds etc.; direct touch with the cloth and yarn market; knowledge of the changes in the demand; and a greater scope for work.

Rationalisation of the Industry

Though the investigation attempted to obtain facts regarding rationalisation in the matter of organisation of production, the material obtained is very scanty and unsatisfactory. The number of independent workers and the hired labourers and the size of each unit of production have not been properly ascertained. So nothing can be said regarding them. Nor is there any basis for comparative study of the recent changes in the condition of the industry.

But there is ample evidence to show that the rationalisation of the industry on the technical side is going apace. Now, the old system, where the weaver did everything from winding to weaving with the help of the members of his family, is giving place to a more rational system of division of labour. The tendency to specialisation and adoption of improved appliances deserves notice. The old peg warping has now given place to warping mills, except in the upland tracts where the industry is carried on by isolated workers. In those places, of course, all the preparatory processes are done by women and children of the weaver. But in all centres where weaving is of some importance, warping mills are found. But winding and sizing are done in the old way. Children and old persons do the bobbin winding at 2 to 3 pies per ladi or 10 hanks. Warping is the special function of some persons who are mainly

weavers by caste, and their rates for warping vary according to the weight and count of yarn. Sizing is slowly becoming a specialised process. In some places it is done by weavers themselves on a co-operative basis. Those that help the weaver are given a nominal remuneration of 2 annas each per warp. In Salem and Rasipuram and other centres where weaving is the chief industry of the locality, sizing is done by special groups of workers. This obtains only where long warps are prepared. In Salem, sized warp is also sold by the merchant. Where short warps are prepared—say for sarees in Rasipuram—women do the sizing. But where longer warps are needed—more than 30 yards or so—sizing is done by men only.

The following facts become clear from a study of this hand-loom census :—

(i) improved weaving appliances are generally in use ; more than 50 per cent. of the looms have flyshuttles. Drawboy harnesses, multiple sleys, and warping mills are also used. Only sizing and winding are done on primitive lines.

(ii) The tendency to localisation of the industry, the adoption of specialisation in processes and manufactures and the general tendency for the rationalisation of the industry are now in evidence ;

(iii) nearly a third of the looms are producing cloths in direct competition with power-looms ;

(iv) and the industry is not so primitive in its technical equipment as is often stated.

APPENDIX II

THE HAND-LOOM CENSUS : A CRITICISM

The authors of the various provincial census reports in 1921 recognised that census figures as at present compiled, could not afford any useful information regarding the progress of the hand-loom weaving industry. This is true in all cases of small industries in India. It was observed by Mr. Talents : ' we must on the whole conclude that any estimate of the tendency of the home weaving industry based on the census figures is at present inconclusive. But the record of the hand-loom census if it be continued may afford material for a better estimate at a future census '. Sir Alfred Chatterton also emphasised on the need for the collection of useful occupational statistics : ' We desire to draw attention to the unsatisfactory means provided by the ordinary census for the collection of useful occupational statistics and to suggest the adoption of special enquiries ; for, the object is at least as important as the ethnological discussions that have hitherto figured largely in the census report '. Mr. Amalsad, Textile Expert to the Government of Madras, writes : ' It is found that it is extremely difficult to estimate the decline in the condition of the cottage workers in India as no figures exist which will enable one to compare the past condition of the industry with that of the present. The census statistics are usually compiled by persons not in close touch with the industry and the classification of the various branches of the textile trade adopted in these figures affords very little help. The statistical publications regarding Cotton Mills in India give figures regarding the consumption of yarn in terms of weight without stating the counts of yarn. This conveys no meaning whatever regarding the decline in the industry and the changes in the economic condition of the weaver '. The quantity of yarn used by the loom, the daily outturn, the number of days the weaver gets work in the year, the counts of yarn used and the kind of fabric woven, the subsidiary occupation of the weaver, the average prices of yarn and cloth and other raw materials required for weaving, are essential data to gauge the changes in the economic status of the weaver and the progress of the industry and in some measure the economic progress of the country. The census of 1931 while offering no basis for comparison is yet an improvement on previous censuses. The workers are divided into three groups (a) persons following it as principal occupation, (b) persons following it as subsidiary occupation and (c) those who are ' working dependents '.

The Director of Industries, Madras, passing orders on the resolutions passed in the Handloom Conference in 1925 and recognising the value of a survey of the weaving industry observed that a certain amount of information in the form below would be helpful if collected by Weaving Superintendents.

Statistics of Hand-looms

1. Name of the weaving centre visited.
2. Taluk and district.
3. Village population.
4. Weaver population in the village : Men, Women—Total.
5. Probable number of persons engaged in
 - Winding
 - Warping
 - Sizing
 - Dyeing.
6. Classification according to weaver's caste.
7. Number of looms in the centre—Total.
 - (1) Looms fitted with flyshuttle sley.
 - (2) Ordinary looms with throw shuttles.
8. Number of looms lying idle.
9. Number of improved appliances at work.
 - (a) Dobbies, (b) warping mill, (c) sizing plant,
 - (d) jacquard harness, (e) weaver's beam etc.
10. Particulars of fabrics manufactured.
 - (1) Details—Sarees or dhoties, solid or other bordered cloth, plain weave or otherwise etc.
 - (2) Counts of yarn used (colour, grey or bleached).
 - (3) Nature and count of silk and artsilk thread used.
11. Character and composition of the size used.
12. Nature of dyes used.
13. Number of weaving factories.
14. Number of co-operative societies $\left\{ \begin{array}{l} \text{Total number of members.} \\ \text{Number of weaver mem-} \\ \text{bers.} \end{array} \right.$
15. Nature of any other textile industry followed there.
16. Remarks.

If the survey of the industry is carried on these lines periodically—say every ten years—it will indicate the tendency of the industry to localise, the movement of the industrial population, the changes in the range of articles manufactured in hand-looms, the technical progress of the industry, the mobility of labour and its employment, the changes in the caste monopoly in industrial occupations, the tendency or otherwise of the industry to concentrate in

factories, the changes in the sex distribution of workers in the industry and in the various processes connected with the industry etc., etc.

But there is one great omission in this survey. It fails to get at the human factor in the industry. The two main objects of a study of an industry are 1. industrial progress, and 2. human progress. A study of the former without reference to the latter is necessarily incomplete ; and what the Textile branch of the Industries Department has so far done is that its attention was mainly focussed on the technical progress of the industry and nothing was so far done to ascertain the changes in the economic status of the weaver. It is true that if a comprehensive statistical census along with the general census is taken, nothing more can be done. But this must be supplemented by special surveys in selected centres. A special survey will require workers with efficient training in practical economics, who have the training, tact and patience necessary to investigate the household budgets of a number of weavers, their general indebtedness to capitalists, the actual output of the loom with and without fly-shuttle, the wages of cooly workers for different operations, the prices of yarn and other raw materials, the sale of manufactured articles and their prices in different shandies and many others.¹ A special staff is necessary to collect data simultaneously in all centres. Mere statistics on the lines suggested by the Director of Industries is of no value. And it is unscientific to collect data in a few centres at random and apply them to the industry as a whole. The census of the hand-loom industry and all other important small industries must be taken periodically and must be supplemented by special investigation on the human side². One cannot say how far the census of production contemplated by the Government of India will realize the objectives of the census of hand-looms stated herein.

¹ The Research Department of the University can carry on this work systematically with the help, and through the co-operation, of the Industries and the Co-operative Departments.

² The recent investigation in the Madras Presidency carried out by a special officer for cottage industries is a welcome departure in the industrial policy of the Government. But, unfortunately, for various reasons for which the special officer is in no way responsible, neither the enquiry nor the report is fruitful from the point of view of either technical and commercial organisation of the hand-loom industry or economic and social regeneration of the weaving community.

APPENDIX III

Questionnaire

I. GENERAL CENSUS.

1. Name of the village and Taluk.
2. Population :
 - Men
 - Women
 - Children (below 10).
3. Number of weaver families.
4. Total weaving population (including dependents):
 - Men
 - Women
 - Children.
5. Number of actual workers in
 - (a) cotton, (b) silk, (c) mixed, (d) others:
 - Men
 - Women
 - Children.
6. Number of looms (a) working and (b) idle.
7. Number of looms fitted with flyshuttle sley
 - " with throw shuttle sley
 - " with lever dobby
 - " with jacquard harness
 - " with country chain harness
 - " with weaver's beam
 - " with multiple sley box
 - " with other mechanical improvements
8. Number and kind of warping mills used.
9. Number and kind of sizing plant in use.
10. Number of yarn depots in the locality.
11. Number of cloth dealers in the place : (a) dealers who are weavers themselves, and (b) dealers who are not.
12. Castes of workers.
13. Number of actual workers (a) winding, (b) warping, (c) sizing, and (d) weaving, and number of men, women and children in each.
14. Number of (a) textile dyers, and (b) textile bleachers.

15. Civil condition of workers :
 - (a) literate or illiterate.
 - (b) age of workers—Below 10, 11–15, 16–60. Above 60.
 - (c) sex of workers.
 - (d) married, unmarried and widowed.
16. Extent and means of subsidiary income of the family.
17. Number of persons owning their looms.
18. Number of persons owning their houses and place of work.
19. Number of weavers who are members of the Co-operative Society.
20. Number of families and workers who are—
 - (a) independent cottage workers
 - (b) hired or wage earners (independent)
 - (c) dependent on the sowcar
 - (d) master craftsmen
 - (e) capitalist workers.
21. Number of looms manufacturing—
 - (a) sarees (ordinary)
 - (b) grey cloth
 - (c) sarees with solid border or lace or grey cloth with solid border or lace
 - (d) special kinds of cloths.
22. Number of families where all the preparatory processes are done by the members of the families themselves or at least part of the processes is done by them. Mention the processes that are done by them.
23. Number of looms using—
 - (a) grey yarns below 40s
 - (b) " above 40s
 - (c) coloured yarns below 40s
 - (d) " above 40s
 - (e) mixed cotton, silk, and rayon.

APPENDIX IV

Questionnaire

II. CENSUS OF HAND-LOOM FACTORIES.

1. Name of the factory, name of the place etc.
2. Nature of the company : Private or public.
Limited or otherwise.
Jointstock or partnership or individual basis.
3. Number of looms : Working
Idle
4. Number fitted with flyshuttle
" with dobbies
" with weaver's beams
" with jacquard harness
" with swivel or multiple sley.
5. Number of looms manufacturing—
KINDS OF FABRICS WOVEN.
(a) coating
(b) shirting
(c) sheetings
(d) others
6. Number of workers : Men
Women
Children.
7. Number of Weavers : Men
Women
Children.
8. Number of Warpers : Men, Women and Children.
9. Winding : Men, Women and Children.
10. Dyeing : Men, Women and Children.
11. Castes of workers.
12. Number of families
(1) Where only one member works in the factory.
(2) Where two members work in the factory.
(3) Where more than two members work.
13. Number of workers with whom weaving is the hereditary calling.

14. Wages : for pirn winding
for bobbin winding
for warping
for sizing
for dyeing
for weaving.

(State wages per operation in respect of different kinds of clothes woven, different kinds of yarns used, and different textiles used, at cotton, silk and rayon) and also the average earnings of workers.

15. Systems of remuneration—
(a) period : weekly, or monthly etc.
(b) piece rate or time rate
Wages for overtime work.
16. Hours of work per day.
17. Hours of work for the week.
18. Fines etc.
19. Provision for provident fund, profit sharing, bonuses etc.
20. Provision of sanitary and other amenities in the factory.
21. Provision of facilities for education, purchase of things etc. in the factory.
22. Details of improved appliances used.
23. Number, pay and qualification of special technical staff
(a) weaving foremen, (b) dyer, (c) business manager etc.
24. Special investigation on BUSINESS SIDE.
(1) Amount of capital invested.
(2) Amount of working capital.
(3) Amount of borrowed capital. Rate of interest.
Securities offered, if any.
(4) Average monthly turnover. Quantity and value.
Examination of the day sheet of workers in different processes.
Examination of the costing sheets in the factory.
Other matters of interest, e.g., study of balance sheets etc.

Questionnaire

SPECIAL INVESTIGATION *re*: HAND-LOOM INDUSTRY

(The purpose of the investigation is firstly to ascertain the cost of production so that it might be known where the hand-loom is beaten by the power-loom and secondly to ascertain the changes in the economic condition of the weaver. The following questionnaire is framed with these two objects in view.)

I. Organisation—

1. Purchase of raw materials :—Number of yarn dealers ;
 „ dealers in other accessories ;
Compare prices in towns and villages ; Systems of purchase:
cash or credit or otherwise noticing the advantages and
disadvantages of each.
2. Sale of manufactured goods : Agency for distribution : How
goods are marketed : Conditions of the market.
3. Finance for production and distribution : note rates of
interest, condition of security, systems of repayment etc.

II. Cost of production—

1. Kind of cloth woven: (a) description regarding the kind of weave, (b) the length of warp, (c) the number of ends and picks per inch, (d) the count and kind of yarn used for warp and weft: state the amount of the colour yarn used, (e) the amount of silk and lace used, (f) the dimensions of the cloth, (g) the cost of yarn and other raw materials employed, (h) the selling price of the cloth: (1) to the middleman and (2) to the consumer, (i) the weight of yarn required for warp and weft, (j) the warp if sized or not.
2. In regard to the operations mentioned below state—
 - (a) time and labour required;
 - (b) by whom done: by the weaver or his relations or by outsiders.
 - (c) wages paid or usually paid for
 1. Bobbin winding.
 2. Warping.
 3. Sizing.
 4. Pirn winding.

5. Joining the threads.
6. Rolling on the beam.
7. Weaving.
8. Others.

III. *Economic Status of the Weaver* to be studied in respect of each group.

1. Classification of workers (*a*) according to their industrial status
 1. Master craftsman.
 2. Independent cottage worker.
 3. Hired labourer.
 4. Indentured worker.
 5. Others.
- (*b*) Classification according to the kinds of cloth woven.
 1. Cloths that are also produced in mills.
 2. Cloths that are the special province of hand-loom.
2. The weaver's family : Number of members : number of workers—men, women and children ; number of dependents.
3. Income : Number of looms working : Work available daily. number of full working days in the year. Kinds of operation done by the members of the family : Nominal and real wages of workers and of the family.
4. Family budget : Expenditure (*a*) rice and other staple food grains and other food articles, (*b*) clothing, (*c*) housing and lighting, (*d*) education, (*e*) industrial equipment, (*f*) drink, (*g*) conventional extravagances etc.
5. Indebtedness of the family : Causes of indebtedness : Economic condition of the family in the last generation. Extent of debt : Interest : Secured or not : Capacity of repayment. When was the debt contracted.

APPENDIX VI

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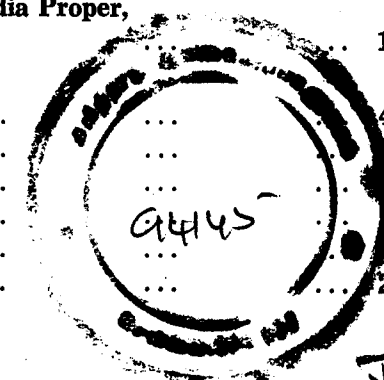
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