THE PROCESS OF EDUCATION

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For this paper I am assuming certain things which I have discussed elsewhere.*

The main presuppositions which underly this paper are (1) there is astronomical-geographical world independent of man, although man also belongs to this world, and (2) Man is continuously trying to modify the astronomical-geographical world with his own efforts and constructs another world over the first.

From the cosmocentric point of view all that exists is the world. But whether the world is one or whether it consists of infinite parts or atoms has no particular significance so long as there is no conscious being to look at it. Man is such a being. He is conscious, self-aware and free. This awareness is, so to say, a configuration which is temporal, i. e., which has some elements of the past in the form of memory and some elements of future represented by hopes, expectations, wants, desires etc. Man is a being who is continuously using his past to modify his present and future. He is subjected to the laws of the cosmocentric world and is nevertheless trying to control this world with a view to achieving his expectations, hopes etc., although he can never control them in full. It is the man who begins to distinguish or differentiate between him and the world and also between one part of the world and the other part of the world. The process of becoming conscious-self-conscioussynchronises with the process of distinguishing more and more parts of the world. As a matter of fact, self-consciousness is of various types. It is continuously growing and with it man is also able to distinguish between more and more things. The process and growth of self-consciousness therefore simultaneously results in the process of alienation. Man is continuously trying to establish not only a reflexive relation with himself but also a possessive relation with the world. The possessive relation may also sometimes have equality relation which, in fact, destroys the possessive relation. When "I" possess the

Vide my papers: Freedom; One World; Language and the World:

other and the "other" possesses me, the possession part is destroyed. We are thus able to distinguish between I-You relation and I-It relation. The world ultimately consists of "you" and "it" in addition to "I". It may consist of he, she or it. but "it" is a common denomination for all-he, she or it. We are therefore able to say that man has a relation with "you" or "it". But the relationships of "I" with "you", and "I" with "it" give different pictures. "I" and every "you" (for in some sense "they" consist of "you") form a whole which we call mankind or society (in extended form the society may also include animals like cows, horses, dogs and cats) and this can be contrasted with the remaining world which we regard either as animal kingdom or vegetation kingdom or the remaining non-sentient world. The non-sentient world has the spatial property and the sentient world of which the "I" is the representative has the 'properties' both of space and consciousness.

What we call Culture belongs to this world of man. It is a human construction over the cosmocentric world. But the world that is created, the world of culture, has so much cris-crossed with the world of nature that one is not able to separate out the warps and woofs of which this newly constructed world is made. What we call education is and should be a means to construct successfully this Second world, and accord to it certain value. But although in general, one can say that education is a means to achieving this object of man, man himself is not a unitary notion. It is a class which has several individuals as members and they belong to different nations and races and communities with different aspirations and interests which may be conflicting. The result is that there may not be one goal for all men and although one may talk of education as means to achieving man's goal vis-a-vis the world, each man or a group of men may create it's own separate world. The problem of education is thus concerned with (1) the relation between one individual and another, (2) between an individual and a group of individuals to which he belongs, (3) the individual and the geographical-astronomical world. All these relationships may be either formal and therefore methodological or they may be concerned with the details, that is, may be concerned with information. Again, man's relationship with other individuals may

be either social or biological and these two types of relations may give rise to varieties of theoretical questions.

Although one talks of an individual because each individual is an independent centre which receives stimuli from nature and reacts to it, in no period of time can we ever think about an individual without a society, however rudimenary the society may be. It is true that the concepts of society may change from time to time and may in fact develop. But whether it is a rudimentary society or a developed one, almost all the characteristics of society are bound to be present in it. And although we regard an individual as free, and an independent centre trying to modify the world and the society the fact remain that a man begins his life not by inquiring about the society, but by accepting the society. Perhaps it is one of the functions of his brain to accept the society and only then try to to construct over it either by way of revolt, reform or modification. Essentially, therefore, by education we mean a training for an individual by which he would adjust himself to the society. It may, however, be noted that I am using here the word, 'adjust' in a very peculiar sense which would allow even for the transformation or revolution of society. It is on account of his freedom that man is able to conceive of norms and try to adjust our world to them. Man's training, therefore, should consist, first, of knowing something about the world. The phrase, 'knowing something about the world' is very vague and ambiguous. Although we talk of one world we always think of a pluralistic universe. The world consists of many things. At least as soon as we think of different individuals we have accepted the pluralistic hypothesis. For example, if I say that the world consists of 10 tables and 20 chairs and if I have said this truly I have some information of the world. But I have some information of the world even if in this world there are more tables and chairs and I am able to count only 10 tables and 20 chairs. Incomplete information is nevertheless information. So long as I do not say that there are only 10 tables and 20 chairs in the world, my information is information. But now suppose I say that there are only 10 tables and 20 chairs in the world will it cease to be information? Limits of my knowledge or information are limits of my self. Knowledge or information is

making a thrust into the world. It is like an army occupation. Whatever the army occupies nevertheless it occupies. My information is that there are 10 tables and 20 chairs in the world. If I add the word 'only' to it, it merely means that I do not have any further information. It may be due to my ignorance. But the information received does not cease to be information. Information is a relation between me and the objects about which the information is to be sought. And according to my capacity to conquer the territories of the world my information can be more or less. It is due to my limitation that sometimes I may think that the world consists of something and not more. This is how the surveyors and the geographers, for example, measure our fields and rivers and mountains and find out their length, breadth and heights and scientists discover or add to the elements. In Indian Philosophy, for instance, they talk of five elements. This information has now grown and scientists talk of more than hundred elementary particles. Nobody would ever say that the information which Indian philosophers had was wrong. So long as the previous information is not inconsistent with the later information it is possible to think that both of them are informations. Such information is a necessary part of education. It may, for instance, be agreed that lives of great men may supply good data for the education of a child, but how many such lives must he know? There is bound to be a limit to the child's having information of such men. It means that at some stage we will have to be selective. What would and should be the logic of such selections is a different matter. What is important to know is that information of some kind must be the basis for any education. I cannot conceive of education without any information. The information part may grow less or more, in the total system of education. Nevertheless there must be a place for information in our educational system.

It may be borne in mend that the concept of information functions at more levels than one. At the first level it is concerned with things or what the case is. Gradually, however, it assumes a more complex form and it is concerned more and more with relations among things. It may be thought that in-

formation is usually concerned with reporting by one person to the other person or persons about things. If so, there must be a level of cognition which is prior to this information. 'A' experiences X: it is this experience which A conveys to B. Information is concerned with this conveying, reporting, communicating. Nevertheless one may imagine of this "message" as a bare report, a picture, may be blurred, of what there is. But as soon as one masters this technique of communication one can report not only about things or relations of things but also report one's reactions to the experience. These relations can also be "informed" to others and this is how even reactions attain the status of information. Many a time information is mistaken for knowledge. While accepting the value of information in any one's life it may be pointed out that there is a fundamental difference between information and knowlege. As an instance one may think of a general knowledge paper, which is usually about general information and not about knowledge. Similarly the quizes etc., which are usually presented on the radio, television etc., are more or less concerned with information: The questions asked in such tests usually take the form: What is the name of the finance minister of a certain, usually uncared for country? Of course it may be worthwhile having this information but one must also understand that man's brain is not a store-house where every bit of information recorded by an electronic signal is definitely recorded. It may be necessary to select some information. But it may also be necessary to forget quite a lot of it. Some information is necessary to everyone. But from this one cannot draw the conclusion that every information is necessary to everyone. For example, if someone asks me which horse is going to win in the next Derby, I might be justified in showing my ignorance and I might ask the question what the Derby is. To know this information is not everything and we also have physical limitation to assimilate every kind of information within "us". In the good old days the day of a young boy of four began with Nama Rupavali, stotras etc., and multiplication tables. Everything was to be remembered and therefore learning by rote became very important. Educationsts started saying that such learning was a great pressure on one's memory. Today, too much general knowledge which has just the form of

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of general information has taken its place. I do not want to deny the importance of general information but at the same time I do not want to make a fetish of the general information and also of the objective tests based on it. Today, under the influence of 'Experts' the fad of objective tests has even entered the UPSC and the plea that a large number of students appear at the examination helps such pleas. The result is that students are examined no more by human beings but by computers and machines.

Where does information end and knowledge begin is really a problem. As a matter of fact there may really be nothing like the substantive knowledge, but only the act of knowing. The act of knowing however may be accidental and may be soon forgotten. Everything that our sense organs receive and convey to the brain is not consciously retained by us. It cannot be retained, a large part of it is actually ignored. But that part which is retained and which enriches the personality, i.e., which modifies the person and so cannot be separated from him should be called knowledge. It certainly begins with experience and so has a relation with information. But it is not merely the enumeration of the experience, it is trying to find out the connections amongst experiences. It, therefore, gradually concerns itself with implications and generalizations. It is concerned with application of a particular instance to other situations. It is also concerned with the relations amongst men since at every level it is not merely a relation between things and things, men and things but also a relation amongst man, man and things. Thus knowledge may, for example, be concerned with the law of gravitation, but it may also be concerned with man's knowing the law of gravitation. However, the distinction between information and knowledge is really very thin. For most of us what we call knowledge is more or less information only. For a physicist, gravitation may be knowledge but for me it may be information only and nothing else. In any education system a conscious attempt must be made to turn information into knowledge. But levery information cannot and need not be turned into knowledge. The problem for any education system is how to turn information into knowledge. The teacher can give information only so far as the content of his teaching is

concerned. The intelligent students while receiving it transform it into knowledge. Perhaps the style of a teacher and the concentration of a student may help it. Perhaps, in order to achieve this the teacher should be able to plan his class in such a way that every part of the class would not require the same concentration.

It will be interesting to see how the words know, understand and inform behave. Although it is possible to say that I inform myself, the primary use of the word inform has a feel of informing "others" and it is this primary meaning which is inbuilt in the word information. One may contrast the word, know with the word inform. In the primary sense of the term one cannot say 'you know' or 'he knows'. When someone uses such an expression what is really meant is that I know that you know or I know that he knows. Whether such a use as you know or he knows is justified or not, it evidently involves "my knowing". It is my knowing which takes the form of "informing others". Evidently, knowing is connected with me, it is my knowing and whatever be the form of knowing, sensing, perceiving, inferring knowing is bound to be inseparable from me. Information is something which is separated from me and goes to others. So when something is conveyed out of my knowledge to others it is only the information part that is conveyed. And if it is understood by someone else, for others it again takes the form of knowledge. In fact this is the distinction which the Buddhist logicians brought out when they made a distinction between Syartha and Parartha Anumana. The distinction however has a wider scope than they actually thought of. It is really a distinction between Svartha and Parartha Jaana or knowledge (although the word Jñana can be primarily used in the context of me and not you or he). Incidentally the possibility of transformation of knowledge into information and vice versa brings home another point. Although knowledge may be inseparable from its knower, the content of knowledge is public and can be conveyed to us. This possibility makes the content of knowledge public and also makes education or instruction possible. The possibility of turning information into knowledge and vice-versa is thus the first presupposition of education.

Skills also form a very important part of education. But skills cannot be transferred from A to B or vice versa. Skill is something

which is basically practical in nature and is also inseparable from the person having that skill. When we talk of learning the skill what is really meant is that there is a possibility of understanding the different relationships which are involved in the performance of skills, and once the other man knows these relationships he gradually tries to imitate the action and masters the skill or the technique. This may be called learning by doing. It may not however be thought that the knowing or understanding of skill is completely prior to the imitation or practice of the skill. The process may be discribed to some extent as follows : understanding, imitation, further understanding, further information.... mastering the skill. By education we mean a training for successful living in this world. This world naturally requires both the understanding and relationships which the man and the rest of the universe have and also the possibility of utilising these relationships in practice. Thus, although skills are different from knowing they are so intimately connected with each other, that one cannot think of either skills alone or knowledge or information alone. We see today that there is an emphasis given on job-oriented education. This is particularly because of the part played by skills in education.

One more point which is very significant here is the relationship that knowing makes between the object known and the knower. It may be relevantly asked as to what steps are involved in this "process"? People usually think that there are a number of steps in this and the process is spread over some tangible duration of time. I have a feeling that this is not so. I do not want to deny thereby that I cannot change this "process" or "act" into more than one process or more than one act. It is thus possible to think that my knowing may be regarded as a transition from A to B, B to C, and C to D. But it merely means that I am trying to know something in four stages. It is not one knowing; although different knowings may ultimately lead to one knowing. If we start saying that each "knowing" is a process and has duration then every such process will be made of several processes and would lead to infinite regress. The fact seems to be that the act of knowing whether simple or complex is instantaneous and when one knows, one knows immediately although one could take pauses and try to know it gradually. These pauses, sometimes, are regarded as steps (as in geometry)

or premises or additional premises as in logic. Since knowing is subjective it would be elastic, it could be contracted or expanded according to one's will. And one could naver be able to say that our knowing consists of elements such an A+B+C+..+.. etc. Our knowing is always single and indivisible. Just as when our object is to reach a place we can do so either by walking down the distance or by one or more jumps, similarly when it is a matter of knowing we may know the object of knowing at once or in stages. To know something at once or to know it in stages depends on us—the knowers—on our capacity to know. It has nothing to do with the object that is known. I therefore think that knowing is instantaneous in nature.

If my above analysis is correct it will have lot of implications for our educational system. First it would mean that all methods of learning are epistemic in character and are not constitutive of knowledge. This would also mean that a certain theorem in mathematics can be understood immediately and the steps that we take by way of method are only contingent to the understanding of the subject. The steps that the teacher takes in the class are more for the mediocre student than for the genius. (One may see the etymology of the word mediocre.)

I have said earlier that our world is evolved through the interaction between man and the astronomical-geographical world. Although man himself is a part of this world, through such interaction he continuously creates his own world. I shall mot worry msyelf whether this world is real or unreal but it is this world which acts as a shell for man and every action of man primarily helps the evolution of this world. This world consists of names, forms, opinions, judgements and values.

Apart from information and knowledge, education has also to impart training which should help people in forming opinion, pass judgements, think or rethink of values and arrive at greater and deeper understanding of the universe by way of discoveries or apply his intuition for new inventions which would be useful to human beings as a whole. There is, however, a difference between information and other aspects of education. Information supplies the data or material over which men have to make further constructions. Information may be about the

objects in the world or about the relation of man to these objects. But the attitude necessary for information is different from the attitude necessary for opining, judging, evaluating or transvaluating. In all these aspects the attitude primarily projects a relationship between man and man. In fact here lies the difference between man and other animals. At every stage of construction the human being modifies the things and makes them human. It is this humanness which gives a cultural polish to every human construct. Sometimes this cultural polish is on the material supplied by the world, sometimes the cultural polish does not require anything that may be supposed to be of the nature of things. I have some files before me, I have written something in them. They may be very valuable to me but from the point of nature these are perhaps some collection of grass or wood. The same is the case with the furniture here. The building which is made of stone and cement-concrete is a building on account of the human polish. But in buildings, furniture or files some material which is not a human construct is required. What material is required for spoken language, poetry, ethical rules and aesthetic appreciation? Such things arise purely in human beings and their status also ends with human beings. Amongst these, however, one has to make a distinction. Opinion is not the same as judgement and judgement is not the same as evaluation. Beliefs, expectations etc., are still different matters. An educated person should be able to learn to form opinions. In fact it is a natural product of self-consciousness. But opinion is personal. It is a subjective reaction to a situation. In a way, udgement and evaluation can also be classed under opinion. If the aim of education is to have same kind of freedom then man ought to be able to form some opinions whether they are right or wrong. In fact, what we call prejudices are also opinions. The minimum that is contained in opinion is man's freedom to opine. Judgement is different from opinion in this, that judgement aims at giving objectivity to one's opinions whether or not one's judgement is as a mather of fact correct. Judgement gives us the objective view of things. It is no more my opinion, it is of the form. "any body would 'opine' this way". The transition from 'I to anybody marks the difference between opinion and judgement. Judgement also aims at the

correct evaluation of the situation. Unless education succeeds in developing this faculty in human beings man would not be able to go far ahead; he wauld not be able to take decisions, predict, take risk. The last but not the least is, man's being able to think of values. Elsewhere and in the beginning also I stated that values are concerned with acceptance. But they are equally concerned with preferences and rejections of previous values. Acceptance of the values gives an order to human behaviour and it creates a tradition. Preferences and rejection of traditions make room for new values and for the dynamism of the society. If education is not able to attain this and generate in man the possibility of creating new values and rejecting the old values, man's education system would have attained nothing.

Education is a preparation for equipping human beings against nature. The word 'against', however, does not mean here an opposition of man with nature. It is rather an apposition with nature. In a way, by education man is trying to evolve nature. One can even say that nature is being realized more and more in the evolution or development of man. Man's education is, in fact, an aid to this development. This development, as we have seen, proceeds through five different sources. These sources as have been pointed out earlier are information, knowledge, opinion, judgement and evaluation. In a way all these are aspects of training. But the word training has acquired a more technical sense now. Similarly, the word education and its correlates teach and learn have also acquired some extended meaning. Thus a ring-master in a circus may train or educate the animals in the circus and we may say that the animals also learn. The process of learning is, of course, common to all living beings; it is also perhaps the process of evolution. It is on account of this process alone that consciousness is transformed into self-consciousness which in turn gives rise to conscious education, learning or teaching. It also makes room for appreciation and gives rise to evaluation and values.

But the practical problem of education is concerned with striving for existence and in the present context it takes the form of getting oneself qualified for appointments, services or certain

other vocations. In a developed society we also build organizations for this purpose and when the states and governments are formed, education is taken as a part of the duty which the government have to fulfil. In a socialist state it is the monopoly of the State to deal with educational matters. Where such socialistic tendencies are absent parents or the guardians have the responsibilty or even the incentive to train the person so long as he does not attain majorhood. In such a world, naturally there would be a greater emphasis on technical or technological training which is supposed to give greater scope to man in the inevitable competition. But technology has to be regarded as a skill and some skills are preferred to others on account of utility. The skills, thus, could be graded according to the necessities, comforts and luxuries. I am reminded here of a dialogue which I read as a child between a tailor and a magician. A magician was earning much more than the tailor and he was sorry for his friend because the tailor could not earn as much as the magician. (Those were perhaps not the days of fashion where the tailor could have new designs every alternate day and hypnotize customers by his tailoring art which also would be a case of magic.) But then came a famine. People had not enough money for luxuries. But even then they required the services of the tailor who could thus maintain himself. The magician, however, had no spectators and had to go starving. The skills are also graded accordingly in a developing state. A doctor, a mechanical engineer, a metallurgist are likely to be preferred to an Arts graduate, and even among the Arts graduates an economist would have a far greater chance than a philosopher. The value of education is likely to be measured in terms of the job opportunity. Since the skills also require some preliminary training in science, science education is likely to have greater markets than the arts one. Perhaps it is not necessary that everybody should have science education. Boys taking up the science course do not necessarily have aptitude for science. Perhaps undue emphasis on science education is likely to make our education rather unbalanced. But in a competitive world where the dictum is, 'one who survives is the fittest,' survival in the world becomes the most important and the possibility of this survival would come from science education.

In fact, how to evolve a balance in this training becomes a headache for the government, the universities and the societies running educational institutions. Again, those who have to do this job have also to stand in competition in the struggle for existence. Thus, not only the students who are to be trained have to take training for standing the competition later on but those who have taken the training and who are now training others have also to survive the competition, for, training others is a means for their maintenance. More the money we have there is greater possibility of maintaining us and ensuring a secured life. It thus becomes necessary for the teaching community to take tuitions, write guides and run coaching classes. Once all these things are accepted they attain respectability and become social institutions.

The problem of education attains a different magnitude where the population is continuously on the increase. In a society where there is a hierarchy the people at the lower end of the ladder have the model of those who are at the higher end and they have always a tendency to imitate them. They naturally think that the path by which the earlier people climbed the ladder is the path by which they could also climb. And if the people at the higher end think honestly that on account of the difference in circumstances and on account of the change of times this would not be the proper path, the people at the lower end are likely to think that the people at the higher end are not in fact interested in the development of the people at the lower end. People in the 18th and 19th centuries in Bengal and Maharashtra amongst other provinces rose to power and respectability by taking English education. They attained a status by going abroad, by making a certain change in their way of living. Today if these people say that education should be through the mother-tongue, there would be a tendency of certain sections of the society to think that this step is taken for maintaining the supremacy of certain classes for all the time, to maintain a distinction between classes and masses. There is a tendency to resist such a move by people at the lower end partly because they think people at the higher end are preventing their development. One can see that after 1947 there is a greater tendency of people in our country to send their children to convent schools.

Similarly, there is a tendency of the rural people to go to colleges and centres of higher learning. There is a tendency to become more urban, for in urbanization people see the actualization of modernization. It must be kept in mind that people always imitate their superiors and this imitation is a packagedeal. Imitation of bad aspects may also be regarded as prestigious, as a status symbol. Sometime in the past Berar Cotton had a prosperous market and when the cultivators became rich over-night, they did not know how to utilize their riches and thought that they should smoke in a richer fashion and so many a time they used to wrap their tobacco in a hundred rupee note. The present manufacturers may not go to this extent. But I remember here an anecdote how taking drink, particularly the foreign one, has become a symbol of prestige and status. Once while I was going to Delhi from Bombay by plane I had by my side a very important industrialist, or rather a son of an industrialist. We became fairly friendly on the flight and as a token of friendship he offered me some whisky from his flask. When I said I do not want it he replied "It is very costly, (meaning thereby that it was very expensive) it is foreign, it is Sctoch. It cost me three hundred rupees."

How to get rid of such hindrances would be one of the problems before an educationist or a government. But more importantly the problem is how to check two important effects of our education. One is the tendency to urbanize, i.e., to remain in town and not to go back to the village. Economists name this process as the process of urbanization. I have said elsewhere that this is not in fact urbanization but ruralization of the towns and cities. The second is the tendency to think that education is for finding out a job, a service. Our unemployment is usually measured by how many persons are without service and are therefore, unemployed. This is again a very incorrect attitude. As the proportion of literacy and education increases, in the same proportion cannot increase the service opportunities either in government or semi-government and non-government institutions If getting service is the aim of education then with the increase in the percentage of the educated there is bound to be increase in the percentage of educated unemployed. Man should certainly be free but this should not mean that each one would have freedom to choose the kind of job one wanted. Such a thing would upset the balance.

A word about balanced education is also necessary. While accepting that theoretical education should have a very significant place in our educational system, it must be pointed out that there must not be any imbalance between theoretical training and practical aspects of education. Suppose a country produces all soldiers or all technicians or all scientists, it is surely not going to develop the country. As a matter of fact it has to be recognized that just as one part of our body cannot increase beyond proportion, similarly one particular aspect of education should not increase beyond proportion. Such an imbalance will bring down the prosperity of the country. I do think that disciplines like physics, mathematics, economics, philosophy and languages have to go hand in hand. Similarly I feel that there must be proper training at every level. Today it appears that a man is required to do a job in which he is not trained, nor does he understand the implications of the job which he has to do. A clerk in the office does not take the training of filing or a typist does not know the way letters are to be typed, a farmer does not have training of repairing his tools, a cook in a mess goes on smoking while cooking, with the result that many a time the ash of smoke and several other things fall in the preparation. He, for instance, does not know that a napkin with which he cleans his sweat should not also be used for cleaning the dishes and utensils. People do not know how to use the public toilets, that they must be flushed, that they must be kept clean, that the flap of a commode is to be lifted before using the commode for 'urination. These and several other things (at different levels), which form part of our living are not but ought to be included in our educational system. Perhaps Gandhi was the only man who thought of all such things and included them in his Nai Talim. We are also not trained for the firstaid, nor given the information of different diseases like leprosy, nor trained for the preventive measures of such diseases. In fact, we have never cared for the hygiene, or the social relations, or have thought of other persons and other things. Our

training has all along been of the narrower self. In a proper educational system our indifference to all such things should be discounted or even depricated. Even in formal theoretical education there is a greater stress on scholarship rather than on thinking. People forget that stupidity and learning can go together. Citing quotations is not necessarily the assimilation of thought, that it is not thinking at all. If education is to implement proper living then it must increase both the intellectual, the ethical and the aesthetic sense of man. It means education should cover both the theoretical and the practical aspects, that our training should primarily consist among other things of skills and information. There may be other aspects of education which certainly are very important. But they are important only for special training. But skills and information are basically important, for without these no education can start. Education is primarily for the common man though it may also be necessary for the genius. But skills and information are necessary both for the common man and the genius.

What is a skill? It is a practical manipulation of man to handle or wield the world or the part of the world. This world includes the man himself also. As a matter of fact when one does not expertize in skill of a particular kind, it merely means that he has accepted the principle of division of labour and has transferred a part of his responsibilities in respect of skills to others, i.e., other men agree to fulfil this part of his work. But essentially skill is concerned with the practical relation that man has with the world. It is concerned with the body and also the material available in the world: Two definitions of man are very interesting in this context. Man is defined as a rational animal. But man is also defined as a tool-making and tool-wielding animal. Tool making and tool-wielding are directly concerned with skills and are directly concerned with his animality, i.e., with the spatial properties that he has. The anthropologists tell us that the main difference between man and other animals is that man, unlike other animals, is able to bend his thumb inside. This makes it possible for him to use (anything as) a tool. By extention the concept of tool can be used in several other ways. For example, just as a man can become a good archer, similarly he can also become a good wrestler; he can also build his

body without perhaps making use of his thumb. But by and large skills are concerned with a proficiency in tool making and tool using. By tool we need not necessarily mean a thing made of stone or metal. Anything that man uses as his means are tools including other men and animals. But the growth of skills also requires certain information. It is on account of information that there is an improvement in tools. But man not only requires information for improving his tools, he also requires information — theoretical information regarding other men and other parts of the world. Basically man's life, and prosperity depend on skills and information. The history of human civilization is the history of man's skills and informations.

If education is to be properly planned then skills and informations must be equally valued. One should not be regarded as more important than the other. It was Gandhi who insisted on the equal value of both. In fact this is a derivation from the principle that physical labour is as important as the intellectual labour. Man requires food, cloth and housing. For this he needs to know how to hunt, how to spin or weave, how to build, how to store and how to rear the cattle. These not only require the information but also require the actual use of tools. Gandhi therefore thought that up to a particular age each one must acquire the minimum skills. Education as a training for genius or the non-productive section of the middle class can either wait or can come later. Even when we talk of technology it really means that by mutual agreements we agree that someone else should do 'my' job. But an upset in balance in this regard also topsiturvies the balance in society, e.g., once a technologist becomes a monopolist and attains a certain social status he begins to dictate to the other sections of society. Today's mechanical engineer is only an improvement over yesterday's black-smith. His function is the same though it is more sophisticated. Today's doctor and a gynaecologist has also to carry out the same function as yesterday's medicine man and a dayi. Similarly as a matter of fact a managing director of a spinning mill is our 'servant', for, he is preparing for our needs. But in a topsiturvied society they became much more important and upset the balance of society. Vinoba once asked me when I was a young boy, "what is more important for you, the glass

or the water in the glass?" When I said 'water', he sharply replied, "But in today's society we value glass more than the water. You do not pay for water but you preserve your glass, more so if it is golden or silver." He said, "instruments become more important in the present society. It is unfortunate that the material means become more important than the objectives." This leads to unbalanced society where one section of the society exploits the other. A true form of education must not allow this. But although one may not bother about this problem at present it certainly follows that our basic education must have both these aspects. Gandhi's Nai Talim laid equal stress on both. It was the first experiment in this direction. And any philosophy of education cannot simply close its eyes to the one or the other.

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