

TECHNOLOGY, THE SOCIAL SCIENCES, EDUCATION
AND THE FUTURE OF VIET - NAM

(Inaugural lecture on commencement of academic year
1970-71 at Van-Hanh University, December 1, 1970)

By Dr. TON-THAT-THIEN, Dean of the Faculty of
Social Sciences)

Mr Minister,

Distinguished Guests,

Dear Students,

This year, the amount of the national budget earmarked for education has remained practically the same. With a larger student body, and a vast increase of the cost of living resulting from higher taxes and the devaluation of the piastre, we are confronted in fact with a sizeable cut of the budget for education. For Van Hanh University, the government grant is 12 million piastres, that is the same as last year. With an increase of the student body from 3000 to 4000, and taking into account the rise in prices, the government grant to us has in fact been cut by almost two thirds. That is a severe blow to us all who are concerned with education, that is with the building of a better future for this country.

In the coming year great financial difficulties will therefore be awaiting us. But if we really love our country, we must carry on, with greater courage, greater patience, and unshakeable hope, especially as we are standing on the threshold of a year when peace seems to appear at last on the horizon, bringing with it the prospects of an end to the hardships and uncertainties which have weighed so heavily on the flesh and spirit of our people, and ushering in for the youths of this country a new era in which they can turn their minds to more noble thoughts and their energies to more constructive purposes.

In spite of the financial clouds casting a dark shadow on us, now is perhaps an appropriate time to lift our eyes, and look beyond our immediate worries towards the future, a future about which we still know little, but whose shape we must try our hardest to visualise and to mould, in the light of what has been happening in the outside world. It is a world from which we have been cut off for many reasons or pretexts, but whose contours we can at least see clearly through our readings, or through radio and television. Some of us have been lucky enough to see it with their own eyes. Some others are still more **lucky to get a good picture of what this world may be like three decades** from now, through their contacts with people who make it their business to try to study the past, and especially the present, in order to anticipate the future.

When we draw on all the knowledge available to us, and especially when we try to imagine the future on the basis of this knowledge - I say knowledge, and not just conjecture or fiction - we cannot fail to be struck by one glaring fact: while we in Vietnam have been busy killing one another and destroying the precious capital - moral, intellectual, material - which several generations of our people had built at the cost of so much blood, sweat and tears, the world has been forging ahead. It is a world dominated by change, and what is still more remarkable, the rate of change has been accelerating, in every field of human endeavour, especially in the field of science and technology - the foundations of economic development and progress. Through science and technology, man has pushed the frontiers of knowledge of both the visible and the invisible outwards - towards space - , as well as inwards - into matter and even into the deepest parts of man's mind. This tremendous expansion of knowledge places mankind on the threshold of a new era.

The coming of this era has been made possible by a series of revolutions through which mankind has passed: an intellectual revolution which shattered the fetters of the Middle Age and ushered in the Renaissance; a scientific revolution in the XVII and XVIII

centuries which laid the foundations of the Industrial Revolution in the XIX century which gave the world the steamship, the railways, and the machines producing both agricultural and industrial goods in vast quantities; then the end of the XIX century and the early part of the XX century witnessed a new wave of scientific discoveries which led to the motor car, electricity, wireless communication, and the modern streamlined factories. We have now entered a new era of scientific and technological development whose most conspicuous manifestations are the jet plane, television, transistors, computers, spaceships, and nuclear energy. We are also on the threshold of a revolution in biology with the possibility of making the earth and the sea produce food and other goods in abundance of improving the human race, or even producing a completely new breed of man.

The new technology has given man new tools to probe outer space, the depth of the earth, or the bottom of the sea. Man is now capable of devising means to live in space, or undersea, and through genetic manipulations and prosthesis, to fabricate a new breed of men endowed with new faculties, or even beings which are partly organic and partly mechanical. The new technology is now capable also of freeing mankind from the worries of hunger, cold, heat, or even labour, in other words, of producing an affluent, or even superaffluent society, that is one in which everyone can have not only enough, but more than enough of everything he may have ever wanted, or even dreamed of possessing. In such a society, the communist slogan: "to each according to his needs, from each according to his ability" will sound hollow, because scarcity will no longer be man's plague and work his curse : man will no longer be required to torment his body, but simply to think and push buttons.

Everything is now possible, because the knowledge for it has already been acquired, is being acquired, or will be acquired sooner or later, and those who take the trouble to acquire it can put it to use to achieve their purposes - good or bad. All over the world, the most brilliant minds are wrestling with the problems of cushioning

what Alvin Toffler has called the "future shock" in a famous ^{book} bearing the same title. (1) Others, like Arthur Clarke, have tried to help us visualise the "profiles of the future" (2). Others, like John McHale, are now discussing with the greatest seriousness "the future of the future" (3). Yet some others, like Herman Kahn, are trying through figures, equations, and novel concepts, to predict the shape of things in the year 2000 (4). In more and more countries, societies for the study of the future are being set up, and more and more regional and international conferences have been held, in America, in Europe, and even in Asia - in Japan or Korea, for example - , to swap ideas on how best to cope with the rising flood of knowledge and fast developing technology.

What the best brains in the world fear most is the loss of control over the changes brought about by the revolution in knowledge and technology, or, what is still more disastrous, to be bypassed by it. One can fully realise the fear which grips the most knowledgeable and wisest men when one is aware of the latest developments in science and technology. Let us cite a few of the technological developments which have already taken place, or which will surely take place in the near future:

- weather control: artificial rains, storms, droughts,
- artificial food, tasting exactly like natural food,
- picture phone, TV directly to the homes via satellites,
- lasers, disintegrating rays,
- computers with a capacity of the general order of the human brain, but much faster, and which could be carried in a shoe box,

-
- (1) Alvin Toffler, Future Shock, New York, Random House, 1970.
(2) Arthur Clarke, Profiles of the Future, New York, Harper, 1965.
(3) John McHale, The Future of the Future, New York, George Brazillier, 1969.
(4) Herman Kahn and Anthony Weiner, The Year 2000, New York, MacMillan, 1967.

- solar energy for the homes,
- hypersonic aircraft (scramjets) capable of flying at Mach 25 (25 x 740 miles per hour),
- submarines which can reach the greatest depths (20,000 feet),
- nuclear matter-annihilation bomb of 15 kilotons power,
- data banks,
- sensors permitting remote mapping of the resources of the world,
- mind affecting drugs which can produce the state of mind and mood desired, improve or destroy memory,
- biological mutations at will through the manipulations of the genes,
- prosthesis,
- closed ecology permitting life in space or undersea,
- (and to give food for thought to students) the revolution in information, computers and electronics allows us to "visualise a world in which anyone anywhere might have ready access to great libraries and their books, to videotape or films libraries containing lessons on specialised topics, to records of significant contemporary or past events, to outstanding dramatic productions, to a difficult operation particularly well performed in a leading hospital, and to a particularly smooth negotiation by particularly wise diplomats..."(5)

The above is merely a list of some of the major technological developments which are going to affect our lives profoundly. The full details are given in the works I have already cited, as well as in the short but remarkably comprehensive book published by the American Foreign Policy Association, Toward the Year 2018, from which the above passage was quoted. I strongly urge you all to read them, and to reflect upon the implications of those technological developments for society, and for the social sciences. To this, I will now turn.

(5) American Foreign Policy Association, Toward the Year 2018, New York, Cowles Education Corporation, 1968, p.76.

II

The fear of being swept under helplessly - therefore stupidly - by the revolution in knowledge and technology arises from the painful awareness that the technological developments have an inevitable social impact, and that the current social apparatuses are no longer adequate to take advantage of, or to control, the developments of technology, or that those apparatuses will be inappropriate to cope with developments in the future. In other words, social techniques and organisations, as well as social institutions are becoming more and more ineffective in coping with the technological advances because they are obsolete. Social technology is out of step with industrial technology. A possible result - in fact a probable result - of this discrepancy is that technology may degrade and destroy man instead of serving as an instrument of human progress.

The social obsolescence becomes clear when we look at the sickening poverty, ignorance, inequality, inefficiency and corruption around us. Some of us have seen in New York and Chicago, in Tokyo and Osaka, in Dusseldorf and Essen, the fantastic pollution of man's environment. But there is no need for us to go so far. Each of us present in this room has seen - could not help seeing - the huge garbage dump or the stinking canal and slums just outside the walls of this university, as he comes here each morning for the purpose of lifting his thoughts to noble heights. All of us here are aware of the bareness of the equipment of our class rooms and offices, or that the Faculty of Education building which is being erected a few yards from us for the purpose of helping improve education in this country cannot be finished for lack of funds - all we need is 50,000 dollars - while 70 million dollars are being spent each day to turn young men into battered corpses, homes into smoldering ruins, and fields into barren land. And those 70 million dollars do not include what the other side has been spending - probably not less than two million dollars per day, that is 730 million dollars a year. All of us have suffered the oppressor's wrong, the law's delay, the insolence of office, and

the spurns that patient merit of the unworthy takes.

It is clear that, in this country, as elsewhere in the world - including the most advanced industrial nations - social organisation has lagged far behind the progress of science and technology. And behind the obsolete social organisations, institutions, and techniques we can trace the obsolete social ideas, concepts and attitudes. As McHale has pointed out: "The obstacles and limitations to the fullest use of our resources and knowledge are non-material. They reside mainly in the obsolete economic, fiscal, and political structures that are the quasi-sacred legacies of our past" (6). The situation at mid-twentieth century, as he sees rightly, is that we are confronted with :

1)- an explosive growth in man's capacity to interfere on a large scale with natural environmental processes,

2)- a lag in conceptual orientation toward these capacities and toward the social processes through which man accomodates change.
(7)

He stressed that "at every opportunity the negatives of our present situation are not inherent in the technological revolution as such, but in the conceptual approaches and social attitudes that determine how new technical means will be employed". (8)

Our social organisations have not helped us cope with the technological developments because the social ideas, concepts, attitudes underlying that social organisation are still, by and large, those of the XIX century and the early part of the XX century. They are still based on the concepts of Economic Man and Pure Science. And because the Western nations have come to dominate the world, those concepts have also become prevalent universally. This means that, in the East, we have suffered the consequences of a double failure: that of the West, and our own - for many of our social ideas

(6) McHale, op. cit., p.51

(7) -ibid- p.61

(8) -ibid- p.148

and concepts had become obsolete long before we were overrun by the West, and they have not been abandoned because we would not, or could not do so. Those ideas and concepts were Ethical Man and Order.

The concept of Economic Man - with its closely related the doctrines of Individual Freedom, Inviolability of Property, Laissez Faire, Survival of the Fittest, Supremacy of Efficiency - was the central concept which dominated social thinking for much of the last two hundred years. On it were founded the social organisations and institutions which still survive today. The concept of Economic Man was reinforced by that of Pure Science and its tenets - technology, rationalism, scientific method, mechanisation, and secularisation.

Together, the two above concepts brought wealth, freedom, and power to the lucky few who were at the top of the social pyramid. But the wealth, freedom and power of this minority were acquired at the expense of a vast majority in the Western nations and their colonies. This acquisition was also achieved at the expense of society as a whole: large private profit was obtained at high social costs: wanton depletion of resources, pollution of the environment, and especially the shocking inequalities which led to the alienation of large masses of exploited, oppressed, and degraded people - the source of much of the tensions and conflicts - both international and international.

Furthermore, the idea of Pure Science, that is "value free" science, practised by men who looked upon themselves as mere "professionals" or "experts" having nothing to do, and desiring no involvement, with matters which had no direct connection with their work: the larger social goals and purposes, i.e., what happened to other men and other nations. They did not allow the questions of values and purposes to intrude upon their lives, work, and thoughts. They felt no responsibility for the social consequences of their discoveries or inventions, be those consequences good or bad. They were merely "technicians" doing a job for whomever paid them, or "scientists"

interested solely in the discovery of truth - of scientific truth, that is. By this attitude, they consciously or unconsciously became the servants of the status quo, or authors of inventions which may threaten the survival of mankind. This attitude spilled from the physical sciences over to the social sciences, as we shall see further on. For the time being let us first consider the failure of the East.

If the fundamental failure of the Western nations was due largely to their allowing an economic and mechanistic view of man and nature to dominate their social thinking and social organisation - and this is true of Communist Russia as well - the failure of the East was due to a refusal to consider nothing worthy of man's attention except the creation and preservation of an ethical and orderly society. In this society, the tao li - at all three levels : heaven, man, nature - must reign supreme, and stability must be enforced by a strict respect for order based on a detailed and rigid hierarchy of status and positions. Nothing mattered but the respect for the tao, and the preservation of a stable social order based on merit as measured by ethical and literary accomplishments. The production of material wealth - through economic and commercial activities - , was downgraded to third and fourth places in the social hierarchy - si, nông, công, thương: scholar, farmer, labourer, merchant - , and scholarship was confined to the study of the li of heaven, men, and nature - a li of order harmony. Everything was perfect, especially the existing social order, and there should be no change, no innovation: what was aimed at was an innovation-proof society.

Of course, the above view was not the real view of Confucius, who stressed the necessity for observation, analysis, adaptation, and change as a condition of durability, as a careful reading of Ta Hsueh or Chung Yung would prove. But the literati of the Han, and especially of the Sung, period twisted the Confucian teachings and used them for the preservation of the status quo and the prevention of all attempts at innovation and change, thereby condemning Confucian

societies to sclerosis and decay (9). There was naturally brilliance and luxury, but only for the Emperor and his mandarins. As in the Western nations which gave prominence to the concepts of Economic Man and Pure Science the brilliance and luxury of the Emperor and his mandarins were obtained at high social costs: China, Korea, Vietnam, as nations, were to pay dearly for the exclusive adoption of Ethics and Order when faced with the power - based on science and technology - of the West in the XIX century. Of the Asian confucian countries, Japan alone escaped that fate because its intellectuals had the genius of giving the concept of li an interpretation which covered both ethics (dori) and science (butsurei), and thereby laying the foundations in the Meiji era of an eastern nation which accomplished the feat of enjoying the benefits of both western science and eastern ethics. (10)

Nowhere was the adoption of the Sung interpretation of the concepts of Ethical Man and Order - which was imposed on Vietnam after the Ming invasion (1414-1427) and thereafter adopted by our literati - was more disastrous to this country than in the fields of administration and education. It produced a state apparatus based on the scalar principle (or vertical intergradation) with exclusive emphasis on superior-subordinate relations, and a rigid and awful respect for the established order with its laws and policies, no matter how incompetent and corrupt the superiors might be, and no matter how anachronistic the laws and policies may have become. It made it impossible for men to learn to work together on the principle of horizontal integration, which has become a prime necessity in a fast

-
- (9) See Huỳnh-Thúc-Kháng, "Nho Học Cuối Triều Tự Đức Đến Nay" (Ju Studies From the Tu Duc Dynasty Until Today) in Phan Bội Châu, Khổng Học Đăng, Hue, Anh Minh, 1957. *Japanese*
- (10) See Maurius Jansen (ed), Changing Attitudes Towards Modernisation, Princeton, Princeton University Press, 1969, and Joseph R. Levenson, Liang Ch'i Ch'ao and the Mind of China, Berkeley, University of California Press, 1969. Also TON THAT THIEN, "Thái Độ Trung-Hoa, Viet-Nam và Nhật-Bản về Khái-Niệm Cùng Kỳ Lý và Khoa-Học Tây Phương" (The Attitudes of China, Viet Nam and Japan on the Concept "Go to the End of the Li" and Western Science", Tu Tuong Van Hanh University, No 2, June 1970, and "More on the word Li" Tu Tuong, n^o 4, August 1970.

changing modern world, in which the pooling knowledge, competence, energies, and resources is a basic condition of effectiveness, as the greatest experts on management take great pains to impress upon us (11). It also produced a prismatic society, in which the reactionary, corrupt, and incompetent state officials become a power itself, blocking all attempts at innovations and reforms for the benefit of themselves, their families, and their friends, especially when the political power had broken down or was itself incompetent. Those who are familiar with Fred Riggs' Administration in Developing Countries realise how difficult it is to break this built-in obstacle to modernisation in our social body. (12)

In the field of education, the Sung system helped produce a breed of men whose primary concern was to excel in learning by rote, in calligraphy, in literary subjects, completely indifferent to science and technology, living as parasites and considering this parasitism a matter of right and righteousness. It was a system of education whose main function was to transmit anachronistic knowledge, to kill all initiative, innovating and creative imagination, sense of team work; to instil into generation after generation the passion for conformism, for the superficial, the irrelevant, and the completely useless. In fact, it produced two breeds men: 1) those who were of no use to society, and 2) those who blocked the march forward of their own country and people. Such people were only interested in honours, titles and personal wealth and power. One need only look at Vietnamese society today to realise the disastrous nature of such a system of education, for today's system is essentially a continuation of the Sung system, with French oil and American vinegar added to Vietnamese amoebiae to make it into a deadly salad.

-
- (11) See for example Peter F. DRUCKER, Technology, Management, and Society, New York, Harper, 1970, and Fremont E. KAST, and James E. ROSENZWEIG, Organisation and Management: A Systems Approach, University of Washington, 1970.
- (12) Fred W. RIGGS, Administration in Developing Countries: The Theory of Prismatic Society, Boston, Houghton and Mifflin Co, 1964.

III

From the above analysis, the implications for all concerned about the future are clear: to cling to obsolete social concepts, ideas, attitudes, and organisations is not only unproductive, but even dangerous. There is great need for the reevaluation of our values ; for the reconceptualisation, reorientation, and redesigning of our social organisations and institutions to meet the problems of society undergoing massive, fast, and accelerating change under the impact of technological developments. We must reshape our image of the ideal society. This calls for a thorough understanding of the problem of change; for a clear grasp of science and technology, their nature, their scope, their potential for good and evil; for a clear vision of what constitutes the social good; for social innovations to keep pace with technological innovations.

As early as forty years ago, Bertrand Russell stressed that science, as a technique, makes it possible, or even necessary, new forms of human society. But we cannot rely on science alone. In his words:

"Man hitherto has been prevented from realising his hopes by ignorance as to means. As this ignorance disappears he becomes increasingly able to mould his physical environment, his social milieu and himself into the forms which he deems best. In so far as he is wise this new power is beneficent; in so far as he is foolish it is the reverse. If, therefore, a scientific civilisation is to be a good civilisation it is necessary that increase in knowledge should be accompanied by increase in wisdom. I mean by wisdom a right conception of the ends of life. This is something which science itself does not provide. Increase of science by itself, therefore, is not enough to guarantee any genuine progress, though it provides one of the ingredients which progress requires". (13)

All students of social sciences are aware of the problem of values in relation to science, and especially to the social sciences.

(13) Bertrand RUSSELL, The Scientific Outlook, New York, Norton and Co, 1962 (first published in 1931), p.100.

The question whether the social sciences should be "value free" is an issue which has deeply divided social scientists in the past, and is still dividing them today, although to a lesser extent. The issue is as old as the origin of the social sciences themselves. When Auguste Comte began to be interested in sociology, he believed that a science of society could be developed which would enable the scientist to discover the laws governing society, and permit him to control and shape this society in the same way as physical scientists can control and shape the physical environment by discovering physical laws - a belief which Karl Marx was to take up later and push with greater energy. Comte therefore named the new science physique sociale (social physics).

Today, we are a long way from social physics, viewed as pure science, using solely the concepts and methods of the physical sciences. More and more scientists have come to recognise that the social sciences cannot be exactly like the physical sciences, because the social scientist cannot exclude social values and social purposes from his studies, nor can he assert that his work is "value free". Man is different from matter in that he can think and feel, and constantly thinks and feels, and reacts to his environment in such a way as to improve his survival advantages in the light of acquired knowledge. One cannot study him in isolation or in group in the same way as one studies a lump of metal or a chemical compound. The qualification so dear to scientists - rebus sic stantibus - cannot apply to him, for he never remains the same and his social environment never remains the same. Indeed, as already pointed out, this environment is changing, and changing very fast, and man is changing with it. The only constant in human and social affairs today is change. Man therefore learns, and can thereby improve himself and his environment, provided he gets adequate, relevant, accurate, and timely information. What he needs more than anything today is timely knowledge of the right kind and in the right amount to be able to anticipate and shape the future by orienting the present, in the light of the mistakes of the past. It is the task of education to provide this kind of knowledge and information. And it is the principal task of the social scientist to help in

obtaining the relevant information, to draw correct inferences from it, and offer the new concepts, ideas, and forms of social organisation which would permit society to cope successfully with the accelerated technological developments, keep them under control, and guide them towards goals so defined as to ensure the maximum chances for the survival, freedom, and progress of society. To be able to do this, the social scientist needs full information on the problems mentioned earlier, and not only in relation to the present, but to the past and future as well.

The social scientist, as well as the educator, and, in fact, all those whose responsibility is to lead and guide society, must be aware - at least in a general way - of the latest developments not only in the social sciences, but in the sciences in general - both pure and applied. In other words, he must not draw any line in front of him, or follow any single track, but must keep an open mind. His motto should be: homo sum: humani nihil a me alienum puto. What kind of developments he must watch carefully was suggested at the beginning of this lecture. But that concerns the present and its implications for the future. The social scientist must also, and especially, dig widely and deeply into the past.

Changing the future requires changes in our views of the past, says McHale. He adds, and the passage is so important that I shall quote it in full in spite of its length:

"Any serious study of the future implies an equally rigorous hindsight operation of the past. Rather than approach this in terms of traditional historical modes, we need to review the past as a vast collection of incompletely recorded social and cultural experiments conducted under many different degrees of local controls and environmental determinants. The records of that past are our experimental data for charting the future. Traditionally the value of the past was to supply stability and continuity to the present, but its more critical relevance lies in identifying within our past historical conditioning those attitudinal constraints that endanger and obscure our future possibilities. The need is to cut ourselves off from the past so that we can achieve the future, but to review past potentials

and disabilities in the light of changed conditions that give us a greater range of choices and options.

.....

"One might even say that this reevaluation of the past is of greater priority than the elaboration of more future. This is particularly true in relation to evidence in socio-political theories, which constitute the latent assumptions and take-off points for all social futures. From such theories, we derive our images of man, his institutions, and the possible forms of his societies. Yet, patently, many of these theoretical assumptions were formulated in preindustrial phase or under transitional stress to the industrial period". (I4)

We have identified above certain social concepts in the West and the East which had nefarious effects in the past, and are still exerting a braking effect in the present. We should round off the picture by adding that the so-called new and progressive ideologies have nothing new or progressive, or even healthy, about them either. In fact, they have also become obsolete, and are hampering our efforts to build a better future. The most conspicuous of those ideologies is marxism, as interpreted and practised by the communists - especially the Chinese and Vietnamese communists - today. As Wright Mills has pointed out, liberalism and socialism have virtually collapsed as adequate explanations of the world and ourselves. He writes:

"Liberalism has been concerned with freedom and reason as supreme facts about the individual; marxism, as supreme facts about man's role in the political making of history... But what has been happening in the world makes evident, I believe, why the ideas of freedom and reason now so often seem so ambiguous in both the new capitalist and the communist societies of our time; why marxism has often become dreary rhetoric of bureaucratic defense and abuse; and liberalism, a trivial and irrelevant way of masking social reality. The major developments of our time, I believe, can be correctly understood neither in terms of the liberal nor the marxian interpretation of politics and culture. These ways of thought arose as guidelines to reflection about types of society which do not now exist. John Stuart Mill never examined the kinds of political economy

(I4) McHale, op. cit., p.30

now arising in the capitalist world. Karl Marx never analysed the kinds of society now arising in the Communist bloc. And neither of them ever thought of the problems of the so-called underdeveloped countries in which seven out of ten men are trying to exist today. Now we confront new kinds of social structure which, in terms of "modern" ideals, resist analysis in the liberal and in the socialist terms we have inherited."(5)

Since liberalism and marxism have been the two ideologies in whose names Americans, Russians, Chinese, and others ~~with the stupid help of Vietnamese, or with the help of stupid Vietnamese choose what you like~~ have turned Vietnam into a vale of tears and blood, it is necessary for Vietnamese social scientists - and not only for Vietnamese social scientists, but for all Vietnamese who care about their country - to take time to study those ideologies closely and become aware of what, as social concepts, ideas, slogans, and organisation, they can contribute to the progress of this country and its people.

On the other hand, the Vietnamese social scientist must also develop a deep interest in the social and intellectual history of Vietnam, especially in the period of its contact with the West, that is from the later Lê dynasty onwards. It is by studying this period that he can make relevant, fruitful, and, I think, very instructive comparisons with the present period. He will see how little ideas and concepts have changed, how ideas and concepts developed three hundred years ago or more still impede the progress of our people today; that many intellectuals today behave and react the same way as the intellectual mandarins of the Court of Emperor Tu Duc; that the political picture today is not much different from that prevailing under the Trinh, and the military attitude today is not much different from that prevailing at the Court of Emperor Minh Mang. If he studies the ideas of Phan Chu Trinh, he will be struck, as I have been struck, by

(15) Wright MILLS, The Sociological Imagination, Oxford, Oxford University Press, 1969 (first published 1959) p.167.

the fact that the moral, intellectual, and political situation Phan Chu Trinh found in his time were similar to that prevailing today. And yet, Phan Chu Trinh had written about the effects of the kind of education and politics which had produced his generation, and was being pursued in his own. (16) There is nothing new under the Vietnamese sun :

As social scientists, we must, however, have more than a strong sense of historical perspective. We must also have a strong sense of social purpose. As I have suggested earlier, there is a school of social scientists which wants to see values and purposes excluded from the social sciences, which considers that the main task of the social scientist is to study things "as they are". But in social matters, things are what they are because, somewhere along the line, someone had wanted them to be different from what they had been. Gunnar Myrdal, who had spent a lifetime studying social problems, and is one of the most respected social scientists of our time, has this to say on the matter: "There is no way of studying social reality other than from the viewpoint of human ideals. A "disinterested social science" has never existed and, for logical reasons, cannot exist. The value connotation of our main concepts represents our interest in a matter, gives direction to our thoughts and significance to our inferences. It poses questions without which there are no answers." "The social sciences, he further says, have all received their impetus much more from the urge to improve society than from simple curiosity about its working." Social policy has been primary, social theory secondary". (17) In Social Science and Social Purpose, Professor T.S. Simey echoes the same thought. He says:

(16) See TON THAT THIEN "Phan Chu Trinh" in Tu Tuong June 1969
Van Hanh Bulletin, March-April, 1970.

(17) Gunnar MYRDAL, Value in Social Theory, London, Routledge and Kegan Paul, 1958, pp. 1 and 9.

"If one looks at things and events rather in the manner of a modern philosopher... one refrains from basing one's thinking on a refusal to face facts; man cannot be "value free", science or no science. One must accept the necessity to share the basic assumptions of the ordinary man when he seeks to bring as much intellectual order as he can into the world in which he lives. Values are part of his system of thought. It can be assumed without difficulty, therefore, that policy-makers and administrators will do their jobs better if they avail themselves of the world's wisdom in general, and in particular, of the intelligence of sociologist has contrived to collect". (18)

He agrees also with Professor Robert K Merton that the social scientist must establish new goals and bench marks of the attainable, that is "to introduce new values into a social situation", and adds that "there can be no social science without social values".

The social scientist must therefore develop a strong sense of social value and purpose because, apart from methodological considerations, he realises that many personal problems cannot be solved as personal problems, but as social problems which ^{are} soluble only by a restructuring of society. This is what Wright Mills calls the connection between biography, history, and society. Many personal troubles, he says, "cannot be solved merely as troubles, but must be understood in terms of public issues - and in terms of the problems of history - making... the problems of social science, when adequately formulated, must include both troubles and issues, both biography and history, and the range of their intricate relations". (19)

It is thus in the light of social values and social purpose that the social scientist uses his imagination to forge new ideas and concepts, and visualise new forms of social organisation to take full advantage of the new technological developments. However, before he sets his imagination to work in that direction, he must have know-

(18) T. S. SIMEY, Social Science and Social Purpose, London, Constable, 1968, p.177.

(19) MILLS, op. cit., p.226

ledge, his own, as well as that of many others. But this knowledge may not be there, because the educational system of his society is such that it cannot produce the kind of knowledge he needs. And thus the production of knowledge becomes also the social scientist's concern. And production of knowledge is one of the major functions of education.

IV

Fifty years ago, economic development was, according to textbooks on economics, the result of the combined use of three factors of production: land, labour, and capital. Twenty years ago, the textbooks stressed the importance of entrepreneurship as another important factor of production. Today, the most important factor of economic development, as well as technological development, and of much else is knowledge. Experts on management and sociologists agree on that. "The basic capital resources, the fundamental investment, but also the center of a developed economy, says Drucker, is the knowledge worker who puts to work what he has learned in systematic education, that is concepts, ideas, and theories, rather than the man who puts to work manual skill or muscle" (20) Says McHale, who is a social scientist: "Increased knowledge, based on human resource capital, transferred into many forms of physical and social activities, is now more directly the wealth generator". And again: "Our most important resource will be the possession of organised knowledge, that is, trained human beings, their requisite standards for full creature living, and the facilities for their continued pursuit of further knowledge". (21)

The development of science and technology, made possible by increased knowledge will, in turn, directly contribute to the generation of more knowledge. The rate of acceleration rises all the time. Those who talk about an "explosion of knowledge" are quite correct.

(20) DRUCKER, op. cit., p. 37

(21) McHALE, op. cit., p. 231 and 278

It is increasingly recognised that a society can develop faster if it channels a large part of its resources to research and development. The United States and the Soviet Union are the most conspicuous illustrations of this fact. Another important fact about knowledge is that it is cumulative and has no frontiers: the late comer enjoys greater advantage in the exploitation of the latest discoveries - if it is organised for that purpose. The spectacular recovery and rise of Germany and Japan to the top ranks of the world after World War II, for example, are to be explained for a large part by their application of the latest results of researches in science and technology to industrial development, in what has been described aptly as "skip-hop-and-jump" development. A nation which does not possess relevant and up-to-date knowledge, and does not adopt the kind of social organisation permitting it to acquire, transmit, and create such knowledge is condemned to stay behind in poverty, to face domination, extinction, or relegation to the role of an anthropological museum.

But to be useful, knowledge must be disseminated. For this, an appropriate system of education is necessary. By appropriate is meant a system capable of producing men with alert minds, and able to adapt swiftly to a fast changing environment. This means that such a system must be an open one, and not the system of locked harbours, locked doors (bế quan toả cảng) and locked mouths and locked minds (bịt mắt bịt miệng) which were used with disastrous results in the past, and is still being applied today, especially to the vast majority of people without wealth, power, or readiness to conform or submit. An appropriate system of education must aim at developing to the maximum constructive critical analysis and imagination, the sense of creativeness and innovation, the sense of awareness and readiness to accept change, intellectual curiosity and the desire to learn and to master what one learns.

Transmission of knowledge and creation of knowledge are, however, only two of the functions of education. To be complete, education must develop the moral and civic qualities without which no society can be strong and lasting. In particular, it must teach moral and intellectual integrity, willingness to accept hard work and discipline, social, national, and international consciousness, and readiness to cooperate with others in common endeavours for the good of society, that is horizontal integration.

There is yet a third level of human concern which any good system of education cannot neglect, and must not neglect. That is the transcendental. Man does not live by bread alone, Jesus said. In their doctrines of jen, and non-attachment, Confucius and Buddha have stressed much the same. Between the traditional western way which gives too much weight to science, and the traditional eastern way which gives too much weight to ethics, there is a third way which would combine a right dose of science with a right dose of ethics, and add to it a concern for the transcendental in the search for welfare, happiness and truth. This is the concept of si (Chinese: shi) which in its original meaning, is a man who is well versed in things of heaven, earth and man. A narrow view of science will cause us to reject the material supports of human happiness. Neglect of the transcendental leaves man on the side of matter. We must have both science, ethics and the mystic, study the li of tao the li of things, as well as the li of men.

One last observation should be made. An appropriate system of education must aim at training good experts, good citizens, and good men for tomorrow, not for meeting the problems of twenty years in the past, but for meeting the problems of twenty years in the future. Our concern should therefore be for the young. Those above thirty are much too old for education. For them little can be done. They have already been shaped by an education which, as pointed out earlier, is only remarkable by its absurdity and nefariousness - because it

x - ~~A narrow view of science will cause us to confuse means~~ with ends. A narrow view of ethics will cause us to

only developed vanity and anti-social habits of the worst kind. When we talk about education, we must think rather of those under twenty year of age, and more especially those who begin their first acquaintance with learning either in the homes or the schools. At the limit, we can include those entering universities. But, for these, it is also a little late: the best students are trained in the elementary and secondary schools, not in the universities. The latter can only make good technicians - and not even that - but not good citizens and good men out of them.

The education we give the young must prepare them for life thirty years from now, when they grow up into a world which will be vastly different from that of today, and unrecognisable to those who had left their colleges or universities thirty or twenty years ago without taking care not to allow their minds to become frozen. It would be criminal to teach our children and youths and to cram into their heads thousands of facts and values which will have become obsolete - and therefore useless - as they reach manhood or maturity twenty or thirty years from now. We must concentrate our efforts on teaching them not contents, but methods, ability to manipulate concept and ideas, ability to use the tools for (which means that analytical methods, mathematics and foreign languages will be essential), ability to use their imagination creatively to adapt to swift changing environment, for their own good and for the good of society. We must teach them ability to analyse the past, to anticipate the future, to solve new and unknown problems, instead of littering their minds with solutions of problems which will have ceased to exist or to matter when they grow up. One must therefore agree with Confucius that he follows four noes: no bias, no dogmatism, no finality, no subjectiveness (Tứ tuyệt tứ: vô ý, vô tất, vô cố, vô ngã). Only in this way can we keep the road to the future wide open.

It has been said that education is dangerous. Says John Millet:

"Education is a dangerous business. It is committed to change. It expects first of all to change individuals by augmenting their store of knowledge and by developing their ability to reason. Beyond this, the educated person may become an instrument of social change...

"Higher education is dangerous. It carries with it at all times the possibility that it may upset an existing power structure in society. It carries with it at all times the possibility that individuals and institutions in society may have to accept new ideas and new ways of behaviour. The truth higher education perpetuates and expands is never final, but only tentative". (22)

It is true that education is dangerous, but only to those who turn their backs to the future, and who block the path of a whole nation to the future, out of ignorance or a narrow view of their own interests. Otherwise, there is no danger in education. Rather the contrary: it is lack of education which is dangerous.

To establish a sound and future-oriented system of education to ensure the survival and progress of this country and its people is the responsibility of the whole Vietnamese society, and not just that of the schools, the universities, the Ministry of Education, or the Government. But it is clear that because the Ministry of Education and the Government control the use of national resources, and can withhold, or put more of these resources at the disposal of the universities and educators to improve the educational facilities and give the Vietnamese youths a better education than the one they have been getting at present, they bear a major share of responsibility. It has been said that the future of Vietnam depends on the Vietnamese youths. That is true, but only if these youths get the right kind of education. If they do not, they will have been taught only to weaken or destroy this country, as most of their elders of the present generation have been doing. That would be criminal. Education is preparing young people for the future, and therefore the future of Vietnam depends on education. The burden of proof rests with those who ~~assert~~ the contrary.

(22) John MILLET, in The Academic Community: An Essay in Organisation, New York, McGrawhill, 1962, cited by KAST and ROZENWEIG, op. cit. p. 560.