

Industrialisation and Culture

by

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The impact of industrialisation and technology on culture presents a big problem in the context of developing countries. It has varied aspects and wide-spread implications which cannot be covered adequately in a short article. At the most, one may hope to raise certain relevant questions and attempt partial answers. If the discussion helps to stimulate thinking on the subject, and to draw the attention of economic planners, it would be worthwhile. Such thinking is vital for the smooth transition of backward feudal societies to modern advanced economies. At present, unfortunately, not much thought is given, in the developing countries themselves, to the impact of development process on the various forms and manifestations of culture¹, or of culture and cultural institutions on the development process.

2. The questions I would pose are:

- a) How far industrialisation and the process of economic growth affect culture in the developing countries; is the impact for better or for worse from the cultural and social viewpoint; and, is it feasible to withstand this impact?
- b) What are the main features of this impact?
- c) Can cultural institutions and factors contribute to the process of economic growth?
- d) Is it possible and worthwhile to give a conscious direction to the impact, and modify its adverse features?

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¹ "Culture" is broadly defined as a distinctive way of life covering both the visible aspects like social customs and relationships and the deeper aspects derived from religion and philosophy. According to Margaret Mead. "Culture is an abstraction from the body of learned behaviour which a group of people, who share the same tradition, transmit entirely to their children. It covers not only the arts and sciences, religions and philosophies, but also the system of technology, the political practices, the small intimate habits of daily life such as the way of preparing or eating food or of hushing a child to sleep, as well as the method of electing a prime minister or changing the constitution."

IMPACT OF INDUSTRIALISATION ON CULTURE AND ITS INEVITABILITY

3. No one will deny that industrialisation, and the process of introducing modern technology and scientific methods into simple agrarian economies has tremendous repercussions on the ways of life, value concepts and cultural institutions. The difference of opinion arises only with regard to the extent of these repercussions. According to some thinkers, industrialisation of under-developed countries will mean their total transition into Western² societies, there being no *via media*. Professor Toynbee has said that "... any civilization, any way of life, is an indivisible whole in which all parts hang together and are inter-dependent. . . . This notion that, in adopting a foreign technology, one is incurring only a limited liability may, of course, be miscalculation. The truth seems to be that all the different elements in a culture-pattern have an inner connection with each other, so that, if one abandons one's own traditional technology and adopts a foreign technology instead, the effect of this change on the technological surface of life will not remain confined to the surface, but will gradually work its way down to the depths till the whole of one's traditional culture has been undermined and the whole of foreign culture has been given entry, bit by bit, through the gap made in the outer ring of one's cultural defences by the foreign technology's entering wedge" [28, pp. 26 and 55].

4. But there are other thinkers who do not hold such a radical view, and who consider that industrialisation and technological assimilation should be possible in the national setting, and that an Eastern country need not give up its entire cultural and ethical framework in order to absorb Western technology and to scale Western economic heights. At a symposium held in Bangkok some-time ago, of philosophers and religious leaders from the West and the East, the conclusion reached was that "... there is no fundamental conflict between technological progress and the various religions represented here. This conclusion, which runs counter to certain appearances, superficial but fairly common, is very important" [26, p. 87].

5. Personally, I like to belong to the second school. It seems too dogmatic to assert that economic development can take place only in a certain standardised fashion: it denies both the extent of human ingenuity and the variety of human behaviour. The cultural background as well as the social and political setting of a country must modify the process and pattern of economic growth, and yet economic progress must be made if the country is determined to achieve it. For instance, the Union of Socialist Soviet Republic has achieved industrialisation

²"Western" in this article is used to represent the technologically advanced societies of Europe and North America, and "Eastern" or "Asian" represents generally the developing economies of Asia, Africa and Latin America.

and technological change, in its own cultural, social and political setting, which is different from that of Europe and America. The argument of the first school of thought is that basically the Soviet Union also has Western culture born of Christian Protestant ethics, with its progressive attitudes and values. It is also said that only Christian societies have successfully absorbed modern technology and scientific processes. Against that, one could quote the example of Japanese, who have achieved economic progress in an essentially Oriental setting and non-Christian culture. One could also mention the great advances made in scientific thought by the Islamic countries in an earlier era when the Western societies were very backward.

6. But again it is contended that the economic progress of Japan is directly proportional to the extent to which the Japanese have adopted Western culture and abandoned their own values and ways of life, and that the more they advance the more they will tend to become like Western countries. It is also said that Western technology in an Eastern setting is no more than wishful thinking. This indeed is a counsel of despair, or perhaps an exuberance of Western vanity. Speaking for an Asian and an Islamic country, I would say that we are determined to achieve technological and economic progress, but we are also determined to stick to our basic cultural values.

7. Culture is deeper and more lasting than technology. In the short run, the struggle to improve living conditions and the effort at economic development may seem to suppress or even destroy identifiable strains of national culture, but in the long run the basic ingredients of culture will show their tenacity and are bound to predominate. The best manifestations of culture require leisure, and when it is available in increasing measure, the national culture will blossom. Technology and wealth alone cannot sustain a nation. Besides, every nation is different and wants to be different, to be something in itself, and would not like to be merely affluent and modern at the expense of its roots and its culture.

8. Of course, there is no question that the developing countries must be prepared to change to a degree, maybe to a substantial degree, and that it is idle to pretend that modern machines and processes can be just transplanted without disturbing anything. Economic growth does not merely mean technological developments; it is also to some extent a psychological, cultural and social process and involves changes in the people's attitudes and institutions. And we should welcome the essential changes. Not everything in the traditional way of life and the traditional constituents of culture, is typical or worthwhile. Old is not always gold. For instance, no one would suggest the continuance of the African practice of tattooing the faces or the oriental practice of prostration before authority. If culture is regarded as consisting of two parts, namely, theology and

ideology as one, and habits and relationships as the other, then it should be easier and less unwelcome to make adjustments in the latter, although some re-interpretation of the former may also be desirable.

9. The question, therefore, boils down to—what are the essential changes required? or, what are the essential components of what I would call the “cultural infra-structure” of economic development? The answer, to my mind, is that a developing country should have, as far as possible, attitudes, habits and institutions which ensure optimum utilization and exploitation of resources. Some of these are:

- desire for economic progress and material well-being;
- readiness to work and work hard to improve one’s economic condition, without antipathy for manual labour or particular types of work;
- change of antiquated land-tenure systems and feudal relations between workers and owners;
- abandonment of regional, provincial and tribal loyalties as manifested in nepotism or other undesirable forms;
- reform of social institutions or forces which discourage entrepreneurship, investment and experimentation, *e.g.*, caste and class systems which define and control economic functions or degree of social advancement;
- development of scientific outlook and contempt for superstition;
- incentives for healthy competition;

and so on.

10. There should be no glaring inconsistencies between the desire of developing countries to achieve industrial advancement and their willingness to make necessary adjustments. As a writer has put it, “they may want industries and higher incomes but no real competition among businessmen or lower profits per unit of sales. Underdeveloped countries may want fine highways and public buildings and a cradle-to-grave social security system but not an honest tax system or a non-political civil service or labour laws designed to encourage productivity and honest effort as well as to protect labour rights. They may want good health, plenty of food and low death rates, but not a changed family and low birth rates”[27]. Indeed, what the developing countries need is human investment in the qualities of “efficiency, organising capacity, initiative, energy and hard work, honesty, security and confidence in the future, knowledge and skills, inventiveness, mobility, universalism, rationality, entrepreneurial ability, progressive outlook, ambition and drive and achievement-motivation”[3].

11. On the other hand, not everything in the modern Western way of life and cultural pattern is worth emulating and possessing. “If we want steel factories

and aircraft, dams and atomic reactors, must we also have cow boy comics, cha-cha-cha, hula-hoops and bikinis?" Must we import "Beatles" along with "Boeings"? In his sense of superiority, the Western enthusiast may sometimes consider every traditional feature as bad and every Western idea as good, and may regard this as self-evident. As an old African woman is said to have reacted—"You Europeans think you have everything to teach us. You tell us we eat the wrong food, treat our babies the wrong way, give our sick people the wrong medicines. You are always telling us that we are wrong. Yet, if we had always done the wrong things, we should all be dead. And you see we are not"[20]. Certain features of the Western system may not be needed in the Eastern setting. For instance, drinking and ballroom dancing are not essential for progress. We need not import Western crime films or juvenile delinquency. We need not establish megalopolises like New York, Chicago and London—while they may be the superficial symbols of advancement, they have evils to be avoided. For instance, they mean spending three or four hours of one's daily life in transit to and from work. Proceeding further, the Eastern qualities of modesty, courtesy, respect for age, hospitality, need not be in conflict with businesslike dealings. The understanding of machines is important, but one need not become an automaton and may well retain his sentiments and emotions. Wives need not lose respect for their husbands and filial bonds need not consist of sending cards on Mothers' Day and Fathers' Day! Family love could be harmonised with professional interests. Cleanliness is desirable, but community baths may not be so. A practical working dress may be worthwhile but one need not give up the national costume altogether. While punctuality is necessary, the change of mealtimes is not. And the use of dining table and chairs is not vital.

12. My conclusion on this point would be that one should give up the undesirable features of old traditional cultures, which are inconsistent with "economically relevant behaviour, *i.e.*, behaviour related to the production and distribution of goods and services"[9], and one should adopt the essential requirements of modern technology and economic progress. One should certainly retain the good features of ones' own value system and culture pattern, and to the extent feasible, *adapt* the Western features which need to be *adopted*. As the Arabic saying exhorts "*Khuz ma safa daa ma kadar*"—select what is good and reject what is bad. There is no point in riding rough-shod over traditional cultures merely because they are different from Western cultures. The developing countries have certainly no reason to be ashamed of their traditions and cultures, which in the past meant great achievement and which even today provide the basis for stability, social security and self-respect. One observes that the most developed countries today have the greatest psychological unrest and social disturbance, and one would hate to exchange peace of mind for material prosperity.

If imported technology and everything else that may get imported along with it is permitted to destroy national values indiscriminately, this maybe not only undesirable from the overall social point of view, but may generate resistance to the very process of development.

13. It is totally wrong to say that the Eastern religions do not favour material progress and economic development³. This is the way foreigners have generally viewed them, and even the local people have sometimes been led to believe so. If at all, the religions need to be reinterpreted, and Asian leaders are fully conscious of this⁴. Otherwise, for instance, discussions about birth control in Roman Catholic or Muslim countries would be out of the question.

14. There is no basic ideological resistance to change; indeed, there is a universal desire for liberty as well as better living. If on occasion religious leaders have opposed "modernisation", it is not the application of science or technology that they are against, but they resent the Western habits and attitudes associated with such application. Frequently, this opposition is based on ignorance. Sometimes, the opposition is due to vested interests of the landed gentry and other classes whose rights and privileges are affected by industrialisation and economic development. Not unoften, the opposition is also due to the involvement of foreign aid in the process of development, and the strings attached to it and the colonial type of superiority complex exhibited by the aid administrators.

15. The responsibility for change in most developing countries devolves on the government and on government officials, as they are the best educated and best informed and as they have had the best contacts with the developed countries through international conferences and training abroad under various technical assistance programmes or otherwise. Responsibility also devolves to some extent on businessmen and entrepreneurs, who have the greatest economic attraction, and who also have opportunities of contact abroad. The university teachers can also be excellent agents of change, if they get fuller facilities for learning about the development effort and for travelling abroad. In most countries, it is important to educate and inform the religious leaders and the feudal chieftains.

³ "... to say that people do not work hard because their religion does not encourage them to, may not be to give a fundamental explanation; it may equally be that the religion does not at present stress work because the other circumstances of the community, environmental or social, do not bring hard work to the forefront of values" [18, p. 35].

⁴ "Islam cannot become out of date in any age or climate of material or mental progress, and if today there is disparity between our life and our faith, the fault is our own and not of Islam"—President Ayub of Pakistan, in a statement in June 1961.

FEATURES OF IMPACT

16. A few words may now be said about the main features of the impact of industrialisation on developing countries. The modern process of economic growth and the adoption of Western technology causes disturbances particularly in all directions. The machines replace the traditional techniques and turn out well-formed similar products in automatic succession, and thus craftsmanship yields place to mechanical skill. Traditional industries languish, *e.g.*, spinning and weaving, oil-pressing, pottery making and lacquer work. The technician and mill-worker becomes more important than the peasant or craftsman, and the factory-owner and entrepreneur becomes more important than the landlord.

17. The rural subsistence economy gradually gets transformed into the exchange monetary economy. New wants for industrial goods develop, and with them the desire to change from food crops to cash crops. This means loss of rural self-sufficiency, and dependence on national and world markets. "The village which was formerly a family becomes transformed into an adjunct of the factory"[23].

18. The biggest single feature of industrialisation is urbanisation. The first symbols and fruits of technology appear in the cities, and then there is a large-scale movement from rural areas, resulting both from the economic "pull" of better opportunities in urban areas and the "push" of poverty and land pressure in the villages. Economic development, in fact, means a shift from agriculture to industry, and thus the occupational structure changes from agricultural to non-agricultural activities ⁵.

19. As a result of the uncontrolled and uncoordinated movement from the villages to the towns, the worst features of urbanisation manifest themselves—lack of housing and therefore over-crowding slums, and squalor; lack of drainage and therefore filth; lack of playgrounds and gardens and therefore delinquency; lack of health and hospital facilities and therefore sickness; lack of water

⁵ The distribution of working population in a typical underdeveloped country (India) is shown below; it will be observed that while in the rural areas 16 per cent of the population is in non-agricultural activity, in the urban areas about the same level is in agricultural activity:

	Rural Areas	Urban Areas
Primary industry (agricultural and mining)	84%	15%
Secondary industry (manufacturing and processing)	6%	24%
Tertiary industry (transport, trade and services)	10%	61%

supply and therefore disease; lack of roads and other facilities and therefore discomfort; lack of employment and therefore poverty and destitution. There is increase in drinking, gambling, prostitution, crime and violence ⁶.

20. All this means a social and psychological upheaval. The transition from the compact and intimate world of the village to the highly impersonal and anonymous world of the city can be very upsetting. The families get disorganised before they will be reorganised; the discipline imposed by the family head disappears and as people move away from their moorings the moral code gets relaxed; the religious values are replaced by material considerations; and the personal status and individuality of the villager disappear as he becomes a non-entity in the city. Thus, the entire body of traditional beliefs and standards of behaviour is shaken. If the male goes alone to the town and is separated from his wife and children, he faces psychological disturbances and undesirable urban attractions. Even if the wife and children accompany him, he no longer has emotional satisfaction and social security. If mothers start working, the children get neglected. The nominal incomes are higher in the towns, but the persons are not much better off as their costs and wants have increased.

21. However, it would be wrong to think of urbanisation as unmitigated evil. Apart from the fact that the undesirable features of urbanisation could and should be controlled, urbanisation has its good points. The cities have always been the centres of cultural as well as political progress. Because of the large clientele available, they foster the growth of institutions of learning, and all forms of art. Indeed, the entire leadership of the country, cultural as well as economic and political, is generally provided by the urban areas. Urbanisation could occur even without industrialisation, as in the colonial countries, and movement from the rural to the urban areas would take place anyhow, under the influences like greater literacy and better communications, and as a result of pressure on arable land. The bad features of urbanisation are not always the result of industrialisation, but could be due to inadequacy of economic development.

CONTRIBUTION OF CULTURE TO ECONOMIC GROWTH

22. The impact of industrialisation on culture is not a one-way process. There is also the impact of culture on the process and speed of economic development. There are not merely "social consequences of technical change", but technical change also may be a "social consequence"[4]. It seems that the

⁶ The conditions in a typical city (Bombay) have been well described in [33]: "Three-fourths of the total families live in overcrowded conditions, some living 14 to 17 in one room; two-fifths have no electricity; over two-thirds get their water from common taps; about four-fifths have to use common latrines and eight per cent have no latrines at all."

question as to how far the existing and potential cultural habits and institutions can contribute to the process of development, has received little consideration so far. If there is a reference to culture in the context of economic development, it is generally that it must adjust itself to meet the new demands. But not much thought has been given to the part which cultural heritage or practices can be made to play.

23. For instance, the feeling of national pride and the tradition of glorious achievements in the past could be made use of to provide added impetus for the development effort. Citizens of most developing countries are extremely patriotic, sometimes to the point of fanaticism. The revitalization movement of the country could be geared to the task of economic development; the emotional force which can be mobilized by good leadership, can work wonders in a short time. The high regard in which the founders of new countries are held, can be exploited to bring about changes in attitudes as well as institutions. The example of Kamal Ataturk may be quoted. In Thailand, not long ago, progressive heads of state changed over-night the dress pattern of Thais and the style of their names.

24. The traditional authority of the head of the family could be mobilised for accelerated community development in the rural areas. The close nature of family ties⁷ and internal cohesion could be exploited to accelerate industrial growth, as exemplified by the *zaibatsu* in Japan, and by the Birlas and the Tatas in India and the Adamjees and the Dawoods in Pakistan. Western economists are wont to describe the joint family system as a disincentive to savings and investment, forgetting the Rothschilds, the Krupps and the Rockfellers of Europe and America.

25. Religion could be utilised to provide stimulus in several directions. For instance, Islam enjoins upon all Muslims, men as well as women, to attain education as a duty, and to seek knowledge even if it is available in the farthest corners of the world. Islam shows the highest respect for initiative and endeavour, and says that "a man is no man if he does not exert himself". In relation to countries, the Quran says that "God does not improve the condition of those nations who do not want to change it themselves".

26. The exploitation of culture for economic development provides a field of study which has considerable room and attraction for further thinking and research.

⁷ "... from the case studies of factory workers that were made it is abundantly clear that the attitude of the factory workers towards joint family has changed very little after coming to the factory, and they still appear to maintain what is probably the traditional attitude towards this institution and consider its advantages to be very great" [12, p. 178].

REDIRECTION OF CULTURAL CHANGE

27. We may now consider whether a direction can and should be given to the impact of industrialisation in developing countries. I personally believe that this is desirable, and indeed essential. The stresses and strains created by the process of economic growth may not only cause serious psychological disturbance and social disruption, but may also generate resistance to the very process of growth.

28. The adverse features of impact are mostly associated with urbanisation, and measures could certainly be taken to control them. First of all, the establishment of industry should be decentralised as far as possible. Asia is already over-urbanised in relation to the stage of economic development⁸, and the rate of urban growth will continue to be high as a normal consequence of economic development. Mass migration into metropolitan areas has been likened to "a process of mutual poisoning"⁹—destruction of economic activity in the villages and creation of unemployment in the towns. Whatever can be done to arrest this tendency should be done. Accordingly, "in the cities which already enjoy to some extent the benefits of external economies for industries of various sorts, further growth of large-scale industry should be planned. For the rest of the country, chiefly small-scale industry, clustering around a few nuclei of small and middle-size towns should be developed"[11]. I would go further and say that conscious effort should be made to decentralise also the large-scale industry. For instance, in Pakistan a number of large as well as small industry estates have been planned for the smaller towns in order to syphon off industrial pressure. Instead of bringing villagers to the work, the work should be taken as close to the villages as possible.

29. The rural areas should be made more attractive, both in economic and social aspects. They should be linked up with the bigger urban centres through good communications, higher educational institutions should be decentralised and brought nearer, and likewise facilities for entertainment and other amenities. The concept of regional development should be fostered, and the conditions of living in villages should not be allowed to be very much poorer than the cities. Rural electrification and the provision of minimum sanitation arrangements can make a lot of difference. All this will help to reduce the cultural and social distance between the rural and the urban areas.

⁸ "Although the proportion of the urban population (in cities of 2000 or more) is only 13 per cent, the proportion of non-agricultural labour force is roughly 30". However, at a similar degree of urbanisation in the Western Countries—U.S. (1850s), France (1860s), Germany (1880s), and Canada (1890s)—had roughly 55 per cent of their labour force engaged in non-agricultural occupations [32].

⁹ E.F. Schumacher, Senior Economic Adviser, National Coal Board, the United Kingdom, formerly Economic Adviser, Government of Burma.

30. On the other hand, the inflow of migrants into the cities should be regulated. As in Japan, whole families rather than individuals should be encouraged to move. And migrants from the same area or community should be encouraged to live together and satellite colonies planned for them, keeping in view other social requirements of course. This will ensure the least disturbance in the cultural life of migrants, and would serve the purpose while better urban facilities are built and fuller integration can take place. There should be vocational centres for the unemployed, and recreational centres for all. A campaign for adult education should be launched. The concept of community development, now well understood in the context of rural areas, should be extended to the urban areas, and everything should be done to establish a community feeling of the type associated with villages¹⁰. This will give some cultural and emotional satisfaction to the migrants. Opportunities for self-expression and for cooperative effort should be maximised, as a *catharsis* for emotions and energies. Any form or degree of local self-government would be helpful. The institution of "basic democracies" developed in Pakistan for urban as well as rural areas is relevant in this connection. It has helped to heighten the sense of responsibility and develop the personality of the common man who was hitherto shown little respect. What is important is that the migrants should have a sense of belonging in the new abode and should be woven into the fabric of the new community. "If instead of participation, there is alienation, then an explosive situation can build up"[36].

31. Of course, whatever is possible in the cities in order to improve housing, sanitation, water supply, educational and health facilities, should be done. It is better to plan and provide for urbanisation as it develops than to remedy its evils after they have emerged, as that would not be only more expensive but would have already done the damage with regard to its impact on culture. "Instead of treating social policy as a hand-maiden whose function is to tidy up human suffering and insecurity left in the wake of economic development, social objectives should be built in on an equal footing with economic objectives, into comprehensive social and economical planning"[31]. "The costly squalor of industrial towns.....the very costly decline of health in the town worker as compared with the agriculturist.....mass ignorance and degradation, could have been avoided and mentally healthy town life could have been built, if, when rapid economic changes were taking place, it had been possible to take into account what is now known about the importance of human relationships" [37, p. 619].

¹⁰ In Pakistan a large number of urban community centres has been established, with success and worthwhile results.

32. On the positive side, deliberate support should be given to the fostering of cultural values which are not inconsistent with the requirements of economic development, and to promote cultural forms and institutions which will provide emotional satisfaction and promote social stability. The human being should not be regarded merely as an economic functionary and mechanical worker, but should be recognised as an individual having spiritual, emotional and social demands and urges. In the urban as well as rural community centres, cultural programmes should be organised. Reading rooms and libraries should be provided. Museums, art galleries and exhibitions should be organised. Literature, drama, painting, music and other forms of culture should be given conscious encouragement and direction. National academies should be established, and developed with both government and private effort. Books and brochures should be published to educate the people about their cultural heritage and to develop the features which need to be developed. The radio and cinema should be made use of, as well as other media of communication. "When the planners make their projections and programmes, let them not forget the cultural aspects and their requirements. A development plan should aim at balanced growth in social and cultural as well as economic terms, embracing both cities and rural areas"[13].

33. In particular, attention should be given to religion. Faith and basic religious doctrines function as anchors of stability, and are specially valuable in a setting where extraordinary expenditures are taking place as part of the development effort and in consequence material pressures and emotional strains are building up. If religion, as understood by the traditional 'priests', comes into clash with the new demands, and no distinction is made between basic doctrines and not-so-basic practices or rituals and no attempt is made to reinterpret and adjust the latter, the cause of development and indeed of progress itself may suffer. On the other hand, no compromise may be necessary on basic doctrines. For instance, it has been said that the Muslim month of 'Ramzan' (*i.e.*, fasting) means loss of efficiency and productivity during that period. Apart from the consideration that according to Islamic history even battles were fought and won during Ramzan, fasting has to be accepted as a basic fact and provided for as such. If, for instance, the British productive system can afford loss of five days on cricket matches, there is no reason why in a Muslim economy the productive system cannot be adjusted to Ramzan. At the same time, one should be prepared to abandon or modify religious practices which are not basic but which have only time-honoured sanctity, *e.g.*, the use of veil by women.

CONCLUSION

34. The entire subject of the influence of industrialisation on culture and *vice versa* calls for further study in the context of developing countries. At

present, we concentrate almost wholly on the technical and economic aspects of development, and if any thought is given to the cultural and psychological aspects it is on the basis of the experience of the developed countries.

35. It has been rightly said that "it is a highly debatable matter as to whether the Western outlook, so characterised, is an antecedent or consequent of industrialisation and urbanisation or something of both, and also as to whether this outlook or each element of it, really is an essential ingredient of economic development. It is conceivable that the difference between Asian and Western outlook may produce somewhat different types of industrialisation and urbanisation or interpersonal and social relations arising therefrom. It is also conceivable that much of what has been written on this subject is the product of premature generalisation based on limited observation of Western experience" [32]. Technologies must be adapted to the resource pattern of developing countries including their culture. We have to build on the existing societies, and not to destroy them and rebuild. Basic knowledge about existing institutions and culture is essential for the design of appropriate social innovations which will facilitate the application of technology.

36. There is a dangerous tendency towards standardisation of the pattern of economic growth, and all sorts of models and equations are put forward. Apart from other variables, national culture and heritage is most difficult to quantify. Each country has its own historical background, cultural institutions and responses and each country has a different stage of literacy, international awareness and adaptability. It is, therefore, obviously wrong to treat all of them alike, and to try to evolve a solution of their problems through electronic computers! There can be no single standard reaction to technological change and no single sequence of evolution. There are traditional societies with greatly sophisticated culture which may have a high degree of absorptive capacity, and there are primitive societies with comparatively simple behaviour and organization which may find it more difficult to adjust.

37. It is said that evolution of culture follows an inexorable course, and while international communications and interplay of culture may lead to the development of a new type of culture, or a universal culture, little can be done about it. It would be manifestly wrong to take a defeatist attitude and to adopt a policy of *laissez faire* only in relation to culture, when there is conscious planning in the economic and other fields. Culture can and should be given a deliberate orientation. For instance, to ignore the importance of the content and system of education could be suicidal.

38. It is vital that the Western economist or planner or aid-adviser who professes to help a developing country should have an open mind and that he

should think beyond purely material and technological considerations. To assume that whatever may happen to traditional culture should be acceptable as part of the growth phenomenon, is naive and dangerous. Just as "life in a remote jungle tribe is in many ways a poor preparation for life in modern cities. . . , life in modern cities or in areas with advanced methods of land reclamation or health regulations and with a complex organisation of labour may be an equally poor preparation for life in a pioneering environment." Those who are carrying the burden of teaching may be moving away in their own estimation from all amenities of life, but for that very reason they may provide poor models for those whom they are attempting to assist"[21].

39. Fuller studies are required in order to examine the origin, purpose and validity of various elements of culture in relation to the requirements of industrialisation and economic progress. The Western domination in science and technology creates the belief that no elements of traditional culture are in line with or favourable to the modern process of development, but this may be totally or partially wrong in many cases. Cultural institutions and social habits have a great range of tolerance. Several elements of traditional cultures had great vitality and validity at one time, and may again have value if properly viewed and used. For instance, joint family or extended family system now regarded as inimical to individual savings and enterprise, has played a great part in material progress. In fact, fragmentation of land holdings in certain countries under the desire for individual ownership has led to decline in enterprise and productivity. Careful studies are needed to see how far cultural elements are relevant and unfavourable to the modern process of growth and how far they require adaptation or abandonment. Different conclusions may be reached for different countries depending upon how far a cultural element has become decadent and is important in the general setting.

40. A major criterion in determining whether or not a cultural element is consistent with industrialisation may be whether or not it promotes enterprise. However, this enterprise in itself could and should be able to make adjustments in the imported technology and adapt it to fit into the national culture. Technology needs to be moulded to suit the endowment factors of a country as well as its cultural pattern.

41. The fine arts—music and folk songs, poetry and literature, dance and drama, paintings and architecture—which form the heritage of a country, provide an emotional satisfaction which is essential for the sense of well-being and individuality of a people, and there can be little material compensation for it. Few countries may like to exchange their souls for higher *per capita* incomes if that is the only choice. The developing countries do not wish to become

British or Americans or Germans. A break with the heritage can only create inferiority complex, and disinherited minds can make little contribution to the achievement of high goals. In the last analysis, every country must develop its own pattern of development, studying all technologies and 'isms' and creating its own 'ism' in the light of its own cultural, social, economic, and political factors.

42. I would like to conclude by quoting an eminent leader of a developing country. "The pitiful pre-occupation with hunger, ignorance and disease is sheer formalism. It is sacrilegious today to suggest that the hungry, the ignorant and the diseased can still be noble and good, and that in the past some of them achieved wonderful things, despite their hunger, ignorance or disease, and at times because of it. I want no man to be hungry or ignorant or diseased, but the question is: what will people live for once they are not hungry, once they are no longer ignorant, and once they suffer from no disease whatever?.....Must you not be concerned about it from now?.....It is most important that they (Western leaders) realise that history did not begin yesterday, that they cannot chop it up into bits and pieces, that certainly it did not begin with them or at any point they may arbitrarily set up in the past. Broad, fundamental, critical, scientific, historical culture is of the essence of good leadership"¹¹.

43. Unfortunately, little concern has been shown for cultural implications and cultural aspects by the planners of underdeveloped countries themselves. In most development plans there is hardly any mention of culture. The economic planners are preoccupied with capital-output and cost-benefit ratios. The destiny of most developing countries is being fashioned by their planning agencies, and these agencies are dominated by economists. Accordingly, aspects which may be regarded as non-economic by them are likely to be neglected. Planning needs to be more broadly based and more comprehensive thinking is needed on the part of national planning authorities. They should not forget the dimension of culture when charting out the course of technological assimilation and economic growth.

¹¹ Dr. Charles Malik of the Lebanon, in an address to the 13th International Management Congress at New York, 1964.

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