

Cultural Factors in Economic and Social Change

by

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With the development of the practice of sending missions to the less developed parts of the world in order to assist the inhabitants to improve their standard of living by the adoption of more advanced techniques of production has come the realisation that such assistance may be ineffective if the proposed economic changes are not adapted to the traditional way of life of the inhabitants.

The following article treats of the difficulties and dangers involved in attempts by experts to introduce new economic techniques or improvements in living conditions among peoples with a culture different from their own and explains the role of the social scientist, and particularly the anthropologist, in helping to prepare a programme of economic and social change. The problems discussed here are frequently referred to in the study of living and working conditions of indigenous peoples recently published by the Office¹, but it was found impossible to deal with these problems at length in that study.

Professor Beaglehole, who was Chairman at the recent Second Session of the I.L.O. Committee of Experts on Indigenous Labour (March 1954) will be remembered by Review readers as the leader of the joint field mission on indigenous populations of the United Nations and the specialised agencies that visited the Andes in 1952.²

IN the sixth resolution of the Fourth Conference of American States Members of the International Labour Organisation held at Montevideo in 1949, the Conference clearly and unequivocally

¹ I.L.O.: *Indigenous Peoples: Living and Working Conditions of Aboriginal Populations in Independent Countries*, Studies and Reports, New Series, No. 35 (Geneva, 1953). A note on the study appeared in *International Labour Review*, Vol. LXIX, No. 2, Feb. 1954, p. 173.

² See Ernest BEAGLEHOLE: "A Technical Assistance Mission to the Andes", in *International Labour Review*, Vol. LXVII, No. 6, June 1953, p. 520.

states its opinion that "for the purposes of the International Labour Organisation, the problems relating to the conditions of life and work of the indigenous populations of Latin America, and, consequently, the action required to solve them, are essentially social and economic in character". The record of the discussions of the First Session of the I.L.O. Committee of Experts on Indigenous Labour is even more explicit: while recognising the importance of economic and social factors in furthering the integration of indigenous peoples into contemporary economic life the Committee was of the opinion that little progress could be achieved unless international organisations, governments and experts alike recognised that the problem of economic change was basically a human problem. This recognition means that in any attempt to introduce new economic techniques to an indigenous people or to improve their way of life in any particular fashion, the desired economic or social adaptation is likely to be slow until one realises that no social or economic institution can be changed without some change in the action and thought patterns of human beings who have been accustomed to a given way of life, a culture as the anthropologist terms it, for many generations. This way of life cannot be changed simply or quickly. Human beings are always more conservative than they are innovators. Yet there are many examples in the world today of people adjusting to new ways of life. From the study of this adjustment the anthropologist can offer experience and skills which need to be taken into account if economic change is to proceed with the maximum effectiveness and the minimum disorganisation of indigenous life.

CULTURAL AND ECONOMIC INTEGRATION

To prevent misunderstanding it is well to state at the outset that an emphasis on the importance of cultural factors in social and economic change does not mean that cultural factors are more important than economic factors or that they should necessarily receive a priority over attempts to produce economic change. There is no contradiction between the work of the anthropologist and that of the economist. The practical problem is always a field problem: how shall we go about interesting an indigenous people in doing new things, practising new habits, using new pieces of machinery, planting a new type of seed? In attempting to solve this kind of problem, the skills of many experts are required. The skill of the anthropologist is basic for the solution simply because he can bring to a team of experts a knowledge of the existing indigenous social and economic life. This pattern of life is one factor in the social change equation.

Without an understanding of the factor one may never learn to solve the equation. But without other kinds of knowledge also the equation will never be solved. Cultural integration without economic integration can never be successful; conversely economic integration may fail because of the blockages and resistances human beings place in the way of an economic integration that may do violence to their cherished values. Economic integration and the fullest possible knowledge of indigenous cultural life are complementary factors that must be kept to the fore at every stage in the development of an indigenous group.

This principle becomes more obvious when one recalls that man is the only culture-using animal species in the world. His culture is a design for living. In Tylor's now classic definition, culture "is that complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society".¹ This complex whole is the social heritage of a group. It is a reasonably efficient instrument for solving the problems of survival that face any human society. But the design is really a design, the whole a complex whole. This means that various parts of the pattern mesh with each other so that a balanced equilibrium is maintained between the various parts of the whole. Studying one aspect of a culture—say, the economics of getting a living in an African tribe—inevitably and very soon forces the investigator to study the ramifications of economic life as the trail leads him through marriage to kinship and from gardening to religion. Similarly in a more complex society, such as our own, the impact of total war does not begin or end with a military machine but is to be traced in morals and religion, social life and changed ways of earning a living. It is just because culture is a complex whole that attempts to change one aspect of a culture, say the economic, introduce a whole series of interacting changes in other inter-related aspects of the culture. The final result will be a new social equilibrium that supports and makes possible the desired change in economic life. Without this new equilibrium economic change would hang in a sort of social vacuum, and its effects would be superficial rather than profound.

The fact that one is always dealing with a "complex whole" in initiating economic change leads to the further observation that changes in culture can best proceed through the consent and participation of those whose life one wishes to alter. Change can be brought about by force, but such change produces resistances and blockages which often nullify the result that one seeks

¹ E. B. TYLOR: *Primitive Cultures* (London, Murray, 1891), Vol. 1, p. 1.

to achieve. Securing the consent of indigenous peoples before embarking on action projects may often appear time-consuming ; none the less such consent, freely given, will secure more lasting effects than coercion.¹ The late Sir Peter Buck (Te Rangi Hiroa), world-famous Maori anthropologist, has told the story of how, as a young medical practitioner, his first job in the field of Maori public health was to persuade the Maori to adopt the sanitation necessary to prevent the spread of typhoid. Direct suggestions, orders and persuasion had no effect on conservative Maori leaders. Buck then remembered that the famous Maori discoverer of New Zealand, Kupe by name, had reported (or so a tradition dating back to the tenth century relates), after a fleeting visit to New Zealand, having seen a latrine pole at the top of a high cliff. Reminding the conservatives of this historical tradition, Buck was able to convince them that they had forgotten practices well known to their forefathers. Opposition vanished immediately, and Buck was able to proceed with his public health projects supported enthusiastically by the influential members of the Maori tribal groups.

This Maori example shows how it is possible to introduce a desirable change by direct appeal to traditional social values. Elsewhere among the Polynesian peoples of the Pacific, where tradition is perhaps not so strong an influence as it is among the Maori, the consent that is necessary before public health measures can become effective can only be secured by more laborious methods of adult education. Lambert gives a number of instructive examples in this respect which show how public health plans can slowly be implemented provided the time is taken to enlist the co-operation of the people², while Furnivall, on the basis of Netherlands East Indian experience, approves the practical advice that public health coercion can only be successful if at least 90 per cent. of the people already favour a change,

¹ See H. D. LASSWELL : " Appraising the Effects of Technology ", in *International Social Science Bulletin* (Paris, Unesco), Vol. IV, No. 2, Summer 1952, pp. 328-339. An interesting case study showing how a paternalistic federal administration, while " doing good " to an Indian group, none the less brings about a lack of initiative and drive to " get ahead " is given in O. C. STEWART : " Southern Ute Adjustment to Modern Living ", in *Boletín Indigenista* (Mexico, F.D., Instituto Indigenista Interamericano), Vol. XII, No. 1, Mar. 1952, pp. 23-37. Two further studies are also of interest as documentary accounts of a failure to secure group participation : one is a study by A. R. HOLMBERG : " The Wells That Failed : An Attempt to Establish a Stable Water Supply in Viru Valley, Peru " ; the other an account by E. H. SPICER : " Sheepmen and Technicians : A Program of Soil Conservation on the Navajo Indian Reservation ", both to be found in E. H. SPICER (ed.) : *Human Problems in Technological Change* (New York, Russell Sage Foundation, 1952).

² S. M. LAMBERT : *A Doctor in Paradise* (London, Dent, 1942).

and penalties are required to make the tiny minority conform to what is good for all.¹ The general principle that is involved may be stated in the words of Tax :

The problem of ... democratically planned culture change is to respect the general cultural bias and the institutions and beliefs held dear by a community of people, at the same time that their level of living is raised and they are given both new wants and the means to attain them. The economically backward population is to get the benefits of our technology and science, our chemistry and bacteriology without important damage to their values and their traditional way of life.²

Very often the problems involved in developing public health programmes can be met by adding new therapeutic practices to the already existing, customary, semi-magical indigenous procedures or by widening the functions and increasing the skills of indigenous persons already specialised as traditional curers. The example of the Miskito Indians on the Nicaraguan Atlantic coast, where medical care is combined with the techniques of the "witch-doctor" by enlisting the co-operation of the curers and adding to their pharmacopeia simple European drugs and a position of prestige in the public health organisation, shows how the functions of existing indigenous leaders can be usefully extended. A similar suggestion involving the training of Indian curers in first aid and the recognition of the symptoms of a few major diseases has recently been made to the Papago Tribal Council and the United States Indian Service.³ New therapeutic practices may be rather readily accepted provided that they can be integrated into customary ways of thinking about disease. The principle involved seems to be that new practices are more easily introduced to an indigenous people than new ideas underlying the causes of disease. Instead, therefore, of waiting for a long process of re-education to take place, the practical task of the expert is to try to graft European therapeutical techniques on to the body of religico-magical practices and beliefs already existing in an indigenous group. Re-education should not be neglected, but in this field of public health it should not receive priority. Folk concepts of illness, including even folk attitudes to hospitalisation, must be understood and not ridiculed if popular confidence is to be gained and public

¹ J. S. FURNIVALL : *Colonial Policy and Practice* (Cambridge University Press, 1948), p. 371.

² Sol TAX : "Selective Culture Change", in *American Economic Review* (Menasha, Wisconsin, American Economic Society), Vol. XLI, No. 2, May 1951, pp. 315-320.

³ A. H. LEIGHTON, J. ADAIR and S. PARKER : "A Field Method for Teaching Applied Anthropology", in *Human Organization*, Vol. X, No. 4, Winter 1951, pp. 5-11.

health work succeed.¹ This general principle seems universally valid. It does not, of course, preclude efforts to improve the health of an indigenous people by large-scale projects aimed, for instance, at nullifying the effects of disease by treating pathological symptoms.²

THE ROLE OF ANTHROPOLOGY

Just as anthropology can throw new light on public health problems, so it helps to elucidate the adjustments necessary in developing new forms of economic organisation.

The introduction of trade union practices among African Bantu indigenous peoples is a case in point. Father Charles has annotated the reasons why the Bantu labourer, with his traditions of tribal solidarity, takes kindly to co-operative societies, whereas he is unhappy with trade union organisation.

Trade unions ... come up against a major cultural characteristic of tribal society, which has no institution based on the idea of conflicting forces and organised resistance to or defence against the chieftain. In the Bantu culture such a notion would seem as unnatural and ridiculous as a defensive alliance of children against their parents.³

In other words a trade union is an instrument of protest, a fighting association directed against an employer. Yet the employer for the African is conceived of as a guardian chief with the powers and protective responsibilities of the clan chief. One no more fights one's employer than one could conceive of fighting one's tribal chief. Thus, for the Bantu, not a trade union but a labour council is the form of labour organisation that fits more closely his traditional way of acting and thinking—a labour council where the worker can state his grievances and difficulties before reasonably sympathetic associates and make suggestions for improving the joint enterprise. A more complete knowledge of the African

¹ Recent work on the anthropological study of the relation between public health programmes and indigenous folk beliefs in western Yunnan, Latin America (Mexico, Peru, Colombia, Brazil, Guatemala) and among the Navajo is summarised by W. CAUDILL: "Applied Anthropology in Medicine", in A. L. KROEBER: *Anthropology Today* (University of Chicago Press, 1953), pp. 771-806.

² Experiments, for example, are being planned in Brazil to combat hookworm anaemia by artificially enriching with iron the foods habitually eaten by rural populations. See J. DE CASTRO and W. SANTOS: "Carência Alimentar e Verminose na América Latina: Plano de Combate a Anemia Ancilostomótica das Populações Indígenas", in *América Indígena* (Mexico F.D., Instituto Indigenista Interamericano), Vol. XIII, No. 3, July, 1953, pp. 155-163.

³ Pierre CHARLES, S.J.: "Tribal Society and Labour Legislation", in *International Labour Review*, Vol. LXV, No. 4, Apr. 1952, p. 425.

worker's mind with its characteristic cultural attitudes to wage remunerations, contractual relationships and ideas of justice is vitally necessary if the African is to be helped to adjust in a satisfactory manner to the demands of modern industrial enterprises. And, it may well be noted, not only of the Bantu mind but of the mind of all other peasant groups brought within the orbit of technological change.¹

In many indigenous societies, as with the Bantu, co-operative associations having definite and practical objects can be formed successfully and fitted into the way of thinking and the customary forms of social organisation of the indigenous people.² Where such associations fail the cause is most often to be found in an over-complex, unworkable national legislation (as was reported to the Andean Indian Mission in Ecuador) or to a lack of supervision, training, technical ability and knowledge of accounting. Such causes can be rectified once they are recognised. In other cases, however, the failure of co-operation may be due to factors lying deep in the social life of the indigenous people. An interesting contrast in this respect is to be found among the various Indian groups of the United States. For many Plains Indian tribes, the Cheyenne for instance, the Dakota or the Arapaho, traditions of group work and association have survived an official reservation policy which emphasised an artificial dispersion of tribespeople through the development of individual land allotments. Among these tribes group co-operation ventures are still preferred to individualistic activities. Not so among the neighbouring Woodland tribe of Wisconsin Chippewa Indians. Chippewa co-operative ventures failed to materialise during the "reservation" period of culture contact, and there is relatively little social interaction even today, in spite of the fact that there has been a marked concentration of population, initiated during the reservation period. The few Chippewa co-operative undertakings that are occasionally organised, in order to plant and harvest beans on tribal lands for instance, or to attract tourists to an Indian fair, last only for short

¹ See for instance the study by John USEEM: "South Sea Island Strike: Labor-Management Relations in the Caroline Islands, Micronesia", in E. H. SPICER, *op. cit.*, pp. 149-164.

² An interesting development in connection with co-operative enterprises is reported from the Huon Gulf, New Guinea, where in recent years a variety of tasks from stevedoring (each ship in turn to a village) to the running of copra plantations (fixed payment for each ton of copra) has been taken over by village associations working on a contract basis. See Ian HOGGEN: *Transformation Scene* (London, Routledge, 1951), p. 203. That co-operatives will be successful for the Peruvian Indian if they are based on Indian traditional ways of life is argued also by V. BERMEJO: "El Indio, Problema del Indio", in *América Indígena*, Vol. XII, No. 1, Jan. 1952, pp. 77-90.

periods of time. They are accompanied by so much bickering, criticism, stress and tension, that constructive social action is quickly inhibited.

The important question therefore arises as to why Plains Indians can join together in co-operative association while the Chippewa find such association difficult to organise. The answer seems to lie in the fact that Chippewa social organisation, unlike that of the Plains Indian, was marked in aboriginal times by a specific "atomism", reinforced by attitudes of fear and suspicion engendered through the processes of child training and continuing throughout adult life in a widespread fear of sorcery that has made a virtue, almost, of mistrust, and blocked normal processes of social co-operation. Fear and anxiety are characteristics of Chippewa society today. Belief in sorcery may no longer be universal, but enough anxiety has survived in this indigenous group to make co-operation a most difficult objective to achieve.¹ Whatever explanation may be offered of a socio-economic nature to explain differences between Plains Indian and Woodland Indian, in the last analysis these differences must be taken to reflect different emotional responses and attitudes as moulded by different cultural environments. Without prior knowledge of the cultural patterning of these emotional responses, economic changes may very well fail to take root among an indigenous people.

One aspect of indigenous life that must always receive attention because of its profound effects on the possibilities of social and economic change is the close relation that exists, according to indigenous thought, between magic and economics. In a chance-ridden world, subject to all sorts of natural disasters, where a man may sometimes, but not always, expect to reap what he sows, it is natural that indigenous peoples should look for some form of insurance against the blows of ill-fortune, the disfavour of malignant spirits or even the hostility of fellow men. This insurance is most often found in a well-developed indigenous system of magic and sorcery. In times of social change, however, such magical practices may hinder the introduction of new and better agricultural techniques or even operate to prevent economic initiative.

The customs of the Pondo of South Africa may be taken as an illustration of the effects of magic on animal husbandry. In the life crises of birth, initiation, marriage and death, as well as on occasions of sickness, or of thanksgiving for having escaped danger, or again to make rain in times of drought, an ox or a cow

¹ See V. BARNOUW: "Acculturation and Personality among the Wisconsin Chippewa", in *American Anthropologist* (Menasha, Wisconsin, American Anthropological Association), Vol. LII, Oct. 1950, No. 4, Part 2, Memoir 72, pp. 1-152.

is killed ritually. In sickness it is believed that an essential part of the cure is the violent bellowing of the beast as it is stabbed in the stomach over the aorta. Such bellowing summons the ancestral spirits to a ritual feast. After being well fed the spirits are apparently agreeable to releasing the patient from his illness. Since scrub cattle can bellow as loudly as good dairy cows or a pedigree bull and since more scrub cattle can survive on impoverished and over-grazed land than quality animals, improvement in stock is hindered, and over-grazing continues to menace the pasture lands of the Pondo.¹ Again, the Nyakyusa of South Tanganyika believe in a magical association between rams and thunderstorms. Since rams fight when they meet, a herdsman always hurries home with the rest of his sheep when a thunderstorm approaches, leaving the ram of his flock in the pasture to fight the thunderstorm. Sometimes the ram prevails, the storm passes. Sometimes the storm wins and the ram is destroyed.² But it is never worth taking the animal home, nor would it be worth investing, presumably, in well-bred sires if a poor quality ram can fight the thunderstorm with a reasonable chance of success. Thus the magical association of rams and thunderstorms or the similar magical association elsewhere between agriculture and the violation of Mother Earth must be taken into account before improved techniques of agriculture or animal husbandry are likely to be effective.

In the field of incentives, magic may have the effect of dampening economic initiative while at the same time guarding the individual against the risks of failure. Magical security may be of more importance than a competitive striving to get a better position than the next man. Thus for those Bantu natives settled in a town like East London, the need for money earnings to pay taxes, augment food supplies, or satisfy the new wants which contact with the European has created is a very strong incentive to effort. But the magical part of the old Bantu economic organisation is fitted into the new economic system. When the scientific control over the process of earning wages ends, there magic begins. Magical medicines are bought which are believed to ensure that the worker will find a job or will not be dismissed from his position; or witchcraft is used against rivals for employment—witchcraft which is thought to cause blindness or a septic finger, even death—so that persons will not accept positions of high responsibility

¹ MONICA HUNTER: *Reaction to Conquest* (Oxford University Press and International Institute of African Languages and Cultures, 1936), pp. 79-84, 240-253. See also G. and M. WILSON: *The Analysis of Social Change* (Cambridge University Press, 1945), p. 94.

² G. and M. WILSON, op. cit., p. 94.

or well-paid jobs if they think that their action would cause jealous rivals to have recourse to sorcery. Sorcery is believed to account for unlet rooms in a boarding house; sorcery is used to obviate the necessity of paying bills or by the storekeeper to attract custom to his shop.¹ Everywhere the Bantu's association with modern economic life is hedged and supported by magical practices. Hence technological change cannot "sell" itself by its utility alone. Such change has almost literally to become incorporated into an already pre-existing body of economic values and practices. This process of incorporation may well take time if, as with another Bantu people, the Lovedu of the Transvaal, business enterprise is associated with subterfuge and deceit because the people have been conditioned to, and value highly, mutual helpfulness and non-competitive bartering as the only respectable means of obtaining consumer goods.²

DIFFICULTIES OF ADJUSTMENT

Of particular importance in many parts of the world today is the introduction of indigenous peoples to the modern industrial system through employment in factories. Sometimes the indigenous peoples migrate to urban areas where difficulties of adjustment to urban conditions, because of a process of detribalisation, may complicate the process of adjustment to the conditions of factory employment. In areas as far apart as Peru and New Zealand it is evident that adjustment to urban factory life or semi-urban plantation conditions is only possible as yet for indigenous peoples so long as supporting social associations are developed in the working area and the worker himself is allowed to return at frequent intervals to his home community in order to experience a kind of psychological "renewal" that alone makes possible continued absorption into the relatively depersonalised climate of the industrial system. This process of adjustment is easier for temporary or seasonal workers or for those seeking employment in lumbering. In urban industrial life the social background of the indigenous worker still requires a sympathetic understanding if full advantage is to be taken of both his willingness to work and his inability to work for long and continuous periods of time without periodic returns to the life of his own social group.

Where decentralisation of industry has been economically possible there have been marked economic and social advantages in moving factories to those districts where an indigenous labour

¹ Monica HUNTER, op. cit., pp. 455-458.

² E. J. and J. D. KRIGE: *The Realm of the Rain Queen: A Study of Lovedu Society* (Oxford University Press, 1943), pp. 67-68.

supply is already available. In New Zealand, clothing factories have been successfully located in rural townships where Maori women have shown both aptitude for the work and eagerness to be employed in clothing manufacture. Another recent example comes from the Lac du Flambeau Indian Reservation, the home of a community of 1,200 Chippewa Indians in northern Wisconsin, where a Chicago meter manufacturing company, after testing the general aptitudes of the Indians (Indians scored slightly higher than Chicago whites on a manual dexterity test), established a branch assembly plant. To assemble meters requires the ability to work with tiny delicate materials and mechanisms. Indian women, particularly, because of their skills in the making of beadwork, proved ideal workers for the assembly job: they are able to do monotonous work that requires much patience and delicate handling.¹ It is worth recalling in this context that Iroquois Indian men are able to compete more than successfully with white workers for jobs in high steel construction because the Indians do not suffer from the mildly phobic fear of high places that affects so many white people.²

Two types of social adjustment have to be made by the Chippewa Indians in order to be successful at this factory work. Since the large majority of the workers are Indian women, the women become the wage earners of the community and bring home the weekly pay check. The Indian husbands apparently accept this change in economic power within the family, but there is no correlative change in roles (as occurred, for instance, among Dundee jute workers during a depression, when there was employment only for women and the men perforce took charge of housekeeping, cooking and the care of young children) since the husbands rarely play any part in caring for the small children left at home. Secondly, adjustment to the wage-hour system of working was necessary and proved difficult. Punctuality is not an Indian trait; people had no clocks at home and no way of telling when to leave for work; Indian men became restless during the deer-hunting season. None the less after a two-year trial the factory has settled down in the community

¹ R. E. RITZENTHALER: "The Impact of Small Industry on an Indian Community", in *American Anthropologist*, Vol. LV, No. 1, Jan.-Mar. 1953, pp. 143-148.

² See A. F. C. WALLACE: *The Modal Personality Structure of the Tuscarora Indians*, Smithsonian Institution, Bureau of American Ethnology, Bulletin 150 (Washington, D.C., Government Printing Office, 1952), p. 29. For a further study by Wallace on the same theme see "Some Psychological Determinants of Culture Change in an Iroquoian Community", in W. N. FENTON (ed.): *Symposium on Local Diversity in Iroquois Culture*, Smithsonian Institution, Bureau of American Ethnology, Bulletin 149 (Washington, D.C., Government Printing Office, 1951), pp. 55-76.

and the Indians have become accustomed to the working conditions and the new way of life thus imposed upon them.

A change in habit patterns producing punctuality, regularity, conformity and improvements in personal neatness does not necessarily carry with it any changes in patterns of spending and saving. Among the Chippewa a traditional lack of concern over the future means that money earned is spent immediately. The bank remains an unused institution. Among other indigenous peoples money may be saved only to finance more expensive consumer goods or spent in supporting the kinship obligations of an extended family or contributed to finance tribal and village feasts and ceremonies. The obligations of family membership are extremely tenacious in many parts of the world. They are worth encouraging because of a sense of belongingness they provide and the feeling of security they develop. These attitudes are becoming increasingly important as the modern industrial system tends to promote a rootless and insecure independence. Only in those underdeveloped countries where capital expenditures are increasingly necessary and where they might be financed from savings does the traditional attitude of the indigenous person towards spending become a matter of concern—equally a problem with the peasant habit of some indigenous peoples of hoarding savings in an economically unproductive fashion.

The Flambeau Indians have become adjusted satisfactorily to the demands of the modern wage system because this system itself has in turn been satisfactory for a people who previously lived rather precariously catering for tourists or working seasonally as farm labourers. Elsewhere wage scales may be based on the assumption that wage income is supplementary to family agriculture. With the development of the scope of industrialisation, however, the demands of the system may render it increasingly difficult for the indigenous worker to enjoy this other form of income and no adequate wage compensation may operate to make up the differential. Or again, industrialisation may benefit a small class, leaving the majority worse than before.¹ Advances in the level of living due to economic change will therefore depend upon education for better living and a conscious attempt to develop community welfare.

Key persons in all attempts to bring about economic and social change in indigenous communities are the leaders or chiefs of the group. Too often a technical expert will assume that a community must have a chief or a headman who because of noble birth has

¹ C. S. BELSHAW: "Industrialization in the South Pacific", in *South Pacific Commission Quarterly Bulletin* (Noumea, New Caledonia, South Pacific Commission), Vol. III, No. 1, Jan. 1953, pp. 2-4.

sole power over a village or a territorial area. The first problem therefore, in order to get things done, is to identify the chief, support his prestige and power and then expect that the chief will be able to take responsibility for law, order, organisation and the promotion of desired changes. Anthropologists, however, have been able to show that this naïve view has rarely coincided with fact, with the exception perhaps of such readily identifiable indigenous despotisms as are common in West Africa. Even among the New Zealand Maori, with their well-developed patterns of semi-sacred chieftainship, measures proposed by a chief always required the consent of tribal commoners before a chief felt sure enough to put his proposals into action. The Maori chief in fact was more an inspirer than a dominator. The line of authority proceeded more in a circular fashion than in the linear order of superordination-subordination which Western observers are accustomed to think of as the "natural" meaning of leadership and authority.

Elsewhere it may be difficult to find leaders who are chiefs. Among the Peruvian Aymara, Tschopik notes that leadership patterns are so poorly developed that "individuals are extremely reluctant to hold office and actually do their utmost to evade this responsibility."¹ Leadership is apparently exercised by informal councils composed of public spirited men, wise and successful men, old men respected for their age and knowledge, and important sorcerers.² Again, Melanesian political organisation is based upon the development of social controls vested in a group of important men whose conflicting interests and loyalties provide a system of checks and balances which prevents the delegating of authority to a single leader. The German administrative system of giving power in Melanesia to one leader worked, according to a noted authority, so long as this headman was wise enough to share his power and responsibility with village elders. It broke down when the succeeding Australian administration tried, out of misapprehension, to foster the development of self-government through the encouragement of native chiefs. The result was a decay of community control and often the encouragement of nonentities or of "arrant rogues seeking personal aggrandisement".³ The moral to be drawn is that a prior careful analysis is required

¹ H. TSCHOPIK, Jr.: "The Aymara of Chucuito Peru. I: Magic", in *Anthropological Papers* (New York, American Museum of Natural History), Vol. 44, Pt. 2, 1951, pp. 137-308.

² Idem: "The Aymara", in J. H. STEWARD (ed.): *Handbook of South American Indians*, Vol. 2 (Washington, D.C., Government Printing Office, 1946), p. 540.

³ Ian HOBGEN, op. cit., p. 151.

of the social organisation of an indigenous group before a decision is made as to the person or category of persons who shall be regarded as the leaders of the group and therefore the persons most likely to take the initiative, or to be encouraged to take the initiative, in solving problems of social change. Even today among the Eastern Woodland Iroquois Indians of the United States, it is still the "clan mother" who chooses a council chief and a warrior chief to represent the "clan" in national councils and it is still the women who play determining roles in various social events.¹

PITFALLS FOR THE EDUCATOR

Just as public health, new forms of economic organisation and training for leadership will depend for their ultimate success upon the capacity of a people to absorb new ideas and learn new habits, so in the field of education a successful attempt to introduce fundamental education will depend upon prior understanding of folk practices. The experience of U.N.E.S.C.O. in its Marbial Valley (Haiti) pilot project suggests most strongly that in many ways, some obvious and some more subtle, a clear knowledge of social conditions not only shows the educator where he should step lightly but also how fundamental attitudes of the peasants may be used to support a programme of education and social change. Thus, intense religious rivalries superimposed upon intense interest in magic and voodoo indicate that the educator must be careful neither to alienate the deeply religious nor ride roughshod over the folk beliefs of the peasant. Again, a knowledge of the customary relations between parents and children gives the educator insight into attitudes that will inevitably determine relations between teacher and pupil. Similarly the interest with which Haitian parents follow the progress of their children in school can be used to secure the support of adults for new programmes.

The very open-mindedness of Haitian peasants, however, to new explanations and ideas in itself poses dangers. The peasant may find no incongruity between new ideas and old folk beliefs, particularly when new ideas come with all the power and prestige of the international expert behind them. Yet the peasant may soon over-exaggerate the new and become completely dependent

¹ A. F. C. WALLACE, *op. cit.*, Bulletin 150, pp. 18-19. Other contrasting patterns of authority and their influence on the process of economic and social change are analysed by Esther S. GOLDFRANK: "The Different Patterns of Blackfoot and Pueblo Adaptation to White Authority", in Sol. TAX (ed.): *Acculturation in the Americas: Proceedings and Selected Papers of the XXIXth International Congress of Americanists* (University of Chicago Press, 1952), pp. 74-79.

on the outsider, with the risk that, when the educator leaves, his ideas are in turn abandoned in favour of other innovations.

Finally experience in Haiti suggests that it may be unwise for the educator to foster progress by emphasising competition and rivalry. Just as the Pondo Bantu uses sorcery to humble a competitor, so competition appears to arouse deep anxiety feelings in Haiti and competitive success leads to envy, malevolence and a desire to pull down a possible rival by fair means or foul before he succeeds. Incentives based on competition therefore have no place in plans for social improvement. Rather must the educator in Haiti strive to stimulate native forces in the local culture so that non-competitive co-operation becomes the lever whereby the peasant is not only helped to develop self-respect but also to evolve a new way of life that combines the advantages of a simple technology with the rich values of a traditional peasant social organisation.¹ Experience from other parts of the world reinforces the conclusion that education must be an integral aspect of social and economic development if the village teacher is not to find that his education produces more frustrations than satisfactions.²

PRINCIPLES TO BE OBSERVED

There is one very significant set of signs that it is important to recognise in indigenous groups as giving clues to the relative success with which social and economic changes are being accepted and absorbed by these groups. These signs are part of a social complex of action that recurs from time to time in various parts of the world and constitutes to the anthropologist evidence for the existence of revivalistic, messianic or nativistic movements. In general it may be said of such movements, whether they take the form of the Ghost Dance of the Plains Indians, the Ringatu and Ratana revivalisms of the Maori, the Vailala madness or the more recent cargo cults and "Masinga Rule" movements of New Guinea and the Solomons, that they all represent the response of an indigenous people to the threats, frustrations and disorgani-

¹ *Unesco, The Haiti Pilot Project, Phase One, Monographs on Fundamental Education, No. 4* (Paris, Unesco, 1951). The organisation and functioning of the typically Haitian co-operative working association are described in A. METRAUX: *Making a Living in the Marbial Valley (Haiti)*, Unesco Occasional Papers in Education, document ED/OCC/10 (Paris, 1951), pp. 68-86.

² See, for instance, J. VAN BAAL: "Educating the Netherlands New Guinea Village", in *South Pacific Commission Quarterly Bulletin*, Vol. III, No. 3, July 1953, pp. 18-22; and for the Middle East, A. S. EBAN: "Some Social and Cultural Problems of the Middle East", in *International Affairs*, Vol. XXIII, No. 3, July 1947, pp. 367-375.

sation produced by exposure to social and technological change.¹ With the loss of their hunting territories as the white settler pressed westward over the great plains of the United States, the Plains Indians, for instance, found their customary economy no longer possible. The Ghost Dance represented a revival and adaptation of aboriginal ceremonies and ritual in order to strengthen and support the Indians in their disorganised social and economic life. Again the Vailala madness, so-called because of the automatisms, spirit-possession and dancing that characterised the movement, was the reaction of a socially disorganised Papuan people whose economic life had been undermined and its social life broken by the loss of traditional religious rituals. Thus the development of new religious movements, the rise to power of religio-political prophets and the swift dissemination of irrational cults all need careful analysis and appropriate social action if the energies of an indigenous people are not to be frittered away in useless protest against changes they can neither understand nor cope with, and constructive social development is not to be blocked by rebellion instead of being furthered by co-operation.

The outlook for planned social change might in fact be pessimistic were there not in fact sufficient examples of the adjustment of indigenous groups by their own endeavours to prove that such adjustment is possible and to suggest the probability that adjustment can be helped through the use of anthropological knowledge and techniques. Thus the Hottentots once incorporated a cattle complex into their culture; the Maoris have successfully absorbed Christianity and are now not unsuccessfully adjusting themselves to contemporary economic life; the people of Palau in Micronesia have been able to develop successfully a dual but integrated economic system which combines subsistence agriculture with a commercial economy (a system that has become widespread also in other parts of the Pacific region); again, in Yucatan the village of Chan Kom "chose progress" and has been able to work out a way of life that has combined a traditional social system with an acceptance of modern forms of economic organisation; the

¹ See for instance, J. MOONEY: *The Ghost Dance Religion and the Sioux Outbreak of 1890*, Bureau of American Ethnology, 14th Annual Report, Part 2 (Washington, D.C., Government Printer, 1896); F. E. WILLIAMS: *The Vailala Madness and the Destruction of Native Ceremonies in the Gulf Division, Territory of Papua*, Anthropology Report No. 4 (Port Moresby, Government Printer, 1923); C. S. BELSHAW: *Island Administration in the South West Pacific* (London and New York, Royal Institute of International Affairs, 1950) pp. 126-129; and I. LEESON: *Bibliography of Cargo Cults and Other Nativistic Movements in the South Pacific*, South Pacific Commission, Technical Paper No. 30, July 1952, pp. 1-16. A convenient factual and theoretical summary is also available in W. E. H. STANNER: *The South Seas in Transition* (Sydney, Australasian Publishing Company, 1953), pp. 57-73.

widespread development of co-operatives in New Guinea seems to be pointing the way to an economic change that will provide the necessary incentives for the indigenous people of this part of the Western Pacific to adjust themselves to the demands of a new economic system; the people of Nayón, a Quechua Indian village on the outskirts of Quito, Ecuador, are by-passing mestizo culture and working out a reasonable economic adaptation to Ecuadorean urban life; finally Indians from Tepotzlan have shown evidence that they can without social or personal disorganisation adjust themselves to the complex demands of living in Mexico City.¹ In all these instances of reasonably successful adaptation careful analysis reveals at least one probable cause: there has existed a latent congruence between the values, attitude-systems and forms of socio-economic organisation characteristic of the indigenous people and those of the culture bringing the new ways of social and economic life. Thus a graft has been possible and a new growth has taken place that represents a sturdy integration of the traditional with the new.

One of the most important problems of contemporary social science is simply the problem of ensuring that, as far as knowledge and goodwill can take us, the process of adapting the customary social and economic patterns of indigenous people to the demands of technological change shall proceed with the minimum stress, frustration and blockage, with the least possible violence to the traditional values and the greatest possible consideration for the human beings whose ways of life are being changed. It is not without significance that realisation of this problem has led U.N.E.S.C.O. to establish a committee of experts to study the principles that should be taken into account in furthering economic change.² In a very summary form these principles are: every culture is a living unity, and a change in any one aspect will have repercussions on other aspects of the culture; changes within a culture will produce changes in the personality of individuals

¹ A brief summary of the situation in Palau is given by O. LEWIS: "The Effects of Technical Progress on Mental Health in Rural Populations", *América Indígena*, Vol. XII, No. 4, Oct. 1952, pp. 299-307. For Yucatan see Robert REDFIELD: *A Village That Chose Progress: Chan Kom Revisited* (University of Chicago Press, 1950), pp. 46-66 and 113-138. Quecha experience is noted in R. L. BEALS: "Acculturation, Economics and Social Change in an Ecuadorean Village", in Sol TAX, op. cit., pp. 67-73. An analysis of the case of the Tepotzlan Indians is provided by O. LEWIS: "Urbanization without Breakdown: A Case Study", in *Scientific Monthly*, Vol. LXXV, No. 1, July 1952, pp. 31-41.

² The main conclusions of the committee, under the chairmanship of Dr. Margaret MEAD, are to be found in the report "Unesco and the Social Consequences of Technological Change", in *International Social Science Bulletin* (Paris, Unesco), Vol. IV, No. 2, Summer 1952, pp. 370-380.

living within the changing culture ; purposive technological change involves responsibility for the effects of such change upon the lives of the people concerned ; each change is unique, and therefore it is impossible to lay down general prescriptions but, through an identification of the process as it occurs, experts will be able to act in terms of the fullest knowledge ; changes should be introduced with the fullest possible consent and participation of the people and in ways that are familiar and acceptable.

Once these principles are accepted then the role of the social scientist in technological change becomes clear. In co-operation with a team of experts and administrators the anthropologist, for instance, has the task of ensuring that the experts are fully aware of the cultural values of the people whose culture it is sought to change. It is of equal importance that the experts should become aware of their own cultural values and prejudices so that, for instance, tensions and discriminations between racial and minority groups, closely connected in the West with industrialism and technology, are not diffused to an indigenous people as unsuspected appendages to desired innovations.¹ The anthropologist, through his detailed knowledge of indigenous life, can note the areas of resistance, blockage and susceptibility to change, so that local patterns will be circumvented or utilised in order to reduce friction and resistance. Thus the evaluation of an on-going process becomes an important contribution of the anthropologist to a team approach. Finally in bridging a possible gap between administrators and the indigenous people the anthropologist can make sure that planning and action both proceed with the fullest possible consent of the people and on the basis of a complete communication between all those concerned with projects of social and economic change.²

¹ Brazilian and foreign observers have the impression that unless the dangers and pitfalls are known and steps taken to avoid them, Western attitudes and concepts of "racism" may be unsuspectingly smuggled into Brazil along with Western industrial organisation and improved technological processes. See C. WAGLEY (ed.) : *Race and Class in Rural Brazil* (Paris, Unesco, 1952), pp. 154-155.

² In the process of communication between several different persons, transition points are almost always points of resistance to change. See C. A. MACE : "Resistance to Change", in *Occupational Psychology* (London, National Institute of Industrial Psychology), Vol. XXVII, No. 1, Jan. 1953, pp. 23-29.