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A PLAN FOR A CENTRE FOR INDUSTRIAL ADMINISTRATION ^{1/}

by

Frederick Mayer ^{*/}

It has been the dream of great philosophers to develop schemes and institutions of training so that thinkers would exercise actual power and so that more rationality would prevail in the decision-making realm. Most of these schemes have failed because they were based on utopian ideals which ignored the areas of concreteness and experimentation and which widened the gap between theory and practice.

Many modern conceptions relating to administration indirectly suffer from this weakness. They are based upon abstractions rather than upon a problem-solving technique. They cannot supply a valid foundation for decision-making. They create a type of leadership which believes in the status quo and which favours a bureaucracy opposed to experimentation and innovation.

One of the pressing needs for the industrializing as well as for the industrialized nations is the development of creative judgment on the part of key officials. In the past, enormous mistakes have been made which were costly in human and financial terms. Major companies have been ruined; false strategies have been used by governments with catastrophic social results. Some of the mistaken

^{*/} Mr. Frederick Mayer is Vice-President of the International Cultural Institute, Vienna, Austria.

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judgments are due both to the lack of quantitative models and to a lack of understanding of the broader political, economic and psychological areas involved in decision-making.

The decision-maker is frequently in a lonely position. His training may be inadequate both in technical and psychological terms. Often he is involved in so many details and he has to cope with so many crises that he cannot reflect about principles and he has little time to consider innovations. He needs continuous education and continuous expansion of perspective and a dialogue to provoke new ideas. Yet there exists no adequate institution in the world which brings together thinkers and decision-makers in a problem solving setting and which unites the realm of theory and practice for the consideration of strategies involved in the industrialization process.

Because of this gap, a Joint Programme uniting the resources of UNIDO, Austria and other nations, private and public organizations, can have an impact which may affect industrial development on a broad scale. A limited, experimental model can be flexible and be more dynamic than one which is held back by conventional training and static patterns of performance.

The Joint Programme can clarify such questions as: What are the most appropriate strategies for coherent industrial growth? How can new perspectives in implementation be achieved? How can the relationship between the industrialized nations and the industrializing nations be made more constructive? How can human and technological resources be explored in the most adequate manner? How can an interdisciplinary and interagency approach be formulated and implemented? How can the behavioral sciences be best applied in the process of industrial growth? How can a higher priority be given for practical training? How can international linkages at multiple levels be created? How can decision-making be decentralized and how can bottom up planning be effected?

The impact of such a programme may be extensive. Genuine internationalism may be stimulated. Interagency co-operation of the United Nations family may be strengthened. The benefits of such a programme may not only be short term but have lasting implications and may affect industrialized nations almost as much as countries in a more rudimentary state of development.

This demands a functional relationship between the work of specialists and generalists. As Sir James Taylor has stated in New Horizons in Research and Development: "Although we live in an age of intense specialization, and necessarily so, all our current big problems are generalist problems requiring concerted action by many wisdoms and multiple disciplines. We have got to bring together the people who can generate the emotion needed to produce the public urge to get something done and the specialists who alone can provide the solutions in terms of hard technology and economics".

"I am convinced from my experience that no specialist body, whether it be a learned scientific society, or an engineering institute, can act alone to solve our current problems. A multidisciplinary approach is needed and difficult compromises have to be made. Many of the problems are international in character and will need world-wide collaboration".

Actions to be considered

In establishing the Joint Programme, it is important that it should emphasize genuine international co-operation. The programme should serve in multiple ways, first, as a catalyst to establish transferable patterns both for the developing and the industrialized nations.

Second, the model can act as a platform of co-operation involving existing programmes, expand them and internationalize them.

Third, progress can be intensified by aiming at new products; diagnostic service going far beyond the conventional use of analysis can emphasise points of concentration and strength. Interdisciplinary and interagency teams for the industrializing nations can make a unique contribution. Moreover, emphasis should be placed upon changing the styles of leadership and developing techniques for making decisions in an atmosphere of uncertainty.

Fourth, a programme is never an abstraction; it is a concrete exercise and depends upon the quality and range of personnel that is involved. Significant results can be achieved by using provocative ideas in stirring professionals to widen the range of their concerns and to focus more concretely upon the solution of present problems.

Fifth, research should be carried out in operational terms and be related to field functions. Research activities, especially comprehensive case studies on the part of developing countries, should be encouraged. Such research must be action oriented and can learn a great deal from the "think-tanks" which have created new products in industrialized countries.

Sixth, new ways and methods must be found for the development of experts and consultants so that their work has a more dynamic effect upon projects and decision-makers. In the past, the expert's preparation has been frequently too fragmentary. His impact has been limited both in human and technical ways. Evaluation of his activities has been inadequate. With a team approach and with integrative ideas and with closer co-ordination between field and planning activities more concrete results can be expected.

During the First Development Decade the trend was to select experts on the basis of specialized knowledge. For the Second Development Decade more is required on the part of experts who should also have generalist perceptions and be skillful in the art of human relations. This demands far more extensive training for assignments both in quantitative and qualitative terms and more profound knowledge and appreciation of local conditions. Since more teams will be used, patterns of co-operation have to be established and the methods of communication have to be strengthened. Furthermore, the experts need a far greater knowledge and appreciation of the United Nations system and its Specialized Agencies.

It should be realized that the test for an expert lies not in the excellence of his background and his research capacity but in his ability to cope with specific problems and the extent to which he involves local resources and local counterparts. The definition for his effectiveness is pragmatic and lies in his impact upon the process of industrialization and the development of creative patterns of industrial leadership.

At the present time the reports and findings of experts are used in limited ways. A pressing need exists to make the findings more readily available to other groups - public and private - and especially to other United Nations Agencies concerned with the same problem area. The findings should be evaluated carefully and, if well designed, should be regarded as blueprints for action. They should be regarded as case studies and be viewed with the same intensity as a modern medical

school treats the work of distinguished consultants. The hope is that by strengthening the work of experts and by giving them added assistance their work will have long range effects and will stimulate new forms of inquiry and action.

Since the role of experts will be crucial for the success of the Second Development Decade - 321 experts were used by UNIDO in 1970 - new ways for their recruitment should be found. Organized efforts should be made to recruit the most dedicated and creative individuals who would learn as much as they would teach and whose success would be that they would contribute to autonomous patterns of industrial administration in the developing nations. In many cases, experts from the industrializing countries can be used - a step which would be significant both from the standpoint of strategy and human relations.

Seventh, eventually it will be desirable to establish a fellowship programme for young industrial administrators and those having the potential for industrial leadership. At the same time, mature industrialists with prolific experience in public life would be invited to participate.

Eighth, the process of creativity would be studied in depth so that new perspectives in planning and implementation would be achieved. This would not be merely a theoretical investigation but an action oriented scheme.

Ninth, the participants from the developing countries should find new ways of sharing technological and financial resources. In many cases, their management skills are of a high order. Their insights would contribute to creative diversification in the decision-making process.

Such sharing is imperative in a period when a scarcity of investments can be detected and when currency problems afflict both industrialized and industrializing nations. The Centre could indicate basic strategies to achieve co-operation of human and technical resources - a step vital for both industrial leadership and the implementation of United Nations ideals.

Tenth, since the future of mankind will be partially determined by the ability to communicate, a valid strategy will have to be devised for the most constructive use of information systems both on a quantitative and qualitative level. They offer no magic short-cuts for industrial progress. They have often been misused. Their applications are limited in the realm of qualitative social relations. But they have already accomplished a veritable revolution in communications - a revolution which is

of the utmost significance in the decision-making process not only for the industrialized nations but for the developing countries.

The programme would not deal directly with the application of information systems, rather it would be concerned to chart ways and means to integrate information systems in the process of decision implementation so that performance of functions would be achieved in an adequate manner.

Eleventh, the type of environment conducive to the development of industrial leadership must be created. In the industrialized world there is widespread concern about the uncontrolled spread of technology and more and more voices are being heard demanding environmental control. In the industrializing nations the problems of pollution in all its forms are less urgent. There the concern is to overcome disease and illiteracy, to develop adequate housing patterns and to expand employment possibilities. In short, the concern of most industrializing nations is to create an environment which can sustain life and create a basis for industrial advancement.

Thus it is important for the industrializing nations to have industries which should not only benefit a small region but have the largest degree of social usefulness - a spill-over effect - and which should create the foundations for further economic growth. In this respect, the programme can contribute both to applied research and to the spread of appropriate technologies.

It should be realized that industrialized nations are developing technologies which tend to use labour saving devices - a condition which must be analysed thoroughly for it may be catastrophic for those developing nations where unemployment is already a malignant problem. The programme thus should chart strategies for technological development which, while saving capital, can expand areas and opportunities for employment.

This is a process in which science, technology, social conditions and traditions, values and ideals interact. The problem for many developing nations is how to move from resistance to change to openness toward innovation so that industrial progress can be achieved. Industrial administration thus has to provide the kind of stimulation - internal and external - through which new conceptions and new ways of implementation can be found.

All this cannot be done without structural changes in the educational programme in industrializing nations. This refers not merely to the formal school environment but to the agencies of communication which should be mobilized to develop an emphasis upon work-study programmes and to create a close co-ordination between schools and industrial development.

This is a concrete case in which the Centre can contribute to an interagency approach focussing both upon education and industrialization with tangible impact upon joint field operations.

Twelfth, since human relations are basic in industrial development, the Centre should emphasize programmes which define the obstacles in personal interaction and which prevent the growth of mutuality. The team approach stressing shared learning offers rich rewards. It should be pointed out that merely teaching about better human relations is inadequate; what matters is the actual situation and environment in which constructive patterns of interpersonal behavior and real empathy can develop. Practically, this means the avoidance of a stratified structure in the development of the Centre.

Thirteenth, the programme should stress staff development - an action which should have impact both upon its immediate and larger environment. The key to growth is continuous education and continuous inquiry. If this is done, the interaction of the staff of the Centre with the visitors and with UNIDO can be most invigorating and lead to a real Socratic dialogue.

Fourteenth, achievement, represented by the entrepreneurial personality, is basic for industrial growth. Certainly, achievement need not be measured only in quantitative terms. It can have many dimensions both objectively and subjectively. To encourage achievement and to seek new ways and means to apply it in the industrial process will demand the co-operation of many disciplines - all learning from each other and applying their insights to concrete situations with the aim of providing new resources for industrial leadership.

Fifteenth, the co-ordination between various types of aid, between private and public donors, between various projects, between industrialized nations and the developing countries, should receive a high priority. The programme can help to chart strategies which can contribute to maximum industrial growth.

The Athens Symposium of 1967 repeatedly urged that projects be planned and implemented in more systematic ways involving the interaction of various United Nations agencies. As yet, steps in this direction have been limited. The Centre, as a neutral agency, could act as an intermediary to provide stimulation so that co-operation and interchange of ideas among United Nations agencies would be intensified and so that the Second Development Decade would witness more significant progress in the direction of administrative co-ordination.

Sixteenth, one of the goals of the programme would be the development of a new type of industrial leader who combines technical knowledge with a capacity for dynamic action. Unfortunately, the prevalent patterns of training create too much one-sidedness and frequently neglect the area of practice.

Alfred North Whitehead one time remarked that "the secondhandedness of the learned world is the secret of its mediocrity". To prevent this condition, the new industrial executive should rely upon first hand experience without neglecting reflection and disciplined thought and thus would make a unique contribution to industrial administration.

Seventeenth, the programme could encourage strategies for the development of local initiative for industrial growth. Such strategies would represent constructive decentralization in action and would represent an interagency and interdisciplinary approach to decision implementation. They would require the application of the principles of social science, especially as relating to organizational development. Formalistic plans would be less adequate than a stress upon the type of environment in which local development and initiative can flourish. The environment in this case should be conceived of in multiple terms, far transcending economic factors. The challenge would be how to institutionalize change and how to take advantage of local resources and local patterns of co-operation. The experience of several Asian countries indicates how small-scale local industry can add to national income and how it can be an incentive to social and economic progress. The example of the city of Arequipa in Southern Peru shows how decentralization based upon local initiative can have significant consequences both for the immediate region and for the nation.

Eighteenth, the proposed programme could be helpful in creating a closer working association between planners and implementers - a step vital in economic development. Through seminars and workshops based upon a problem solving technique

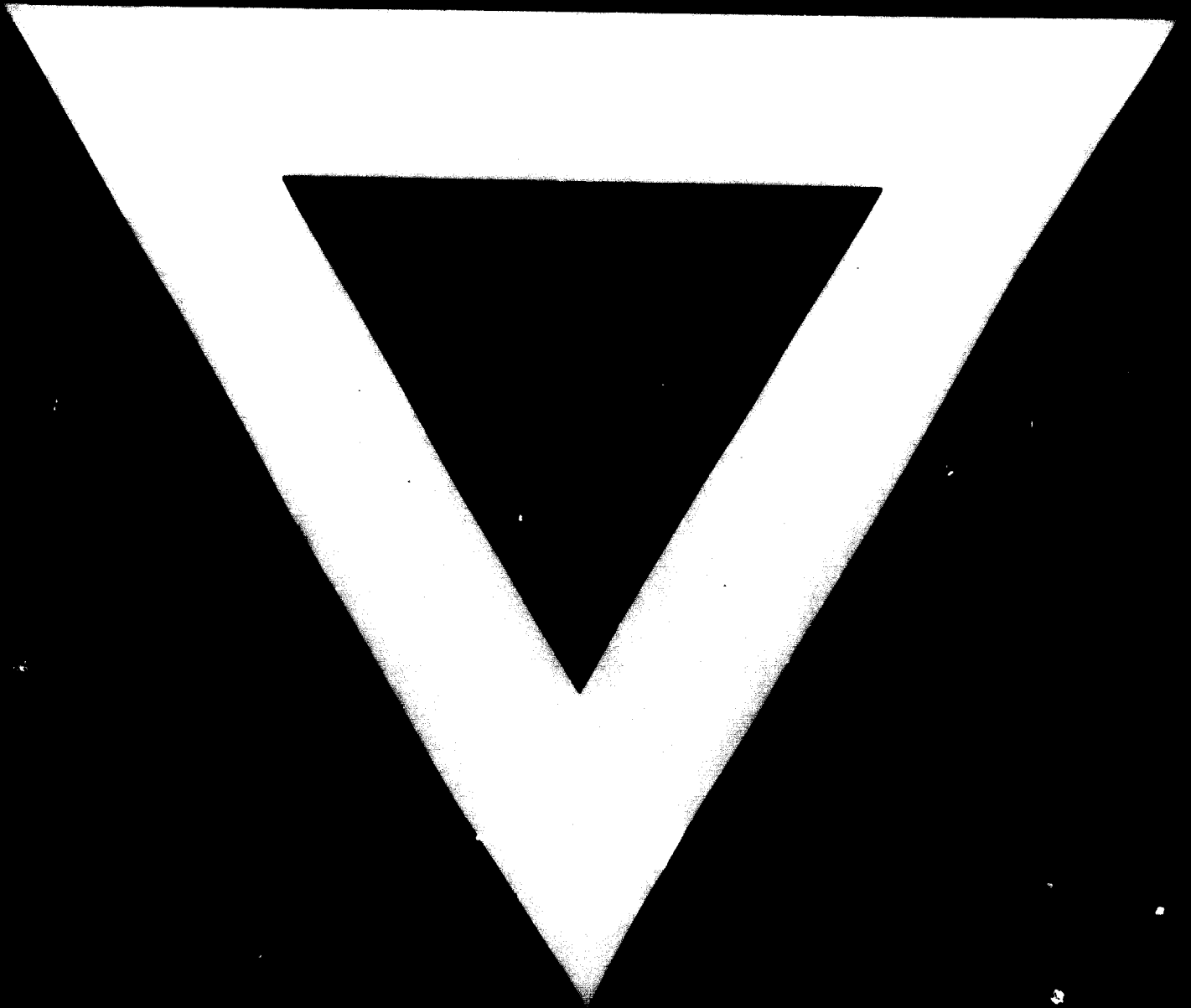
new personal insights and relations might be achieved as well as a clarification of objectives and the means by which they might be attained. Fundamental mistakes in implementation could be avoided in this manner and the decision-making process would be given a more scientific basis.

The role of creative adaptations as links between planning and implementation can scarcely be exaggerated. This was one of the methods used in pre-industrial times by the Phoenician, Alexandrian and Roman civilizations and in a later period applied by the Japanese in their rapid march toward full industrialization. Foreign models and inventions were used as bases upon which often an original superstructure was built. Industrial administration in Japan used the type of co-operative bottom up planning which moved from the lower echelons to the highest agencies for decision-implementation. Through job rotation, the use of satellite companies, and a policy favouring production and expansion both in physical and human terms, Japanese industrial administration has achieved a flexibility which could serve as a fertile source for investigation for both industrialized and industrializing nations.

Nineteenth, most significant is the consideration of motivation - a process which goes far beyond psychological factors. For industrial leadership motivation is the continuous source of stimulation and supplies the perseverance required to attain set goals. A complex problem is how motivation can be institutionalized, how it can transform organizations and how the drive for status and security can be transcended by a drive aimed at calculated risk-taking. The programme might encourage action oriented research to develop the type of motivation that leads to genuine industrial progress.

Twentieth, the effect of the programme will depend upon the quality of its educational structure. The old form of education with teachers and conventional courses resulted in a passive experience of learning. The new idea is to develop genuine communities of learners so that leaders of all countries can contribute to other regions of development. This co-operation represents a form of culture diffusion and service, for in administration the ethical element can never be omitted. The concept of idea engineering can be applied to organize learning experiences in a coherent way. We learn by doing and by reflection about our experiences and through these pragmatic elements we avoid excessive abstraction. The hope is that decision-makers both in the private and public sector can combine so that ideas may be expanded and so that new perspectives may be achieved. This in itself may establish a type of uniqueness that other institutes have not achieved.

Above all, it can be stated that the experiment will depend to a great extent upon its commitment to a creative and flexible viewpoint and by its ability to establish new frontiers for both the private and the public sectors in administration.



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