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Chapter 19

Running Modern Society Effectively: An Overview

We have seen that our society faces enormous problems. We have seen that most proposed solutions to these problems recognise neither how serious they are, their deeper origins in the way society is organised, nor their interconnectedness. It follows that most people do not recognise how extensive are the changes that are actually required if our society - or even the planet in its present form - is to survive.

We have also seen that, contrary to popular belief, we live in a managed economy and that this managed economy has come into being at least in part for the best of reasons. We have seen that our public service is not vigorously tackling the most important problems that confront us, that it has persistently failed to orchestrate communal action in the public interest, and that it has neglected the hidden forces which prevent the vast areas of the economy that are already within the public domain functioning very effectively. These shortcomings have many causes, but they lead to a lack of appreciation of the need to invest heavily in fundamental research to identify the deep-seated connections which result in the causes of problems being far removed from their symptoms, to understand the processes through which the way things are done comes to be supported by a network of mythologies, and to develop the tools and administrative arrangements which are actually required to run public provision effectively.

We have seen that the market mechanism - which was justified as a means of handling and coordinating diffuse, incomplete, interdependent, and contradictory information - has failed to provide, and cannot possibly provide, effective societal management. The attempt to reduce mis-management of the economy by privatisation is utterly misguided. By privatising, we are not turning the management of our society over to some benign invisible hand, but to the managers of our gigantic, managed, Transnational Corporations. It is not a question of whether we will live in a managed economy or not. The questions are: "Who is going to do the managing?" and "In whose interests will society be managed?"

Finally, we have seen that those proposed solutions to our problems which do acknowledge their seriousness are unlikely to have much effect because they do not recognise their depth and ramifications. They do not, in particular, recognise the extent to which our problems are embedded in a system which reacts in ways which cancel the effects of piecemeal interventions. It is these *systems* processes which it is most important to influence. It is

ironical that, although, as Deming^{19.1} and the author^{19.2} have shown, influencing such systems processes is crucial to the effective performance of most people's jobs if evaluated against their job descriptions, those job descriptions almost never highlight the need to engage in systems analysis. Systems processes are hard to identify and still harder to influence. Worse still, examining them is liable to incur denigration as a crank because it involves challenging the "obvious" truths - which actually turn out to be myths which operate to perpetuate the system, particularly by offering a rationale for the "reasonable and realistic" actions of most well-meaning people.

We will now set down what we have been able to discern of the developments that are required to overcome the problems which have been described. Our proposals will be based on two propositions which conflict sharply with the most vociferously advocated economic theories. The first is that it is vital to better utilise, and to refine, the *public management* structures and processes we already have. The second is that what happens in a society is primarily determined by widely shared values and not by such things as the arrangements made to administer financial rewards for "appropriate" behaviour. The way forward will be found by many people striving hard to find new ways of translating the "new values" into effect in their own domains of activity. We will only succeed if many people put a lot of effort into thinking out how an alternative society is to be run, finding new ways of doing things, introducing changes grounded in tentative understandings of systems processes, monitoring and learning from their effects, and introducing the modifications that are indicated.

Effective Management

At the same time as advocating more, and better, societal *management*, it is vital to underline that what is needed differs sharply from the image most often conjured up by that term.

As has been established in a series of studies^{19.3}, effective management within organisations involves:

- a) Managing *organisational arrangements* in such a way as to release the energy, competence, and enthusiasm of all concerned. This involves guiding action by varying organisational arrangements, processes, and climates - not by issuing orders and instructions. The notion that managers can have such superior knowledge of every detail of every necessary action to be able to issue detailed instructions is an illusion.
- b) Creating *learning systems*^{19.4} in which people and organisations monitor the effects of their actions in order to learn more about the operation of the systems with which they are dealing, the problems they are trying to tackle, and the effectiveness of their strategies, and then initiate appropriate further action in the light of what they have learnt, monitor its effects, learn more about the problem and the solution, and take corrective action. Once again it is important to be clear that what is envisaged is something very different from what people generally imagine when they hear the word "learning". As used here, the term "learning society" or "learning organisation" does *not* imply the traditional educational activities which those who advocate such things as "lifelong learning" and "education for life" tend to envisage. Rather, the term is intended to evoke an image of formal arrangements to learn from experience and find new ways of doing things.
- c) Holding managers accountable for *the quality of the discretionary judgments they make on the basis of incomplete and tentative information*. It is the task of a manager to

canvass opinion among those above and below him (or her), to decide what shall be done, and to initiate appropriate action. It is on the quality of such managerial decision taking that the future of the organisation depends. Responsibility for it cannot be delegated to committees - for then no one is responsible for ensuring that the activities which have been initiated work.

In terms of effective *public* management, our task is to evolve new structures whereby the public can supervise the management of society and ensure that its managers act in the public interest. This applies whether those managers are officially public sector managers or managers of so-called "private" organisations (the costs of which are mostly borne directly by the general public [and not just their "customers"] and which make most of their money by selling, directly or indirectly, to the public sector). In other words, our central task must be none other than to evolve new concepts of, and structures and procedures for, democratic management.

The practices and procedures that are to be introduced if we are to create a learning society must:

1. Contribute to the clarification of policy goals. This means introducing better means of stimulating explication of alternatives, collecting information on the consequences of each, feeding that information into public debate, and bringing such debates to meaningful conclusions. Since, in coming to a meaningful conclusion it will be necessary to give due weight to such things as what is in the long-term public interest (as distinct from the short-term benefit of vested interests), the priorities and needs of minorities, and those who are most affected by the policies, it will be necessary to develop alternatives to the majority vote. It is not a question of laying down policy goals for all time: such goals can only be tentative, dependent on the arrival of further information and especially information on the effects of the policies that are introduced. To get the necessary further information it will be necessary to: (i) ask how a number of mavericks can be involved in policy development and evaluation so that attention will be paid to processes and outcomes which would otherwise have been overlooked, (ii) initiate experiments grounded in a tentative understanding of systems processes and which aim to do things which no one had previously thought it might be possible to do, (iii) subject those experiments to *comprehensive* evaluation procedures which examine outcomes which few people had thought it was even possible, never mind important, to consider, and (iv) initiate a further round of more general discussion. This is no tidy, single-targeted approach. Many contradictory experiments with conflicting criteria of evaluation need to be tried. A messy, evolutionary, approach is needed.
2. Facilitate: (i) collection of information on the effects and effectiveness of policies currently in operation and on the forces - including systems constraints perhaps supported by widely accepted mythology - which prevent them functioning as effectively as they might; (ii) sifting the information so obtained for insights and good ideas; (iii) initiating action on the basis of the information collected; and (iv) monitoring the effects of that action in order to learn more about the operation of the system and re-starting the cycle of innovation.
3. Facilitate widespread public participation in the process of defining problems, seeking solutions, translating the results into action, evaluating experiments and developments, and re-defining the issues.

4. Make it possible to monitor the activities of the public service in a professional way and reduce the conspicuous overload of government by arranging for the responsibility for monitoring the quality of provision and the actions of public servants to be exercised by interest groups and a wider cross-section of the public^{19.5}.
5. Establish network-based working arrangements - both within the public service and outside it - so that cells dealing with single issues can share their learning, make observations about the working of the overall system, and tackle worldwide, interconnected problems.
6. Lead managers (and, in particular, public servants) to behave in ways which are appropriate to the running of - and the stimulation of innovation in - the vast organisations they control. Required behaviours include the release of energy and enthusiasm in subordinates, sifting information for good ideas and initiating appropriately monitored experiments.
7. Lead public servants, managers, employees, and citizens to develop the competencies, expectations, and understandings which are required if they are to play their part in running modern society effectively.
8. Incorporate ways of promoting adequate accountability, on both an individual and group basis, for both personal and organisational effectiveness.

The need is, above all, to create a *pervasive climate* of innovation. What happens in a society is not determined by the actions of one or two political leaders or researchers. It depends on a network of parallel and interlinked developments in areas which often seem to have little to do with each other. A design for a steam-engine would be of little value without parallel developments in steel making, financial services, and means of collecting the fares needed to recover the capital.

The above specifications for the developments which are needed if we are to have a learning society interact. It is therefore not possible to understand the developments needed in one area without simultaneously understanding the developments needed in the others. To introduce an understanding of them it will therefore be necessary to adopt a cyclical, or iterative, course. In the next few paragraphs we will briefly sketch out the developments that are needed in each area. We will then enlarge - and to some extent coalesce - the discussion of each area. Having, in this way, built up an understanding of the inter-related whole, the developments needed in each area will be discussed separately, but at greater length.

1. Generating better information about, a wider range of perspectives on, and more creative solutions to, the problems which confront us.

It is said that ours is an information society. But we are still surprisingly ignorant about the complex, social and biological processes with which modern development is interfacing so drastically. Among other things, we need much better information on the human and biophysical, short and long-term, consequences of alternative courses of action. As we have seen, what is in individuals short-term interest often conflicts with what is in their own and the communities long-term interests. To run society more effectively public servants need to explicitly set out to create and separately evaluate multiple options with a view to meeting the divergent needs and priorities of a cross-section of the public and disseminate that information to the public so that they can make more informed choices between them.

Although the need to develop better ways of thinking about our problems and the compilation of better information is fundamental to finding a way forward, we will defer discussion of the

arrangements needed to advance understanding until last. Instead priority will be given to the question of how it might be possible to ensure that information which is likely to open up new understandings and vistas is first collected and sifted, and then acted upon in an appropriately innovative, forward-looking, way.

2. Creating a climate of innovation in society as a whole, and in the public service in particular.

As noted above, *pervasive* change that will lead to *radical transformation* of society is required. *Everyone* needs to be involved in noticing necessary developments and in working with others to translate them into effect. The creation of a pervasive climate of innovation means allocating part of *everyone's* day-to-day activities of the kind Kanter grouped under the heading of "parallel organisation activity concerned with innovation" - that is, to finding better ways of thinking about and doing things. Equally importantly, however, it means recognising the importance of a wider range of roles in the workplace and re-allocating responsibilities so that people who can contribute importantly in one of the many ways necessary to innovation can devote their time more wholeheartedly to doing so.

While the observations we have just made apply to everyone in their diverse jobs and various types of citizenship activity, it is on the innovativeness and ingenuity of our public servants that our future is most dependent. Public servants have a double responsibility: Their task is not merely to display high levels of innovation and ingenuity themselves but also to release energy and creativity in others. If public servants are to do these things, it will be necessary to change our expectations of them, the structures in which they work, and the criteria which are applied when evaluating their work. Their task is to create an innovative, learning society.

3. Mechanisms to increase public participation in defining problems and seeking and testing solutions.

We need ways of enabling many more people to participate in "the planning process" and "public management". One aspect of this process which needs to be singled out for special attention has to do with clarifying the nature of possible experiments grounded in a tentative and incomplete understanding of systems processes, initiating such experiments, and monitoring them in a comprehensive way in order to learn more about the problem and the strategies required to tackle it, its implications for the goals of policy and the long-term public interest, and the systems processes which it will be necessary to make greater efforts to influence.

To find a way forward we need to systematically involve those - often marginalised - people with unusual definitions of "the problem" in the process of defining and tackling our problems. The planning process has, in the past, tended to admit the "informed" public but to exclude those with plebian, unusual, or "radical" ideas^{19.6}. It has tended to focus on what Thompson^{19.7} has called "gainly" institutions and tidy, single-criteria and single-issue, problems and solutions. It has tended to exclude - even dismiss as ill-informed and ignorant - the views of many of those on whom the policies actually impinge.

4. Mechanisms which ensure that public servants seek out, sift, and act on information in an innovative way in the long-term public interest.

The first thing to be done if we are to induce our public servants to seek out and act on information in a more innovative way is to change the criteria and tools adopted in staff appraisal exercises. If this is to be done it will be necessary to disseminate what we have learnt about the *importance* of public servants performing a *managerial* role (defining that in terms of the activities which have emerged from research as being important) and acting in an innovative way. It will also be necessary to disseminate the idea that the way to promote innovation is by creating a *climate* conducive to innovation. Also essential is more widespread recognition of the role which public visibility could play in inducing public servants to act on information in the public interest. If any of these mechanisms are to be introduced it will need to be more widely recognised that we need much more citizen participation in the process of supervising the activities of the public service.

5. Ways of initiating worldwide action.

Worldwide intervention is to be achieved by extending the network-based working arrangements that are required, both within the public service itself and in its interface with the public, to solve “local” problems.

The solution is *not* “world government”. Powerful governments have a tendency to act in their own interests (or at least of those who are behind them). The heavy-handed enforcement of sanctions tends to misfire. People should be made part of the kind of network of relationships which leads to responsible behaviour. They are typically deterred from crime, not so much by the threat of imprisonment as by the thought of neighbours and friends finding out. Public servants and politicians are most likely to be induced to act in the public interest if their behaviour is exposed to the public gaze. We do not have to wait for legislation and central decree to begin this process.

We will, in the remainder of this chapter, merge some of these topics and discuss them a little more fully. Although the central problem we face remains Adam Smith’s and Fred Hayek’s one of finding a way of collating and giving effect to diffuse information, it has proved easier to come at the task of clarifying the way forward by starting with a discussion of the arrangements needed to create an innovative public service, move on to a discussion of public participation, and leave the discussion of the crucial (but rather boring) business of clarifying the nature of the information needed, how it is to be collected, and how it is to be translated into effect, until last.

Creating A Pervasive Climate of Innovation

If we are to stimulate more experimentation with ways of running society, we will have to set aside time for such activity and create a structure, and a set of expectations, which promote it.

Not only do we try to run our existing public provision as “efficiently” as possible by cutting any surplus money not required for the execution of already-defined activities, but our existing hierarchical administrative structures tend to stifle innovation. The process of passing information upward and downward through many bureaucratic levels filters out new and risky ideas the value of which is often only apparent to those who, as a result of their position and temperament, are (i) aware of particular problems (ii) aware of new possibilities, and (iii) have access to idiosyncratic combinations of new knowledge. Messages get distorted to fit what it is thought the recipient wants to hear. Job descriptions rarely highlight the need

for innovative activity and staff appraisal systems rarely record staff competence to contribute in one of the wide variety of ways that are necessary if innovation is to occur.

Research into the process of innovation^{19.8} shows that, for it actually to succeed, one needs both someone with “fire in their belly” and a supportive context. Successful innovation usually comes from small “teams” of people. These typically include someone who has become aware from his or her day-to-day activities of the possibility of doing, or the need to do, something new, or of a new way of doing something. They include someone who has learnt (usually through a network of contacts with people involved in related developments) of new information and new ways of doing things. They include someone who is able to persuade others to fund a trial of the idea on a pilot basis. They include someone who knows how to use his or her feelings or hunches to embark on a course of activity without being very clear how it is to be done or what the outcome will be, monitor the effects of that action to learn more about the problem and the effectiveness of the strategy, and take appropriate corrective action. They include someone who knows how to persuade other people to assist. They include someone who knows how to mount a crusade to get the idea adopted: Better ways of doing things do *not* automatically sell themselves. They include someone who can translate abstract ideas into a practical prototype. They include someone who can pour oil on troubled waters and get people to work together effectively. Staff appraisal systems need to be able to recognise this wide variety of different types of contribution to “team” activity.

Instead of nurturing such network-based “teams”, there is, in our society, a tendency to wish for, and depend on, “champions” of innovation who individually possess many of the qualities mentioned above. Unfortunately, many of these qualities are psychologically incompatible. People who are good at finding new ways of thinking about things are not usually good at generating proposals which will attract funds. People who are good at acting on their hunches to initiate new courses of action are unlikely to be good at “setting up” politicians and bureaucrats in such a way to release money into the activities. As a result, there is a need for structures of working groups containing people with a number of such talents who will persist for the time that is needed to accomplish something worthwhile, and then disband. The membership of such groups needs to be flexible so that different people with different talents are involved at different stages. That is to say, the people who generate ideas may not in the end be the people who implement them: The innovators may move on to other things, leaving others who have different priorities and motives to translate them into effect and still others to sell the product. The activity cannot be funded from paper plans, but only on the basis of assessments of such things as who is able to notice important, practical, new things to do, find ways of getting important things done, and able to turn “chance” observations and discoveries to advantage, and whether a *group* as a whole is likely to be able to venture into the unknown and accomplish something worthwhile. The “teams” required to pull off innovation need different balances of talents to those required to carry out the day-to-day operations of the organisation.

If we are to create a climate of innovation, it will be necessary to set aside part of everyone’s day to work in what Kanter^{19.9} has termed “parallel organisation activity concerned with innovation”. During this time the goals, pattern of activities, and working relationships are all very different from those required for routine day-to-day tasks. Nevertheless, it is important to note that it is *the same people* who need to be involved: Innovation is not a task for some separate cadre of innovators and managers, although there is a need for at least some of those concerned to have links with specialists in information-generation and research, and for all concerned to have access to researchers who may be able to help them with their problems.

During this time a number of things - previously spelt out - are necessary. Chief among them are (a) different patterns of working relationships and, especially, deliberate strategies for the recognition and utilisation of multiple talents, and (b) network working.

To illustrate the idea of network working, let us consider what is needed for innovation in the educational system. Each school needs to have some teachers who contribute to the development of new curriculum theories, some who work on the development of the tools required to administer individualised, competency-oriented programmes of education and monitor their effects, some who generate apparatus, some who contribute to the evolution of new administrative arrangements within the school, some who set out to influence the systems constraints (such as the tests which are used to evaluate performance) on what the school can do, and some who contribute to the development of a new interface with, and new expectations from, parents. None of these teachers can be expected to work on their own. They need to be part of a network of teachers dealing with similar issues in other schools. Within each of these networks, different teachers will need to function as fund-raiser, ideas-person, technician, link-person, publicist, etc.

It is obvious that the criteria used to evaluate teachers' performance in these activities need to be very different from those applied to their performance in classroom teaching (although the evaluation of the latter, like the evaluation of the performance of most public servants and employees, is in itself highly problematic). The task they are to be expected to perform needs to *evolve*. One cannot specify the job to be performed or its outcome in advance.

The external supervisory structure to which the teaching profession needs to be accountable - i.e. to whom the results of personnel and organisational appraisal exercises needs to be reported - needs to parallel that required for carrying out innovation: Not only do the current clients of the service need to be involved, so do other people who are providing other aspects of the service from other Departments - and perhaps from other parts of the world - and the media.

Having seen something of the structure and process that is required to create a climate of innovation, the next problem is one of realisation. The first task must, of course, be to create a *value* for innovation. At the present time, this is very much lacking in the UK: Only 10 or 12% of those we interviewed^{19,10} thought it was important to do such things as find better ways of thinking about things, better ways of doing things, or new things to do - compared with about 40% in Japan. Simply disseminating and debating these results, especially in the context the research we reviewed earlier that showed that the UK has one of the highest proportions wishing to live in what amounts to a new social and economic order which would give effect to the "new values", and a discussion of the probable consequences of these values, might in itself contribute to the necessary change in value priorities.

A second task is to bring both the public and the public service itself to recognise that the first duty of a public servant is to contribute to the management of society. We have shown that this viewpoint receives scant endorsement. As a result, very few public servants asked themselves whether their organisations were contributing as effectively as they might to society or how the value of that contribution might be enhanced.

But public servants are not only more responsible than anyone else for the quality of life in our society as a whole, they are also responsible for the quality of life of *individual* clients of their services. Thus, although they do not usually recognise it, they have a responsibility for

inventing better ways of meeting individual client's requirements. If they are to exercise such responsibilities effectively, they need to be expected to exercise discretion to relate provision to individual needs. Again, we found very few members of the public who thought that public servants should vary what they offered to suit the needs of their clients. They believed that public service clients should get *equal* treatment. The public's expectations of public servants corresponded to public servants' view of their own role.

As we have shown earlier very few of the public servants interviewed by Day and Klein or ourselves were inclined to ask what they could do to enhance the value of their services to those they were serving. Fewer were prepared to take on themselves responsibility for doing something about improving the quality of those services. Fewer still were prepared to take responsibility for individual discretionary decisions about what was in the best interests of their clients in particular circumstances. And fewer still set about studying, and trying to influence, the systems processes which so heavily determined what they could do.

To overcome these problems it will be necessary to first redefine the roles of government, public servant, and citizen and then monitor what happens to see if the staff concerned are applying themselves to all of the new tasks. Not only will new staff appraisal systems be required, new organisational structures will be required to give teeth to the results of the appraisals. These will reject the traditional notion that public servants are responsible through a long hierarchy of command to distant elected representatives. Instead staff-appraisal and organisational-appraisal information should be fed directly to the public through open, network-based, structures of the kind discussed above - i.e. networks made up of colleagues, members of the public, researchers, and media personnel.

However, it is not just *individual* appraisal that is needed. As we have seen, innovation is a cultural process rather than an individualistic activity. An individual innovator can achieve little in a culture which does not provide support or encourage parallel developments on which he or she can build. To take stock of the quality of such *climates for innovation*, individual organisations, communities, and society as a whole will need to undertake "climate" surveys. These lead to the assessment of such things as collective possession of the qualities mentioned above plus such things as levels of dedication to innovation, commitment to monitoring and learning from the effects of any changes which are introduced, and their emphasis on high standards and finding ways of meeting clients' needs. The results of surveys allow the members of an organisation or community to, in a sense, look at themselves in a mirror, ask themselves whether they like what they see, and, if not, decide to change their beliefs or behaviour and subsequently to monitor the effects. By feeding data of this sort to monitoring groups composed of colleagues, the general public, researchers, and the media, Howard^{19.11}, Walberg^{19.12} and others have shown that it is possible to provoke discussions which lead to actions which greatly enhance the quality of the climates of the organisations concerned.

Public Participation

Several kinds of public participation must be discussed: Participation in value-clarification; in the definition and solution of societal problems; and in monitoring the activities of the public service.

Participation in Value-Clarification

What happens in a society is very much determined by the extent to which there is general agreement about three sets of values: *end* values; *life-style* values; and the importance of (or value for) applying high-level competencies to undertaking personally valued activities effectively^{19,13}. An example of an “end value” would be thinking it is important to create a sustainable society. An example of a life-style value might be the desire for a comfortable, non-demanding life-style. Examples of competencies to which people may be committed as a means of translating values of either kind into effect are creativity and initiative.

If the members of a society in general are not personally plagued by value conflicts within or between these domains, and if there are few value conflicts between the members of a society, a variety of different kinds of development may occur. Examples include technological progress, progress toward a society characterised by warm, supportive, human relationships, or progress toward domination of other people or nations. If the members of a society, individually or collectively, suffer from serious value conflicts - as is the case in UK - the distribution of values and competencies in these areas still determines what happens, but the outcome is liable to suit no one.

Fundamental disagreement about the end goals that are to be achieved obviously has serious implications. Less obvious is the possibility that there can be - as there is in the UK - general agreement about the kinds of development that are required in society but little valuation, motivation, or desire to undertake the kinds of activity that would be required to bring the wished for developments into being. While recognising the need for urgent change and acknowledging the importance of many of the features which need to be possessed by an alternative society, people may personally value activities - such as an easy life, or authority over others, or spending their time socialising - which are unlikely to lead to the desired end. To generalise: the pursuit of personally valued activities which are not appropriately coupled to end goals may result in the development of a society in which *no one* is able to do the things they would like to do. This can easily occur even though everyone concerned can foresee it.

Although values are important, what people will do is also determined by institutional arrangements. These may prevent people doing things they would like to do or make them choose the options which are anything but the most desirable. For example, many academics would like to advance fundamental understanding, but the fact that doing so is a difficult and frustrating activity is not usually the only deterrent to relevant activity. The institutional framework in which they work not only provides little support and encouragement to engage in such activities, it also makes it very much easier for them to obtain satisfactions which they actually value much less highly - such as promotion into an administrative position with a higher salary.

It follows from this discussion that we need to promote public participation, not only in activities which result in clarification of end goals and personal values - and forging greater coherence between the two, but also in activities which will lead to the clarification and introduction of institutional arrangements which will allow those values to be realised.

A serious research question we face is, therefore, how best to institutionalise this participation on an on-going basis? Once again, we immediately see the need for the kind of experimentation and evaluation we have so often advocated in this book.

Beyond that lies a need for research to promote the clarification of values in the three domains we have discussed. How best are we to think about these domains? What are the short and long-term, personal, social, and planetary consequences of alternatives? How are relevant experiments to be initiated and evaluated? How is public debate best to be promoted?

The question of how relevant research is to be initiated, conducted, evaluated, and debated is vitally important. Among other things, it will be necessary for us to, in a sense, find ways of funding mavericks who draw attention to issues which have not previously been considered and unconventional researchers who can invent ways of exploring and documenting those issues. The initiation and conduct of the required experiments requires network-based activity in which a large number of people contribute in very different ways to getting the experiments off the ground and making them work. These experiments will need to engage with systems processes of a kind which it is currently not even respectable to mention. It will involve trying to do things which no one has ever considered trying to do because only one or two people had any idea that it could be done and which no committee would ever support. Debate of the results requires a network of action-learning groups with good linkages to the media.

The orchestration of such a cyclical ferment of innovation and information-based goal and institutional clarification is clearly a task for the public service. But that only points to a serious “chicken and egg” problem. Without a widespread change in priorities, beliefs, expectations, and institutional arrangements, the public service will not initiate the required participation, experimentation, documentation, and debate. Yet without them, there will be no agreement on new priorities and institutional arrangements for the public service.

Participation in Defining and Solving Problems

We have seen that there has, in the past, been a tendency to over-simplify societal problems and to apply simplistic solutions. In reality, we are not confronted by isolated problems with single solutions, but multiple, inter-related, complex problems the solutions to which are often in conflict with the solutions to other problems. Frequently the problems have a *systems* basis involving both hidden connections and deeper causes in sociological, economic, biological, and physical processes. Equally seriously, there may be important myths which legitimise and maintain the system. Unless these myths are exposed for what they are, most people will dismiss relevant information and valuable suggestions for reform.

Yet, while it is obvious that we need to find ways of bringing to the fore multiple, alternative, definitions of problems, how are we then to make progress? The answer to that question involves insisting that the fundamental task of the public servant is to act as a manager and that this involves sifting diffuse information for good ideas and acting on them in an innovative way in the long-term public interest. That is, their role involves initiating, and learning from, further experiments (defining the word “experiment” in a much broader way than usual). Getting public servants to perform that role involves finding some way of holding them accountable for doing so. This in turn means finding some way of exposing their behaviour to the public gaze. And *this* means inventing new forms of public participation in the management of society.

Participation in Monitoring the Public Service

One way to reduce bureaucratic inertia is, as philosophers from Aristotle, through Mill, to MacMurray have argued, to extend the concept of open government. Public servants are more likely to act in the public interest if their behaviour is exposed to the public gaze. For public surveillance to work, people other than elected representatives need to be able to monitor what is going on and relay their observations to a wider audience. This monitoring system might consist of a network of groups having overlapping membership and with links to the mass media. But it is not (mainly) the actual day-to-day work of individual public servants or public service departments which needs to be exposed to the public gaze. What needs to be exposed is professionally-collected evaluation data relating to such questions as whether individual public servants have been behaving in ways which are *likely* to create a ferment of innovation and result in actions which are in the long-term public interest, and whether they have made serious attempts to identify the needs of their individual clients and society more generally and invent ways of achieving them. Also needed are a range of professional evaluations of the ways in which the policies they are pursuing are working and not working.

The need for better arrangements to monitor the work of the public service can also be underlined by approaching the topic from another direction. We have seen that most of the policies to be implemented by the public service have some goals and objectives which are universal. But they will also have to meet the needs of differing sub-groups of the population. Besides, since current information on the long-term consequences of pursuing certain policies is limited, and since the effects will change as other developments are introduced, the goals cannot be laid down once and for all, but must emerge and change as a result of a cyclical process of debate, experimentation, and evaluation. It follows from these observations that most goals and policies cannot be determined by majority vote. Instead, public servants must shoulder responsibility for generating variety, evaluating the options, feeding that information to the public, creating the ferment of innovation which is required to find a way forward - a ferment of innovation in which everyone is involved both within their jobs and in their lives out of work - and deciding what to do to better meet the needs and priorities of particular sub-groups within the population as well as the overall long-term public interest.

In addition to promoting network-based structures of participative democracy, much more attention will have to be paid to the structures and procedures which are used to encourage and inform media-based public debate. We need to find ways of making it easier for citizens with unusual views to make their voices heard. To do this, it will be necessary to provide them with the structures which enable them, as of right, to commission research which will investigate those issues from their point of view and on the basis of their assumptions. Properly organised, however, this collection of developments holds out the potential to ensure that everyone's views (and not just those of the vocal few) are taken into account when coming to decisions. It also offers an important way of subjecting the effects of those decisions to public scrutiny from a much wider range of informed points of view than is the case at present.

We have described the way in which Japan has used information-technology to collect and co-ordinate information from all round the world, to conduct extensive discussions through a network of discussion groups linked to the mass media and a wider public debate to sift it for good ideas, and to initiate action on the basis of the conclusions emerging from that debate. This process has been applied to everything from clarifying the industrial goals which the country came to espouse, finding out about and adopting new industrial techniques based on incipient developments throughout the world, identifying, sifting and acting on research dealing with new management and staff development arrangements which might be utilised

within companies, studying the workings of, and adapting, economic management techniques like the adoption of non-tariff barriers to protect home markets, and studying the workings of every political economy on the globe and inventing non-market based ways of penetrating them. It was a *comprehensive*, information-based, management system utilising every available means to clarify goals and achieve them. (That the range of potentially pursuable values and the information on the probable consequences of pursuing each was limited only serves to underline many of the points made elsewhere in this book about the activities that are required if the information on which we base our decisions is to be as comprehensive as possible and if we are to have genuinely broadly based debate.)

Equality, Equity, and Diversity

There are many important reasons for emphasising diversity than those already discussed. Diversity is not only necessary if the needs of different sectors of the population are to be met: Is also an essential pre-requisite to developing the diverse talents which people possess and to harnessing those talents. Most importantly, it is needed to provide a basis for finding a way forward. We need to encourage diversity so that forward-looking people can try out things which no one else thinks it will be possible to do. We need it if we are to be able to initiate multiple experiments and collect the information on the consequences of the different options that is required to clarify which activities *are* in the overall public interest and in the interests of the publics of which it is composed.

It is not simply a question of bringing the public to accept the need for equity in diversity. Jaques^{19.14} has shown that certain patterns of inequality in incomes are felt to be *fair*. Klein^{19.15} has shown that the most important factor determining levels of support for public provision is not the overall quality of the provision, but whether it is felt to have been *fairly* distributed. And, as we have seen, Lane^{19.16} has shown that one of the triumphs of market mythology is that it results in many people feeling that the vast inequalities which are produced are *fair*. In this connection Rawls^{19.17} has argued that inequalities are arbitrary unless it is reasonable to expect that they will result in activities which are to *everyone's* advantage. Certain types of inequality - like the profits of businesses in America - are felt to increase the *overall* quality of life. The question which needs to be addressed is then: "What kinds of diversity and inequality are, in what circumstances, felt to be acceptable, equitable, fair, and desirable?" Clearly there is a need for a public debate linked to the work of a cluster of researchers with different orientations investigating in the area.

Information-Generation

We come now to the question of how the required information, ideas, and ways of thinking are to be generated.

We should look at some of the reasons why policy research has not delivered the hoped-for benefits in the past. Despite the periodically encountered belief that "there is a whole research industry out there", expectations for the outcomes of social research have typically, as Rothschild^{19.18} noted, been wildly unrealistic. Whereas, in sciences like chemistry and physics, there are thousands of well-funded public and private research and development institutes, the tendency in the social sciences has been to expect a single researcher, often working in an academic setting making other demands, to produce, in a short period, solutions to complex, social problems which hundreds of administrators have been unable to solve in half a century.

Although unrealistic funding has been a problem, more fundamental barriers to the delivery of the desired outcomes stem from inappropriate beliefs about how research and development are to be conducted, and, more specifically, how the universities are to be organised and held accountable.

We need to consider the following: (i) some of the developments which research is needed to bring about; (ii) policy research units that need to analyse and evaluate the *goals* of policy as well as the delivery mechanisms; (iii) the importance of scientists going well beyond their data to make inferences which illuminate hidden sociological and systems processes; and (iv) how the necessary enquiries are to be initiated, how the debate that is required to advance understanding is to be conducted, and how that debate is to be linked to the planning process. Boring though it is, this discussion is of the greatest importance.

The Tools and Procedures to be Developed Through Social Research.

Looking at some specific needs first, we need research to:

1. Develop tools to assess quality of life so that progress - and its opposite - can be measured in a more appropriate and differentiated way than through GNP. We need social accounting tools so that human and biological costs can be set against benefits - so that, for example, the isolation, stress, disease, and atmospheric pollution caused by centralised production units can be set against their advantages.
2. Develop the tools needed to run the skills exchanges and local currencies that are required to disengage local wealth-creating activity from international markets and thus enable people to find ways of genuinely helping to improve the quality of life.
3. Develop the means to evaluate and administer diversity in public provision - e.g. housing, education, health care, etc. As we have seen, most people can have little effective choice of these things. We need to provide in each geographical area a range of options suited to people with different needs and priorities. Information on the short and long-term consequences of each option must be made available so that people can make meaningful choices between them. And, since it is not possible for people to have the most desirable and most costly provision in all areas of life, we need tools which will enable us to administer the system in a way which forces people - as would a perfect marketplace - to prioritise their desires and consider the costs. (As has been indicated, in connection with education, the latter are not about choice between different options. They are, at best, about choice between alternative providers offering a *greatly restricted* range of programmes. To create genuine choice and variety it would be necessary to undertake research - into curricula, alternative arrangements for selecting and deploying human resources in society, and the consequences of alternatives. Yet governments have been conspicuously unwilling to initiate such research.)
4. Develop staff appraisal systems so that public servants who have engaged in any of the difficult and demanding activities that are necessary to the effective operation and improvement of modern society can get credit for their contributions.
5. Develop the structures of public debate needed to generate alternative perspectives and implement and monitor a variety of pilot programmes with an eye on the overall operation of the system *qua* system.

The Need to Develop Understanding

At present we have little understanding of what the main characteristics of a sustainable society would look like, how problems of equity could or would be handled in a diversified, information-based, management system, or what arrangements it would be necessary to make to facilitate step-wise, systems-oriented (but not system-wide), experimentation, evaluation, and improvement.

There is still less understanding of how to achieve *systemic* change - that is to say, overall change in systems which operate in such a way as to cancel changes introduced in a piecemeal way into only one or two parts of the system, but in which attempts at system-wide change are also doomed because our understanding of the operation of the overall system is inadequate.

To illustrate why it is so important to have policy evaluation units whose function is to advance understanding, we may return to the example of education. As we have seen, a great deal of the money spent on “education” is wasted so far as the development of human resources is concerned. But the reasons for this have not in the past been at all explicit, and the steps which would need to be taken to overcome the problems have been still less clear.

One of the things which emerges from our work is that the reasons why politicians and parents want more money to be spent on “education” stem from the sociological, not the educational, functions of the system. In the 1950s and 1960s politicians argued that more money should be spent on education on three grounds. First, it was said that, if we invested more money in education, it would result in economic and social development which would enable us to solve some of our conspicuous economic and social problems. Second, if everyone got a good education, everyone would get a good job. And, third, if everyone had more education it would contribute to the creation of a more equal, less divided, society.

Parents wanted more money to be spent on education because of the incontrovertible fact that, if their children did not stay on at school and do well in the system, they were much less likely to get good jobs.

Only the first of the politicians’ arguments had much to do with education *per se* (and even it can now be seen to be false). Their other arguments overlook the fact that we are dealing with a norm-referenced system. In the end, everyone has to work harder to get the jobs they would have had before.

The results of research suggest that the causes of the conspicuous failures of the educational system are quite other than what seem to be. By “the conspicuous failures of the system” is meant pupils’ “lack of motivation”, the failure of the projected economic and social development to materialise, schools’ failure to help pupils to identify, develop, and get recognition for their talents, schools’ failure to help most people develop the qualities needed to lead their lives effectively, do their jobs effectively, and contribute as they would like to society, and the failure of many pupils to get jobs - any jobs, never mind good ones. The causes of these problems include the lack of understanding of how to nurture high-level competencies, the absence of the tools needed to do so, and the absence of means of giving pupils credit for such outcomes in the certification and placement process. But, more fundamentally, they include an unwillingness to address the values problems inherent in catering for variety.

It emerges that solution of the problems of the educational system requires us to develop, not only an understanding of the hidden reality behind the observable defects of the system, but also:

1. An understanding of the educational processes necessary to nurture the qualities pupils actually need and how progress toward them is to be assessed.
2. The tools teachers require to administer multiple-talent, educational programmes and assess the outcomes.
3. Means of giving teachers credit for having contributed to the development of new ways of thinking about educational processes, new curricula, new ways of assessing progress toward the goals of the educational system, and participating in new ways in new arrangements for managing educational institutions.
4. Ways of harnessing sociological forces (like need to legitimise the allocation of privilege) in such a way that they push all concerned toward the goals of the educational system rather than away from them. (This actually means including measures of a wider range of outcomes among those that are employed in the certification process. However, handling the moral dilemmas this poses requires yet another set of developments.)
5. Changed public beliefs about the role of public servants and how public institutions should operate ... indeed, in the end, the introduction of new forms of democracy and bureaucracy.

Our objective in introducing this brief summary of material the presentation of which occupies several other books^{19,19} has been to illustrate that the process of clarifying of the goals of public policy, assessing its effectiveness, identifying why it is not working properly, and finding out what to do about it is (i) heavily dependent on professional research of a more adventurous and problem-oriented nature than that to which we have grown accustomed and (ii) leads to very surprising conclusions which highlight crucially important voids in understanding.

Thinking is not only unacceptable, it is also difficult. So people are inclined to create structures in which they can beat appraisal systems and pass off non-thought as thought. But perhaps more importantly, the human mind cannot cope with too many variables. They also have limited energy. As Etzioni^{19,20} put it: “rationality is *anti-entropic* ... that is, the normal (or base-line) state of human behaviour is ... non-rational; for behaviour to be rational, even in part, forces must be activated to pull it in the rational direction ... The ‘normal’ state is one in which behaviour is not purposive, non-calculative, governed by emotions and values, potentially inconsistent and conflict-ridden, indifferent to evidence, and under the influence of “group-think” (i.e. individuals defer in their thinking to group-defined facts, interpretations, and conclusions even if they diverge significantly from objective reality).” Etzioni does not maintain that rationality is rare: only that it is costly. His conclusion that thinking is anti-entropic and costly is confirmed in the work of psychological researchers like Spearman^{19,21} and Maistriaux^{19,22} who have linked mental ability to “mental energy”. Fortunately, however, a basic feature of life itself is that it is anti-entropic and costly.

The Structures Required to Promote the Debate Needed to Advance Understanding

We have seen that policy research units need to be encouraged to evaluate the *goals* of policy not just the effectiveness of delivery mechanisms. In the case of education this would involve

a great deal of work *outside* the educational system and *comprehensive* evaluation of the effects of different types of educational programme and experiment.

The importance of comprehensive evaluations cannot be over-stressed. Failure to draw attention to an important short or long-term effect of a programme is more important than accuracy in the assessment of an unimportant outcome. It is therefore essential to get a rough index of *all* the short and long-term effects of a particular activity.

Debate which advances understanding and focuses attention on neglected issues is also very important. Social researchers have a responsibility to advance the public interest by promoting public debate and contributing relevant information. The considerations they include in, or omit from, their studies are of the greatest significance. This raises important questions about the orientation and conduct of their research and the content, ownership, and publication of their reports: Such reports are paid for by, and should therefore belong to, the public, and not (as the government in the UK argued and wrote into law) the government of the day.

This raises important questions about the definition of “loyalty” which it is appropriate to apply to public servants - should it be to the public or the government? It also raises questions about the role of the media in informing, facilitating, and conducting public debates. Only through public debate can we surface and challenge the mythologies which lead people to dismiss otherwise sensible suggestions for reform. Nevertheless, challenging mythology is not thought to be the role of the scientist. Indeed it, like pressing for action on the basis of results, is one of the surest ways in which a scientist can undermine his or her credibility.

We have seen that the task of facilitating discussion of goals, clarifying options, and identifying routes to their achievement is no simple matter. The options which can be envisaged and formulated are heavily dependent on a pervasive climate of innovation which promotes multiple changes, on the introduction of numerous small-scale, but carefully evaluated, experiments based on systems understanding, and on fundamental research which will make it possible to evolve new ways of thinking about and doing things. And the choice between alternatives is heavily dependent on the quality and *comprehensiveness* of the information available on their consequences.

Two entirely contradictory viewpoints on how these problems should be addressed have been promoted. On the one hand it has been suggested that, in Thomson’s^{19,23} terms, we need clumsy institutions in which all sorts of people are involved in defining problems and doing things. On the other hand it has been suggested that it will, in the end, be necessary to charge public servants with the duty of acting as managers to come to good, discretionary judgments on the basis of the available information and that a network of supervisory groups is required to get them to perform this role effectively.

Both sets of developments are in fact essential and the tension between them cannot be resolved.

Concluding Comment

What has been shown is that there is no shortage of work to be done to improve the quality of life in (i.e. the real wealth of) and the sustainability of modern society: The quality and variety of public provision, and the delivery system need to be improved. Energy-positive

agriculture and energy-efficient manufacturing will be much more labour intensive than our current agricultural and manufacturing processes. Community care which meets people's most important needs will be more labour intensive than drugs based health care and commoditised medicine. More people will be needed to administer public provision effectively, to contribute to the supervision of the public service, and to evaluate and improve the way society is run.

Although the costs of this activity pale into insignificance when compared with the huge costs of providing and evaluating variety and choice through the marketplace and those of administering the public service as we do, such observations invariably raise the question of how all this work is to be paid for. The reformulation of this question in a way which makes an answer possible is dependent on the evolution of new concepts of political economy and the evolution of new accounting tools. The need for both has already been emphasised. However, the core insight required is acceptance that the key problem to be tackled is that of finding ways of re-deploying the labour available to us to undertake activities which will improve the chances of our society's survival and the quality of life of all. Since it has not been necessary to use the word *money* to make this statement, it follows that the task is primarily a *managerial* not an economic one. One of the key facts we have to hang onto in the tide of confused thinking around this area is that activities which enhance the quality of life contribute *directly* to wealth creation. A society with a high quality of life *is* a wealthy society. One does not have to have wealth *before* one can do the things that are necessary. Fundamental among the inventions we need is, therefore, new, politico-economic theory which recognises this fact and provides us with an appropriate framework for thinking about the issues.

Notes

- 19.1 Deming, 1982, 1993
- 19.2 Raven, 1984
- 19.3 Deming, 1982, 1993; Dore and Sako, 1989; Graham and Raven, 1987; Jaques, 1989; Kanter, 1985; Klemp, Munger and Spencer, 1977; Raven, 1984, 1990
- 19.4 For evidence and a fuller discussion see McClelland (1961), Milbrath (1989), and Revans (1980).
- 19.5 The actual value of such networks in turning round the operation of an irrigation scheme has been documented by Korten and Siy (1989).
- 19.6 Chubb, 1963; Miller, 1992
- 19.7 Thompson, 1979
- 19.8 Kanter, 1985; Roberts, E.B., 1968; Rogers, 1962/83
- 19.9 Kanter, 1985
- 19.10 Graham and Raven, 1987; Raven, 1984
- 19.11 Howard, 1980
- 19.12 Walberg, 1979
- 19.13 Raven, 1984; Graham and Raven, 1987; McClelland et al, 1958; McClelland, 1961
- 19.14 Jaques, 1989
- 19.15 Klein, 1980
- 19.16 Lane, 1979, 1986
- 19.17 Rawls, 1971
- 19.18 Rothschild, 1982
- 19.19 Raven, 1977, 1994
- 19.20 Etzioni, 1985
- 19.21 Spearman, 1927
- 19.22 Maistriaux, 1959
- 19.23 Thompsom, 1979