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DRAGON THE SCOS JOURNAL VOL 2 NO 2 AUGUST 1987

SPECIAL ISSUE : COMMUNITY OPERATIONAL RESEARCH AT HULL UNIVERSITY

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DRAGON EST REPRODUIT PAR L'ECOLE POLYTECHNIQUE (FRANCE) POUR LE CENTRE DE RECHERCHE EN GESTION DE L'ECOLE POLYTECHNIQUE (PARIS)

ANNOUNCING A 'CENTRE FOR COMMUNITY OPERATIONAL RESEARCH' AT HULL UNIVERSITY

Pippa CARTER, Michael C. JACKSON,
Norman V. JACKSON, Paul KEYS

INTRODUCTION

Staff of the Department of Management Systems and Sciences, University of Hull, are creating a Centre for Community Opreational Research. This initiative is a natural extension of the research interests of four members of staff of the department - Pippa Carter, Mike Jackson, Norman Jackson and Paul Keys. The Centre will be essentially autonomous, operating with a constitution drawn up according to the Industrial Common Ownership Movement (ICOM) Model Rules, but will have the support of an 'advisory board' made up of local community activists and University staff with important local contacts. The establishment of the Centre has been approved by the School of Management at Hull and all the formalities are completed for it to begin official operation from 1st August 1987.

The Centre aims to promote the development of appropriate management systems and to help with effective and efficient decision-making and problem-solving in organisations oriented towards serving the social and economic needs of the community. Many of these organisations - such as voluntary groups, co-operatives etc. - do not have the resources to pay for normal operational reseach/systems consultancy assistance. Nor would the kind of assistance available always be suitable. Advisory, consultancy and educational work will be undertaken either free of charge or at much reduced cost, and will be

supported by a research programme focussing upon the management of community and co-operative organisations.

A fundamental concern with the immediate problems caused by high levels of structural unemployment, which, it is widely held, will not be resolved by an expansion of traditional sources of work following any economic 'recovery'. If the economic dictates of traditional work organisations can no longer produce jobs to absorb the available supply of labour, then new forms of work organisation with new objectives are necessary. The reasons for this are fourfold:

(i) no civilised society can tolerate the existence of a long-term economically and socially disadvantaged class in society - the unemployed;

(ii) it is work which improves the quality of life - there are many jobs to be done and many people available to do them, yet, at the moment, the two cannot be brought together;

(iii) not only are the unemployed unable to produce wealth, they are also, through no fault of their own, net consumers of wealth which might otherwise be used for other socially advantageous purposes;

(iv) in our society work performs the dual function of an arena of social interaction and, potentially, a forum for creative activity - those who are excluded from work are not only excluded from these primary social experiences, but also suffer social, psychological and physical deprivation as a result of it.

The Centre at Hull intends, in the context of broader U.K. developments in community operational research (OR), to undertake organised work which will help groups concerned with community development to tackle the social problems they face. This introductory paper serves to announce the inauguration of the Centre at Hull and to say a little about the Community OR

movement of which it is part. It has four sections. First, a short description of some historical antecedents to the current activity is provided. Second, an account of the more recent stimulus for Community OR development is given. Third, a detailed account of the Centre for Community OR at Hull is offered, in terms of 'clients', 'methodology' and 'approach'. Finally, some specific themes are introduced through summaries of the main papers making up the rest of this special issue of Dragon.

HISTORICAL ANTECEDENTS

Any account of the historical antecedents of Community OR must grant pride of place to Russel Ackoff's work, in the late 60's and early 70's, with leaders of the black ghetto of Mantua (1,2). Ackoff and his associates wanted to facilitate the efforts of community members to plan for themselves. The resources of the University were to be made available, but it was up to ghetto leaders to use them as they saw fit. On this basis various projects were undertaken and educational services provided. As well as directly assisting the ghetto community, the research also aimed to broaden the philosophy and practice of OR in order to make it more relevant to critical social problems and to strategic decision-making. Certainly, the project demonstrated the need for continuous, adaptive, participative planning in the uncertain environment faced by the ghetto leaders. All these ideas were later incorporated into the 'interactive planning' approach recommended by Ackoff(3) to corporate executives facing turbulent environments.

In the U.K., and much influenced by Ackoff's work, Steve Cook was an important progenitor. He declared(4) that, in his view, OR should be about "...the use of science and scientific

method to influence decisions to the benefit of society", and stated his fear that its current methodology had led OR to move from the position of 'science helping society' to that of 'science helping the establishment'. Cook argued that OR should reorientate itself around micro-social issues concerning values, individual fulfilment and group interaction. This would require new methods which could only be developed in studies carried out with clients outside the normal power structure - trade unions, consumer groups, charitable bodies, citizen groups, residents' associations etc. Michael Luck(5) has detailed some of the work carried out under Cook's guidance, with inner city community organisations, in the late 1970's.

IMMEDIATE STIMULUS

The more immediate stimulus for the establishment of the Centre was the 'Community OR' initiative launched by the Operational Research Society (U.K.) and inspired by its current President, Jonathan Rosenhead. In his Presidential address on 15th January, 1986, Rosenhead quoted from his original election manifesto: "If elected, I would regard this as a mandate for initiatives to find a more significant role for operational research. We need to expand the range of OR's clients - it is not only business, military and government who have problems of decision-making under uncertainty. We need to make the Society more of a forum for the profession to question its assumptions and methodology, which currently exclude it from the larger and messier problems"(6). A few months later, the Council of the Operational Research Society announced its decision in principle to launch and partially fund a Community OR Unit. During the course of inviting proposals from institutions to house the Unit, the prime aims of the initiative were refined and stated to be: a) to extend

awareness of OR to new sections of the community, thus broadening the range of clients; b) to demonstrate the relevance of OR to a wider range of problem situations; c) to enrich OR methodology and revitalize intellectual life through involvement in novel types of problem; and d) to contribute to improving the quality of discussion and decision-making in society at large.

Eleven bids were recieved to set up the Unit. The level and qualtity of this response suggested that a good deal of uncoordinated Community OR was already taking place. Three of these bids - from Bath University, Hull University, and Northern College/Sheffield City Polytechnic - went forward for final decision. The Operational Research Society opted to give its major funding to the Northern College/Sheffield City Polytechnic initiative and to support and provide financial assistance, as well, to developments at Hull. Involvement in this OR Society initiative helped us clarify and give direction to our thoughts at Hull and led to proposals to create the Centre for Community Operational Research.

THE CENTRE AT HULL

Clients

Hull and Humberside is an area of relative deprivation with high unemployment (over 17% in both Hull and Humberside). Hull itself is a city of some 300,000 people with considerable social problems. It is not surprising therefore to find a clear and well-defined potential demand for the services of the Centre. Potential clients can be roughly categorised into four groups. Voluntary service groups have grown very rapidly in number over the past few years and now seek to promote a wide variety of concerns. These organisations are co-ordinated to some extent by the local Councils for Voluntary

Service (CVS). Workers' co-operatives are becoming an important part of the local scene thanks to the encouragement and assistance afforded by Humberside Co-operative Development Agency (CDA). There are good opportunities for the Centre to build on established University links with trade unions in the region. Small businesses, and the agencies charged with helping small business develop, can play a major part in the regeneration of an area suffering from declining traditional industries.

The client base in Hull and Humberside, therefore, is both balanced and comprehensive. And there exists a network of organisations through which the Centre can gain ready access to a range of potential clients. In the case of the four categories identified, contact has been made using established and respected channels available through the University. Work has been carried out, or is being done, for voluntary groups, Hull CVS, Beverly CVS, Humberside CDA, a development agency and various small businesses.

Methodology

It is possible to give an indication of the variety of methodologies individuals in the Centre will need to deploy, if we consider some of the ideas underpinning a research programme developed by Mike Jackson and Paul Keys. Jackson and Keys(7,8) believe that it is possible to identify in broad terms a number of different 'problem-contexts': mechanical-unitary, systemic-unitary, mechanical-pluralist, systemic-pluralist, mechanical-coercive and systemic-coercive. The methodological approach most likely to succeed in each context can then be suggested. For example, if there is general agreement among the participants about objectives (unitary) then classical OR or management cybernetics(9) can be employed. If there is a lack of agreement (pluralist) then

one of the 'softer' approaches should be used - perhaps Eden's 'cognitive mapping'(10), Mason and Mitroff's 'strategic assumption surfacing and testing'(11), Checkland's 'soft systems methodology'(12), Ackoff's 'interactive planning'(3) or Ulrich's 'critical systems heuristics'(13). The mechanical/systemic and coercive distinctions add further sophistication.

No doubt all of the problem-contexts identified above will be discovered when using OR with non-traditional clients and, therefore, all of the various methods will be appropriate in different circumstances. Nevertheless, it is reasonable to expect a shift in the balance of problem-contexts found, away from the unitary and towards the pluralist type. There will be fewer situations where a clearly defined goal can be agreed, or can be enforced through the managerial hierarchy, and many more situations where debate and consensus building will be necessary before action can be taken. It is likely, therefore, that the 'softer' approaches will come into their own in doing Community OR.

Of equal importance in determining methodological development is the persective on work organisations brought by Pippa Carter and Norman Jackson. This stems from an interest in critical social theory. The failure of mainstream management and organisation theory to cater for value systems other than those found in conventional commercial concerns indicates the need for a new theoretical perspective to accommodate the values espoused by 'alternative' groups(14). Accordingly, Carter and Jackson's research interests are directed towards a praxis-oriented approach, where desired outcomes are established and then systems for achieving those outcomes are developed, both generally and specifically, to be applied iteratively in relation to the desired outcome until particular conditions are achieved(15). As many such problems

relate to qualitative issues, methodological approaches based upon symbolic and cultural analysis are used. Using a systems framework this approach can be used to identify cognitive obstacles to new forms of organisation(16,17,18). This might be understood as a form of process consultation with the objective of developing a 'tool-kit' of strategies and techniques appropriate to the clients' needs.

Approach

The Centre for Community OR will engage in action research. The goals of those working in the Centre are to make a contribution both to practical problem alleviation and to science. A first aim is to use an appropriate range of methodologies and techniques to help clients and organisations for which, at present, little OR gets done. A second aim is to learn from this experience to what extent and in what ways existing OR approaches need to be modified. In pursuit of the first aim, the Centre will carry out projects for community and co-operative organisations in the Hull and Humberside area; publicise Community OR through the various networks that link non-traditional clients (e.g. the 'National Network of Local CDA's); and teach methods and techniques suitable for Community OR on degree courses and as a specialist service (some courses are presently being discussed with a local CVS). In order to contribute to the enhancement of OR as a science (or technology), the work of the Centre must be integrated into a well-formulated research programme. Modern philosophers of science(19,20) are agreed that progress is best achieved when clearly stated hypotheses are put forward and are then subjected to rigorous testing. The idea that it is possible to start with 'pure' observation or practice and, on the basis of this, build hypotheses or theory is not defensible. In the initial period a suitable research programme is that developed by Jackson and Keys (7,8) together

with the development of macro theory concerning socio-organisational structure(14). The existence of this programme gives cohesion to the Centre's activities, provides criteria for the choice of projects, and permits other researchers, not directly connected with the Centre, to contribute fully to methodological development.

SOME SPECIFIC THEMES

Within the research programme outlined above, individuals associated with the Centre will naturally develop their own concerns and interests. Some of these are reflected in the main papers appearing in this special issue of Dragon. The following summary of these papers, therefore, outlines a number of specific themes of Community OR, as it is understood at Hull, as well as serving as an introduction to this special issue.

Community OR supports the management activity in those organisations which serve community rather than other interests. Such community service agencies are embedded within a complex system of relationships and social, economic and political processes inevitably impinge upon them. The Community OR process, if it is to be effective, must be compatible with the management process as it has to operate in these circumstances. Paul Keys addresses this issue by identifying relevant characteristics of community service agencies and the way they are managed. By comparing these with the process usually associated with operational research as used in more conventional settings, it becomes apparent that significant incompatibilities exist. Some consequences of this for the nature of Community OR are considered.

Mike Jackson begins his paper by making a distinction between 'impoverished OR' and 'enhanced OR'. Impoverished OR is a highly quantitative science suitable for solving tactical problems in pursuit of managerial goals. Enhanced OR is an interdisciplinary science aiming to alleviate strategic (as well as tactical) problems in social systems, for the benefit of society. The latter is truer to the spirit of the original pioneers of OR and has continued to be developed by some dedicated thinkers and practitioners, often on the fringes of 'official' OR. In the light of this distinction, the implications of the various purposes held out for Community OR are considered. These purposed include, as well as the obvious commitment to serve community groups, the desire to enrich existing OR methodology and theory through interaction with 'alternative' clients, and, at Hull, the development of a critical approach to prevailing forms of work organisation. It becomes clear that these purposes can only be realised if the enhanced version of OR is adopted by community OR workers. A theoretical framework is then presented that can bring together existing contributions to enhanced OR and assist its further development. This is constructed upon a consideration of organisations as socio-technical systems and some conclusions of Habermas's sociology. Finally an attempt is made to show how this framework can be utilized in Community OR practice. Some examples are given of the sorts of problems that arise in Community OR and the kind of enhanced approaches that can be adopted. These are drawn from projects undertaken by members of the Centre at Hull.

Whilst co-operation is a much lauded attribute of work organisations, Norman Jackson argues that the concept has two distinct and opposing meanings, relative to different forms of work organisation. Co-operation can be understood as a means of achieving social synergy. However co-operation, as it

relates to conventional bureaucratic organisations, more correctly describes relationships of conflict and coercion, in which the conflation of management as a social group and management as a social process is heavily implicated. Taking Barnard's concept of organisations as co-operative systems, a deconstructive approach is employed to demonstrate the difference between co-operation as a means of releasing human energy and skill to create social good, and co-operation as a euphemism for social domination. The latter conception acts as a barrier to optimising the possible synergistic benefits of co-operation, notwithstanding the urgent need for such outcomes. It is suggested that in the current conditions of high unemployment, co-operative forms of organisation offer possibilities for combating the failure of conventional organisations to absorb the available supply of labour and, at the same time, offer an escape from the social dysfunctions of such organisations.

Pippa Carter discusses the development of co-operativism in general, and worker co-operatives in particular, as an alternative way of organising work to the predominant bureaucratic form of modern capitalism. The discussion takes a historical perspective within the context of the debate between modernism and post-modernism. The 'confrontation' between these two positions, especially in relation to the question of the potential existence, or otherwise, of a transcendent rationality, provides a framework for the issue of the viability of alternative forms of work organisation, together with the problems of legitimation attached to it. A relationship between the historical development of co-operativism and its modern manifestations is posited. It is suggested that co-operation is a fundamental characteristic of community organisation and that such organisations represent a genuine challenge to the hegemonic influence of the

rationality of capitalism - as a (defining) characteristic of modernism. They represent a current of development which can substantially mitigate the ills attendant upon the failure of modernist rationality to fulfil the needs of society in general and of individual members of society in particular.

Also included in this special issue are three shorter pieces. One, by Colin Thunhurst, introduces the Northern College/Sheffield City Polytechnic Community OR Unit. One, by Nigel Mason, details the proposed national 'Community OR Network'. Another, by Andy Carlton of Humberside C.D.A., outlines some of the most frequent management problems that arise in workers' co-operatives. We are most grateful to these individuals for their contributions.

CONCLUSION

It is part of the philosophy of the Centre at Hull to reach as many people as possible with the message of Community OR and to involve as many as possible in the activity. We seek assistance therefore in developing our ideas and practices. Anyone interested in pursuing the notion of Community OR and Community Systems Research can contact the members of the Centre at Hull, and, if located in the U.K., become involved through the Community OR Network.

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MANAGEMENT AND MANAGEMENT SUPPORT IN COMMUNITY SERVICE AGENCIES

Paul KEYS

INTRODUCTION

Any serious attempt to manage a group of people, that is to plan, organise and control their activities so that they are co-ordinated and directed to some purpose, should be guided by reference to a set of prescriptive devices. Such a methodology may be acquired by experience or, preferably, by consideration of an understanding of how the management function relates to the environment in which it is embedded. The benefits of a methodology based on theory to a greater extent than experience derive from the higher levels of generality and understanding provided which allow for flexibility and informed reflection on its use. This article is a contribution to the development of an appropriate methodology to support the management of individuals and groups which, for this purpose, will be referred to as community service agencies. A definition of how this term is understood is given later but prime examples include social workers in social services departments of local government, community workers in community development programmes and volunteer workers in the voluntary sector.

The contribution made here is negative in the sense that it argues that one of the most commonly used set of tools, techniques and methods used to support the management process, exemplified by classical operational research/management science, is innappropriate to the type of agency under consideration. This conclusion is based upon the premise that the tools, techniques and methods used to support the management of an organisation should be compatible with the

character of the decision-making environment in which that organisation finds itself.

This argument is developed in three stages. Firstly, the concept of a community service agency is explored and their growing need for effective management established. Secondly, some significant characteristics of such agencies and their environment are identified in order to give an understanding of the context in which the management function operates. Thirdly, the nature of operational research/management science and similar approaches is examined to assess the extent to which they are compatible with these characteristics.

COMMUNITY SERVICE AGENCIES: A SYSTEMS VIEW

A community service agency is defined here to be an organisation which exists to provide services to the community. Although the concept of community is difficult to define without reference to "vague, and often romantic, description and grand abstractions"(1,p.300) one approach which is of particular significance and practical benefit is to view a community as a social system characterised by a strong network of relationships which provides a sense of belonging to those who are part of it. The community as a social system should provide certain functions which are relevant at the local level. Warren(2) suggests that these functions are five in number, the production, distribution and consumption of goods and services, socialisation, social control, social participation and mutual support. The functions have both an economic and a welfare aspect to them and taken as a whole provide a programme for developing a community. Community service agencies have two roles to play in facilitating the establishment of such a programme. They can encourage the development of such functions from within the community itself and they can seek to provide those

functions which it is impractical to expect the community to provide from its own resources.

If the systems perspective is taken a stage further it is possible to place the community service agency within a framework which takes advantage of the above view of the community as a social system. A community service agency should form a natural addition to the community it serves and the subsequent pair of systems should be mutually supportive. The community will depend on the agency for the injection of ideas and motivation which will lead to the emergence of economic and welfare functions from within itself and for those functions it is unable to provide from its own resources. The agency will depend upon the community for response to its ideas and encouragement and for information on the need for and use of services it provides. This pair of systems exists within an environment consisting of a variety of institutions acting at local and more aggregate levels and a range of socio-economic processes which influence the attitude and behaviour of the members of the community and the agency.

This simplistic view of the system in which a community lies needs to be made more complex in two particular ways if it is to reflect the actual situation more closely. Firstly, the boundaries of a community will not be well defined and it must be recognised that boundaries can be defined in various dimensions. Communities will overlap and merge into one another in some ways whilst retaining definite boundaries in others. For example, the boundaries between communities of different ethnic groups may be vague when considered along the dimensions of education and employment but well defined in terms of social activities and locational factors.

Secondly, a single community will be served by several, if not many, agencies. Those offered by the local government sector,

social workers and community development officers, for example, will work in parallel with those provided by the voluntary sector, citizens advice bureaux, for example, and those which originate in the community itself, self-help groups and local employment initiatives for example. These agencies will operate at different levels, some may serve a single community and others several, and offer different services. They may be competing for the same resources and so be acting against each other in this way whilst, at the same time, acting in concert to provide services to the community.

It is not possible here to consider the wealth of forms, activities and intentions associated with community service agencies. However some specific examination of their work is necessary. To examine this two broad categories of community service agencies will be examined. The first is that which is provided by local government, and hence indirectly by central government, and which focusses upon social welfare provision. The agencies involved in this are mainly the Social Services Departments of local authorities and the staff they employ. Although not necessarily their formal title, the staff of these agencies will, for ease of reference, be called social workers.

The activity, organisation and motivation for the work undertaken by Social Services Departments is derived largely from Government. One of the most influential analysis of recent times which lays out the broad direction these agencies take is the report of the Barclay Committee(3). In this social workers are seen to be involved in two areas. The traditional task of individual and family counselling for those in need and the involvement in this respect with all aspects of the welfare state remains a major part of the social workers' activity. In addition social workers are encouraged to utilise the resources of the local community to aid them in this task. Thus the notion of community social

work sees the traditional caring professions becoming more closely involved with the community to which their services are offered. The organisational tool which is essential to achieving their aim is patchwork(4,5). This requires the fieldworkers to be formed into teams each associated with a given area, or patch. The intention being that by working closely with and learning about the community in a patch it would be possible for the team of social workers to provide the type of support most appropriate and to take advantage of the existing voluntary agencies and groups in a more effective manner.

This progressive attitude by Social Services Departments to the community has been accompanied by a change in their oragnisation and workload(6,7). The shifts in demographic, employment, criminal and legal trends have each lead to an increasing demand for the services of social workers and the welfare state generally. The move towards an increased involvement in community issues has lead to a higher degree of planning and organising for the activities of social workers. The increasing degree of professionalism and more formalised career structures have also added to the need for a greater awareness in the Departments of personnel management and staff development. The emergence of a managerial function within the Departments has accelerated recently and lead to a dramatic improvement in the approach to social services provision taken at this level.

The second type of community service agency to be considered is that which is staffed by community development workers. Originally an extension of work undertaken in the colonies as Britain encouraged independence, community work 'took off' in Britain in 1968(1,p.38). The term 'community work' became commonly understood after the publication of a report by the Gubelkian Foundation(8) to refer to three related activities - community development, community organisation and social

planning. In the 1970's three major categories of community work emerged according to Thomas(1). Programmatic community work centred upon various programmes initiated and managed at national level which consisted of individual projects, each working within a common framework. The most well know example of this work is the Government funded Community Development Project(9). Departmental community work was carried out from within existing government departments and was found in the areas of social services, planning, health and education. Project community work consisted of the many individual and locally specific exercises which were independent of national programmes and departmental activity. Funding was provided by many different sources but notably by the Manpower Services Commission as part of a strategy to improve the employment prospects and utilise the skills of the unemployed.

In the 1980's programmatic community work has become less important than the other two forms. The recommendations of the Barclay Report and the support given by Government through, for example, the Urban Programme have encouraged departmental and project work whereas the large-scale national programmes, such as the Community Development Project, have not been continued. Within this framework for organising community work three themes have developed which define the current scope of the activity(1). First, it is seen to be necessary to reconstruct the communities which have disappeared as a result of the local and national social and economic restructuring which has occurred since 1945. Second, the status of groups in society needs to be renegotiated and, in particular, minority and low-status groups should be encouraged to develop themselves. Third, the potential of the community as a device for improving the social and economic welfare of the people within it needs to realised and become a basis for analysis and action. The growing basis of community work in departmental and project work leads to an increased need for the effective management of these activities. The

requirement to fit into a broad range of departmental activities and the wider activities of work undertaken by those agencies which sponsor projects causes a higher level of bureaucracy to exist than was found in the 1970's. The scarcity of resources leads to a need for tighter control and more effective use of those resources which are available.

On the basis of these two examples, which cover a wide range of but by no means all community service agencies, it can be seen that the agencies are becoming increasingly institutionalised. On the one hand social workers and Social Services Departments are taking an increasing role in the creation of community awareness and the harnessing of community groups to provide a caring and supportive environment. On the other hand an increasing amount of government support for community development workers in various ways has led to a greater amount of bureaucracy surrounding the agencies in which they are based. As this process continues in general the need for management skills in community service agencies will increase. The two examples discussed above have shown the particular forms by which this process and the consequent need have manifest themselves in two cases. Different aspects of the process will appear significant in different specific cases but it is clear that if community service agencies are to be able to remain at least as effective as they are at present the ability to manage themselves must be developed.

In the Social Services Departments the lack of management training for those people who move into the managerial positions has been noted by Bamford(10). Waddington(11) sees a future role for community workers as being the management of "the multiplicity of new groups and organisations which will have to be brought into being to engage the long-term structurally unemployed and provide the new community-based social services"(1,p.144). Thomas(1) while pointing out this

need and the significant problems of recruitment, funding and training of community workers makes little reference to the need for management training.

The response to the need for management expertise in community service agencies has been to seek training courses of various types and these are now becoming widely available(12). The danger of simply transferring those management methods found useful in the private sector to community service agencies has been recognised. Etherington and Parker(13) discuss the prevalence of this method of knowledge transference but note how, in the particular case of competitive advantage(14), whilst the short-term benefits may be attractive to Social Services Departments the long-term benefits may not prove as beneficial. Bamford(10,p.176), more generally, prescribes that "the application of management skills has to be allied to organisational structures which reflect the needs of social work."

The level of technical and advisory support for the management of community service agencies is also an area in which developments have followed on from those in the private sector. For example, the use of computerised management information systems is receiving attention in the area although to a much lesser extent than in other sectors(15,16). The whole Community OR initiative is an attempt to use the methods which have been found valuable in other areas in community service agencies. The increased level of management activity in community service agencies will create an increasing demand for management support initiatives. In the same way that the management activity should be compatible with the broader organisational function, the support offered to management should be compatible with the managerial function. If the support offered to community service agency managers is to be effective then the type of support offered in the private sector should not be carried over unless it is

known to be appropriate. It is this issue which is tackled in the following two sections. In the next section the environment in which management support will operate is explored and following that the nature of management support often used in the private sector is compared with this environment in order to establish the extent to which it is appropriate.

THE CONTEXT OF MANAGEMENT IN COMMUNITY SERVICE AGENCIES

In order to understand the environment in which management support will operate in community service agencies it is necessary to have some understanding of the difficulties which managers face in that environment and of the character of the organisations they work in. This understanding will be developed for the two examples of community service agencies discussed above. At the end of this section some general characteristics of the context in which community service agency management operates will be derived on the basis of these two particular cases.

The increasing need for management skills in Social Services Departments, partially as a consequence of the move towards community social work, has already been noted. Bamford(10) identifies four areas of management activity particularly affected by this shift. Accountability, teamwork, planning and participation and organisational structure each highlight in different ways the tension between the increased involvement in the community and the need to maintain a solid base in the local government system. Management is crucially involved in the control of this tension and in ensuring that it is balanced.

A Social Services Department is accountable to many different groups at the various levels at which it operates. Although confusion exists over the nature and role of accountability if

one takes it to mean that the individuals in the department, as departmental representatives, have some responsibility to different groups, then seven related forms of accountability can be recognised(3,17,18). The need to be accountable to oneself, to one's employer, to the profession, to other agencies for whom work is done, to the general public, to the individual client, and to the community provides a varied set of people to whom the staff of a department may have to explain and justify their actions. Each of these individuals or groups can lay claim to have their preferences given priority. Thus a key managerial function is to achieve some balance between the calls on the department's resources in line with these preferences whilst making efficient use of them.

The use of teams in social work was given impetus by the Seebohm Report(19) and the more recent Barclay Report(3) has extended and endorsed the use of the team concept. Use of teams has proven beneficial for two reasons. Social work encompasses many different specialisms and it has been particularly useful to organise social workers into teams which incorporate a wide variety of skills, expertise and knowledge so that complex individual cases can be tackled from within the team. The ethos of social work is centred upon sharing and group involvement and it is therefore natural for social workers to gravitate towards a group structure and thus the organisation into teams is supported rather than fought against by the individuals involved. The move towards community social work has increased the amount of decentralisation in Social Services Departments and community based teams are given considerable autonomy. This has led to the need to maintain an effective flow of information between the area teams and the central policy making staff. It has also proven beneficial to develop a participative style of management so that the area teams, often based away from the

department, can become involved in the decision making-process and so reduce their feeling of alienation.

The general public and their elected representatives in local government are involved in the activities of social services departments in two ways. The recent crisis in local authority funding has led to an increased reliance on budgetary issues for planning purposes. The success or failure to attract resources into a department is dependent upon the relationship between the top management of that department and the elected members who authorise the budget allocations. This involvement is political and party political issues add a further dimension to the management function. Whilst no one can argue against the provision of social services the decisions over how much to resource them by relative to housing, public health, and other local authority items will be dependent upon the ability of representatives of the various functions to influence the key individuals. Public involvement is also felt at the community level where participation is encouraged. The benefits of this are the easier identication of local needs, defects can be more readily recognised, local initiatives can be encouraged and the perception of the welfare state improved. Management in such cases needs to be adept at encouraging participation and maintaining enthusiasm whilst steering the community along a path which is feasible and manageable.

It has already been seen that the ethos of Social Services Departments naturally supports the moves towards decentralisation and community social work. In contrast to this the larger organisation of which the Social Services Department is part is characterised by a strong hierarchical structure with a need for central planning and policy-making. A managerial role in these departments is to act as a link between the two contrasting styles of organisation. The design and maintenance of a structure within which the two

approaches can be effectively reconciled will be crucial to the success of a Social Services Department.

The situation in community work organisations differs from that found in the Social Services Departments in that the agencies involved are often organisationally independent although they may be tied to other bodies by funding conditions and the need to report on the progress of projects for which funding has been given. Thomas(1) considers the key issues for the organisation and implementation of community work to lie in three areas, recruitment, auspices and funding. Each presents particular difficulties if the implementation of community work is to be compatible with its principles.

The staffing of community work projects is an important strategic issue for two reasons. Following on from the principles of community work it is desirable that staff associated with such projects are indigenous to the community involved. The chances of projects being successful are increased if the workers are people who can easily fit into the community and not cause tension due to class or ethnic differences, for example. Such positive discrimination can help to create local employment opportunities. A local person will have first hand knowledge of the difficulties facing the community and thus be better prepared to tackle them. The second reason why staffing is a strategic issue is the need to establish community work as an occupation. If there is to be continuity and stability in the agencies responsible for community work a career structure and job security needs to be offered. The management problem is to establish conditions in which these staffing issues can be tackled in a situation where various sources of funding, often over only short periods, are often necessary to support one project and uncertainty over the future existence of a project is high.

The location of community workers in an organisational structure and the management of this structure is a second issue of particular significance. It was noted above that the increasing dominance of departmental and project community work has led to the institutionalisation of the activity. Participation by the community was seen as being an issue for the management of Social Services Departments. It is a much more significant issue for the management of community development projects. Whereas the involvement of a community in social work issues was beneficial for the Social Services Departments this type of involvement lies at the heart of community work. It is not possible to adhere to the principles of community development and deny the community access to the management of the agency encouraging it. However several pragmatic factors are involved in determining how this access to management should take place. The degree of representation by the community in a management group or consultative committee and level of skills necessary to carry out the necessary functions often temper the theoretical idealism which calls for such bodies. Thus a management issue centres upon the relationship to be established between the community service agency and the community to which it relates.

The third key area central to the implementation of community work is the funding by which such activity is made possible. Funding is dependent upon, and is a manifestation of, a set of policies made by a body responsible for the allocation of financial resources. Thus many community projects have to be sufficiently flexible to be able to meet the policy objectives established by the funding bodies. Therefore the management of such projects must attempt to meet the local needs and work towards the general aims of community work whilst satisfying the broad objectives which define the conditions under which funding is provided. A compounding factor in this matter is the short-term nature of the majority of funding. The

achievement of continuity and the planning of community work projects and seeking of funding towards this end is crucial to the success of the activity. It is necessary to maintain a series of projects over a lengthy period if genuine development is to occur but the funding of such projects will inevitably be drawn from different sources and given under different conditions. Management needs to match the short-term character of funding arrangements with the long-term aims of community work.

The two examples of community service agencies considered above provide sufficient detail to allow some conclusions to be drawn about the situations in which the management of these agencies, in general, is undertaken. These conclusions provide an understanding of the context in which management operates and gives a set of conditions with which the support offered to management must comply if it is to be effective. These conclusions therefore provide a benchmark against which the means of offering support to management in community service agencies can be assessed. This assessment is carried out in the next section for the conventional means of providing such support.

First, within the agencies themselves the participative ideal is strongly held by staff. Hence decision-making and the management style generally is designed to allow participation to take place, and play an active role in the processes involved. Participation is also extended to the community associated with the agency and it is able to play some role in determining the activities of the agency. In terms of the systems model presented earlier this means that the control of the agency does not rest entirely within it or within specific sub-systems of it. Control is spread throughout the agency system and the community system with which it is in close proximity. This contrasts with the more usual case where control of the system lies almost entirely within itself and

often within a specific sub-system. Organisations are often controlled by a small part of the people involved with them and these may act separately from the rest of the organisation.

Second, a community service agency is related to a complex network of individuals and organisations by a variety of relationships. Some of these will be formally defined and others informally so. The richness of these relationships is due to the richness of the community with which the agency is associated and the complexity of the socio-economic system in which the community and the agency exist. The agency system is unable to be fully understood unless it is taken in the context of the surrounding system. It is an open system which, by virtue of the system it chooses to relate to, the community, is confronted by a massive amount of complexity. Whilst many other organisations have to deal with a complex environment they can choose to target certain parts of this, for example by marketing strategies, and as they are not dealing with a social system directly can legitimately choose to see certain aspects of behaviour as irrelevant for their purposes.

Third, community service agencies are often, but not always, in situations where they cannot generate sources directly. Examples of those which can include voluntary groups where people use their own time, money and other resources to carry out the agencies' tasks. Those agencies that cannot generate their own resources must compete for resources from those organisations which can provide them. The successful attraction of support usually involves making an agreement to work within the guidelines set down by the supporting organisation. These organisations therefore take away autonomy from the community service agencies and can exercise control over them. In systems terms the community service agency becomes part of a larger system and relinquishes some

autonomy to that larger system. Again this contrasts with many other organisations whose resources are generated from within themselves and thus there is no need for the organisations to have to accept control from a higher level system.

Thus the management of community service agencies is involved in situations which involve meeting the demands of many people, are part of a complex organisational and social system and, additionally, are often subject to constraints imposed from organisations more powerful than themselves in terms of resource availability. Support to such management must be capable of acting effectively in such conditions. In the next section some common forms of providing such support will be examined to see how well they can meet this criterion.

SUPPORT FOR MANAGEMENT IN COMMUNITY SERVICE AGENCIES

It is usual in most organisations for management to seek advice on certain issues which they do not have the specialised knowledge, time or other resources to tackle for themselves. Such advice is provided by consultants based in an organisation and devoted to the needs of that organisation or based outside organisations and acting for whoever needs their services. Consultants offer their services under a variety of labels, operational researcher, management scientist, systems analyst are three common examples. The role of the consultant is advisory and does not seek to remove from management the responsibility for decision-making and policy implementation. What is offered is information and expertise which is intended to increase the effectiveness with which management carries out these functions. The growing need for management in community service agencies brings with it a growing need for support activities of the type offered by consultants. In this section the approach used by consultants to community service agency management is

considered. The commonly found features of this activity are identified and compared with the three aspects of the environment identified above in which this type of management takes place. Some implications of this comparison for consulants for community service agency management are examined to provide recommendations on some key issues for this group of people.

Although there are several headings under which consultancy is provided to management the underlying approach offered under each heading is similar. It is taken here that the aim of consultants is to provide advice and information relevant to particular issues which require decisions to be made by management. There are some types of advice, for example organisational development work, which do not fall into this category and will not be considered further here. The focus is upon the provision of support to management in relation to their decision-making function. In order to establish the common approach adopted some different methods of providing advice of this type will now be considered.

Classical operational research/management science is often taken to refer to a set of techniques which is able to tackle a particular class of situations. The discipline originated in Britain in the years immediately prior to World War Two. It developed a set of tools to aid the management of the operational aspects of military activities and after the war these were adopted by industrial organisations. By the 1960's the approach was being widely used in a range of contexts(20). The methodology of operational research was first expressed rigourously by Churchman, Ackoff and Arnoff(21) in the late 1950's and this approach remains the corner-stone of all activities carried out under this heading. There are six phases identified by Churchman et.al. although subsequent versions have extended parts of the methodology to give greater detail. The fundamental phases are problem

formulation, construction of a mathematical model to represent the system under study, derivation of a solution from an analysis of the model, testing of the model and of the solution derived from it, establishment of controls over the solution and, finally, implementation of the solution. It was recognised that certain common types of problem occurred which were amenable to this approach and standard models and techniques were developed to address these. These common problems indicate, but do not define, the scope of classical operational research. They are allocation, queuing, replacement, scheduling, inventory and competitive problems.

Systems analysis is a method of aiding the policy-making process which was developed by the RAND Corporation in California after the Second World War. Like operational research it grew out of the perceived need to undertake more effective planning for military projects. RAND was concerned with the investigation of large-scale projects, often in conjunction with government departments, and focussed on the analysis of long-range, strategic issues. The approach developed to help in these studies has five essential elements which are necessary for its application.(22,23). An objective or objectives which are to be accomplished need to be specified. Different methods of achieving these are developed and one of these will eventually be implemented. The costs of implementing each method are established, usually, but not always, in financial terms. A mathematical model which shows how the different methods meet the objectives and how they relate to the wider environment is constructed so that the effects of the methods under different scenarios can be assessed. A criterion for measuring the success with which each method meets the objective is used to allow comparisons to be made between them and so aid the decision-makers in their choice of which method to implement.

Systems engineering has its roots in the work of the Bell Telephone Laboratories in the USA at about the same period as operational research and system analysis were being developed. The standard work which lays out the principles of the approach is based upon work in these laboratories(24). Systems engineering is a process which is concerned with the management of engineering projects from their inception to the manufacture of the finished product. Five phases are recognised by Hall(24) as constituting the approach. Systems studies involves a broad examination of a variety of factors which are relevant to an identified need for a particular piece of equipment. Exploratory planning is then carried out which focusses upon the specific project designed to culminate in the manufacture of suitable equipment. In this phase several alternative ways of proceeding are considered and one chosen. Development planning sees the creation of a plan to bring the chosen system into manufacture. A prototype system is prepared in the fourth phase, studies during development. Finally, full-scale manufacture is introduced together with a system to monitor the performance of the equipment and introduce modifications as necessary.

These three approaches have been seen by Checkland(22) as forming a unified school of thought which he refers to as hard systems thinking. Keys(25) has shown the strength of the relationship between operational research and systems engineering. Jackson and Keys(26) see all three approaches as being appropriate to the same broad category of situation.

The move towards this style of investigation to help understand decision-making situations was taking place in contexts other than in commercial and industrial organisations. Urban and regional planners for example, in the 1950's and 1960's were largely working with an approach referred to as rational-comprehensive or synoptic planning(27,28). In this method the planner schedules the

tasks which need to be accomplished to bring about a certain end and identifies a number of different ways of achieving them. A choice is made between these by reference to some criteria of performance and the chosen procedure is implemented. Smith and Cantley(29) review the traditional methods of evaluating health and welfare service provision. They argue that manistream evaluative research is characterised by a six-stage process(p.3). The goals of the service to be evaluated are defined. Indicators of performance are chosen and the criteria of success specified. The service is then defined in such a way as to isolate it as much as possible from the environment in which it operates. The achievements are measured by the indicators and these compared against the crriteria of success to provide an evaluation.

These various methods of investigating problematic situations are each used by consultants, and on occasion by managers themselves, to provide information of value to the decision-making process. They each suggest that they can indicate the relative merits of the various policies or decisions which may be followed. They do not replace but support management in the decision-making process. Management can use the analysis carried out using these methods to gain a greater insight into the nature of the problem they face. Having done this the decisions that are made should be better informed and more effective than otherwise might be the case.

It is useful to bring together these conventional approaches to the analysis of decision-making situations by looking at their common characteristics. It is these building blocks which enable the methods considered above and several others besides to be considered as a class. The characteristics will be considered in a way which facilitates the comparison between the above class of methods and the characteristics of the management situation in community service agencies.

First, each of the above methods assumes that the specification of the objectives to be pursued and of the measures of performance which show how well they are being met can be done unambiguously. This is underpinned by the deeper assumption that the part of the world under investigation can be viewed objectively and a unique explanation of its behaviour exists. The consequences of these assumptions for the consultant is that they can act independently of the management once the objectives, measures of performance and boundaries of the system under study have been defined. Analysis of the system can then proceed and the resultant information passed to management with no further involvement on their part. This relationship between management and consultant has its weaknesses(20,30). In particular it precludes involvement in the decision-making process by anyone other than the management for whom the consultant provides the advice. The methods used do not encourage the consultant to widen the scope of their analysis and seek the views of other people. Indeed these are considered unnecessary as the objective view of the world is seen to be valid.

When such approaches as those considered above are used by consultants to community service agency management significant difficulties will arise as a result of these assumptions. The existence of many groups and individuals who have an interest in the activities of these agencies and the desire to involve them in a participative manner means that the definition of objectives and measures of performance will be the subject of debate in many cases. The different groups are likely to choose to view the relevant part of the world from various perspectives and to place different boundaries around it. Consequently the assumptions of objectivity and agreement are likely to be invalid. The approaches considered give no clues as to how to deal with such situations. So consultants will either have to proceed with these methods in spite of the problems this causes them or will have to bend the situation

to conform to the desired form. In either case the advice will not be as effective as it could be if a method designed to tackle situations which are subjectivist and pluralist was used.

Second, a central feature of the approaches considered is the reliance upon a mathematical model which is used as a surrogate for the real world. This position assumes that it is possible to construct a model which can adequately reproduce behaviour under a reasonably wide set of conditions. In order to construct such a model the system under study needs to be explained by a set of cause effect relationships which are capable of being brought together in a logical fashion. This reductionist and mechanistic view runs into difficulties when complex systems are being examined. One cause of difficulty is the failure to be able to observe the system fully when it consists of many parts. This makes the identification of individual relationships and the establishment of their patterns of behaviour difficult. A second cause of difficulty arises if the system is social in character. Then the premise that behaviour is rule-governed is questioned and the fundamental assumption that a satisfactory model can be built is exposed. When such systems are the focus of attention the conventional approach of predicting the system's response to change and preparing for this is inappropriate(20,31,32).

Those parts of the world with which the community service agencies find themselves dealing are inherently complex both in terms of size and social character. In certain cases it may be appropriate to simplify the environment to reduce the level of complexity and it may be possible to reduce the degree of individual behaviour which needs to be considered. By doing this the richness and character of the work of the agencies is lost and the situations when these steps can be legitimately taken will be ones of a trivial nature and will

not be significant to the true role of the agencies. Thus consultants armed only with conventional methods of investigation will not be able to involve themselves in the fundamental aspects of agency work. They will only be able to contribute to those decisions where the community is able to be seen as peripheral.

Third, the role of the conventional methods used by consultants can be criticised from a radical perspective as being conservative. They act in this way by increasing the amount of control which management has over the system it directs. Each of the above methods serves to strengthen the position of those who seek the advice of the consultant who uses it. The methods do not suggest that the views of the management served by the consultant may be detrimental to others and no means of establishing if inequalities will be caused are provided. Thus the consultant must accept that these methods will be guaranteed to serve only the purposes of those whom they serve. The conventional methods are not the only ones to be subject to this criticism. Alternative methods which are able to overcome the difficulties objectivity and complexity are equally susceptible(20,33,34).

The management of community service agencies are often in a position in which they must work within the guidelines set down by more powerful organisations. The radical critiques of methods used to aid management decision-making argue that in such a case these methods do not show how the interests of the more powerful bodies can be countered. Thus when in this situation consultants must accept that they are constrained in this way. The only way of countering the interests of the more powerful parts of society is to act independently of them. Then community service agencies and the communities they are associated with will be able to take actions which are in no-one's interest but their own.

Thus conventional methods used by consultants are objective, reductionist and conservative. The use of such methods is appropriate in community service agencies only under certain circumstances. The natural inclination is for the management of such agencies to be faced with situations where subjectivity and complexity are present to a great extent and where radical action is seen as being preferable to the maintenance of the status quo. Alternative methods are available and their potential use and guidelines on when to use them are discussed by Jackson and Keys(26), in general terms, and by Jackson(35), in the specific context of community service agencies.

CONCLUSION

This discussion has focussed upon a very specific aspect of the involvement of consultants with community service agencies. The provision of advice and information to aid the decision-making process is a useful activity but needs to be seen as part of a much wider set of activities which are geared towards the quality of life and the reduction of inequalities in society. It is necessary that the activity becomes integrated with the other process directed towards this end and that it recognises its scope and potential. It has been argued above that if the conventional set of tools used by consultants is used then the potential will remain untapped. The need is to begin to use alternative methods and, if necessary, modify and extend them to cope with the particular characteristics of the situations they will be used in. A direct transference of expertise is useful but it must be accompanied by an awareness that expertise alone is insufficient. If Community OR is to contribute efffectively then it must develop an appropriate set of tools and a framework in which they are used. The above discussion is part of an effort to move towards this objective.

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COMMUNITY OPERATIONAL RESEARCH: PURPOSES, THEORY AND PRACTICE

Michael C. JACKSON

INTRODUCTION

The usual impression of operational research (OR) held by social scientists is of a discipline which seeks to use quantitative techniques to solve tactical problems in pursuit of goals specified by management in large organisations. This view of OR, and especially as it is not a wholly unfair characterisation of much contemporary practice, should make us pause in considering the prospects for 'community OR'. For OR of this type (let us call it 'impoverished OR') would appear, for many reasons, to be unsuitable for the different context of community and co-operative organisations. It is as well to be aware, therefore, that OR began not as a mathematical but as an interdisciplinary science, and that the creation of interdisciplinary teams was seen as one of the most important elements of OR practice in the early textbooks(1,2). We should also note that these same textbooks emphasise that OR is a 'systems' approach, aiming to be relevant to strategic as well as tactical problems, and appreciate that many of the pioneers of OR were socialist scientists who believed that OR should be used for public rather than sectional interests, and that only under socialism could science realise its full potential for increasing human well-being(3).

Given the aspirations of early OR theorists and practitioners, the way the discipline and profession actually developed, and was employed, came to many as a major disappointment. In Churchman's(4) opinion, the original intention of a holistic, interdisciplinary, experimental science addressed to problems of social systems was betrayed, as OR degenerated in the 1960's into little more than mathematical modelling. Rosenhead(3), taking a more materialist line, rues the way OR

was transformed into management science as its techniques and methods were appropriated and harnessed for use in the service of capitalism. The standard form of OR from the 1960's to the present has been the 'impoverished'.

Some within OR, however, did keep faith with original intention. Cook(5), for example, lamented that its current methodology had led OR to move from the position of 'science helping society' to that of 'science helping the establishment', and sought to develop new methods with clients outside the normal power structure. While others remained true, but felt obliged to change the disciplinary banner under which they worked. Churchman's educational programme in 'social system design' at Berkeley was an attempt to keep the original OR dream alive under a different label(4). Ackoff(6,7) continued to develop an approach that could deal with ill-structured and strategic issues, giving the name 'social systems sciences'(SS) to the educational and consulting activities he initiated at the University of Pennsylvania, while Beer(8) developed management cybernetics to deal with the significant problems arising in economies, brains and companies, and retained OR for lesser control problems.

We can, therefore, reasonably talk in terms of an 'enhanced OR' based on the spirit of the early pioneers of OR, and drawing upon the work of those, either in OR or on the fringe of the subject, who have continued to develop the discipline according to original intention. This kind of OR is an interdisciplinary science employing rational methods to alleviate ill-structured and strategic (as well as tactical) problems arising in social systems, for the benefit of society. On the basis of 'enhanced OR' the idea of community OR begins to look much more plausible. Furthermore, a long tradition of thought upon which community OR can build is identified. Of particular significance, from this point of

view, must be Ackoff's work with leaders of the black ghetto of Mantua(9,10), work carried out under Cook's guidance with inner-city community oragnisations(11), Beer's project with the Allende Government in Chile(12), and various projects undertaken from Bath University with charitable and community groups(13,14).

The recent surge in community OR activity in the UK - including the Centre at Hull, the Community OR Unit at Northern College and the national Community OR Network - can, however, be more immediately traced to the 'Community OR Initiative' launched by the Operational Research Society and inspired by its current President, Jonathan Rosenhead. In his Presidential address to the Society, he set out the route he believes OR must follow if it is to carve out for itself a significant role in society and if future progress in the discipline is to be facilitated(15). This involves expanding the range of OR's clients beyond the managements of large organisations, and, on the basis of the challenges arising in assisting 'alternative' clients, developing available theories and methodologies to make them more appropriate to new problem situations. Rosenhead's preferred vehicle for travelling this route turned out to be 'community OR' and the announcement of the Operational Research Society initiative followed.

Two assumptions underpin Rosenhead's conception of community OR. The first is that OR as an interdisciplinary, systems based subject with a modelling orientation can be of great assistance to a range of alternative clients. The second is that, in trying to help such clients, the OR approach can be enriched in a way that will increase its capacity to aid decision-making in society at large. The following will hopefully lend support to these assumptions by considering, in turn, the purposes that community OR can serve, a possible theoretical framework to underpin the activity and some examples of community OR practice.

PURPOSES

During the course of inviting proposals from institutions to house a 'Community OR Unit', the Steering Group for the Operational Research Society initiative stated (16) the aims of community OR to be:

a) to extend awareness of OR to new sections of the community, thus broadening the range of clients.
b) to demonstrate the relevance of OR to a wider range of problem situations.
c) to enrich OR methodology and revitalise intellectual life through involvement in novel types of problem.
d) to contribute to improving the quality of discussion and decision-making in society at large.

It is also possible to interpret community OR as having a more critical and radical dimension. This interpretation will be followed here and can be summarised under two more headings:

e) to help redress the resource imbalance that exists under capitalism by assisting those underprivileged in this respect.
f) to develop decision-aiding and problem-solving methods appropriate to a more democratic and socialist milieu.

The implications of these possible purposes will now be explained as a prelude, in the following sections, to suggesting how they might be realised.

a) The intention to broaden the range of OR's clients implies that the present set of customers is seriously limited. Rosenhead argues(15) that the customers of OR have been:

> "Almost exclusively ... the managements of formally established and legally entrenched organisations disposing of substantial resources (capital, equipment, buildings, supplies), including the labour power of their employees."

Following Rosenhead and Cook(5) and also applying our own minds, the list of excluded groups will number, among others, Patients Associations, Community Health Councils, trade unions, consumer groups, political parties, charitable bodies, citizen groups, residents associations, Councils for Voluntary Service, voluntary organisations and workers' co-operatives. As Rosenhead suggests(15), some of these have been ignored because they lack the funds to pay OR consultants, while others, such as trade unions, have been neglected because of mutual suspicions regarding aims and intentions and because of fears of alienating the traditional clientele of managers. In order to extend the range of organisations served, OR consultants will have to accept the enhanced version of OR, be prepared to sympathise with the more varied concerns exhibited by 'alternative' clients, and be willing to provide services at reduced cost to needy clients - as long ago suggested by Ackoff(17). To extend awareness of the usefulness of OR to new groups will entail publishing relevant work done through the various networks that link non-traditional clients (e.g. the 'National Network of Local Co-operative Development Agencies' and the 'National Council of Voluntary Organisations'). It will also help if methods and techniques suitable for community OR are taught on degree courses and as a specialist provision to alternative clients.

b) As has already been suggested, to demonstrate the relevance of OR to a wider range of problem situations will require the abandonment of 'impoverished OR' and a commitment to the creation of an 'enhanced OR', drawing upon the spirit of the original pioneers of the discipline and upon the work of those who, whether calling themselves operational researchers or not, have developed OR or 'systems' according to that spirit. The kind of impoverished OR that became the norm in the 1960's, and which still remains in the ascendency, is unsuitable for the great majority of problems found in the community context. In large part this is because, as

Rosenhead argues(15), it evolved and was fashioned according to the needs of large bureaucratic organisations, with a tendency towards centralisation, an emphasis on controlling their members' activities and an interest in deskilling their workers. Traditional OR methodology reflects the need for an hierarchically organised decision-making system which can dictate the goals to be pursued and can ensure implementation of recommended procedures using autocratic control devices. In these circumstances human elements could be regarded as passive, and quantitative and optimising techniques employed. In doing community OR there will be fewer situations where a clearly defined goal can be agreed or can be enforced through the managerial hierarchy; and many more situations where debate and consensus building will be necessary before action can be taken. Wide involvement of personnel in decision-making is necessary if satisfactory results are to be obtained and implementation achieved. Fortunately, during the 1970's and the 1980's a number of 'softer' approaches were developed in OR(18) and systems thinking (19,20,21) which encourage and facilitate participation and debate. An enhanced OR can utilize these methods in assisting alternative clients to come to terms with the 'messes'(7) or 'wicked problems'(22) with which they are constantly confronted.

c) Just as the OR methods wrought in the service of large corporations took on a specific form tuned to the needs of these enterprises, so the OR fashioned in the community context will take on characteristics which, hopefully, make it adept in these circumstances. Thus the experience of doing OR for alternative clients should enrich OR methodology and revitalise the intellectual life of the discipline and profession. The organisations which community OR will serve usually lack the resources of traditional clients, may be wedded to democratic decision-making procedures and may lack a

clear managerial hierarchy which can delimit preferences and ensure the implementation of recommended changes. The usual props supporting the success of impoverished OR will therefore be missing and practitioners will be forced in a different direction if their work is to prove useful. Rosenhead(3) has listed some of the characteristics that an alternative OR might have to take on, stressing the extent to which these are polar opposites of its usual features. Differences of interest will have to be accepted and methods designed which facilitate negotiation between different groups. Analysis must be conducted so as to be transparent to all concerned and should assist judgement rather than replace it. Human beings will have to be treated as active subjects and self-control rather than external control of their activities encouraged. Optimisation must be dropped and a greater degree of flexibility and openness in the face of turbulent environments accepted. A number of soft OR and soft systems thinking approaches already demonstrate some of these characteristics and can provide a good foundation for the further enrichment of OR methodology.

d) The tools and techniques developed to aid alternative clients should, of course, contribute to increasing the quality of discussion and decision-making in the sectors of society in which these clients operate. This, however, is not the only benefit to emerge for society. It can be argued that in many other sections of society too, methods capable of alleviating 'messes' and dissolving 'wicked problems' will be welcomed. For example, strategic problems in organisations and social issues facing government are of a type with those confronting community OR's clients - ill-structured, involving many 'stakeholders' with multiple perceptions and embedded in an uncertain environment. The work conducted by Ackoff and his colleagues, with leaders of the Mantua black ghetto,

illustrates the point(9,10). The project revealed the need for continuous, adaptive, participative planning in the situation faced by the ghetto leaders - a situation characterised by uncertainty, lack of hierarchy and the need for active intervention. The idea that planning should be continuous, adaptive and participative later became the cornerstone of the 'interactive planning' methodology recommended by Ackoff to comporate executives facing turbulent environments(20). So, in exposing itself to alternative clients and learning from the experience, OR may become more relevant to the strategic and social concerns from which it has been effectively excluded because impoverished OR is only deemed suitable for resolving tactical questions.

e) It has been argued by Ackoff and Churchman that OR has a social responsibility to serve all the stakeholders of the systems in which it intervenes and all segments of society. For Ackoff(17) OR practitioners, if they are to deserve the title 'professional', must ensure that the interests of those not participating in a decision but affected by it are considered. And they should make provision for all those who might benefit from OR but cannot afford it. Ackoff has given detailed consideration(10,20) to how planning can be made more participative, involving more of the interested parties, and how resources to assist with planning can be made available to the more underprivileged of these groups. Churchman, similarly, argues(23) that the primary responsibility of OR as a profession must be to serve all the 'customers' of the systems it is supposed to be benefitting, and not just the powerful decision-makers. Both Ackoff and Churchman seem to believe, however, that the resource imbalances which are admitted to exist under capitalism, and which prevent full participation by those underprivileged in this respect, can be sidestepped by good OR practice which persuades the powerful

that they too have something to gain by admitting the powerless into decision-making(24,25,26). While this is worth a try, self-respecting community OR practitioners will have, on occasion, to take sides. They will come across conflicts of interest that cannot be simply resolved through debate with the powerful. To challenge resource imbalances, the community OR practitioner may be called upon to help develop methods of struggle against the advantaged group or groups.

f) Rosenhead has argued that there is nothing inherently capitalist about OR and that

> "... despite the market/control bias of the dominant methodology which it has actually accreted ... it could be argued that OR prefigures a planning mechanism for a society whose impetus does not come from the dynamic of capital accumulation."(15)

Community OR workers of a radical bent will be hoping to show the truth of this and will certainly content themselves with the opinion that the tools and techniques perfected with alternative clients are those which will be most useful in some democratic, non-exploitative, socialist society of the future. Various methods already developed in the tradition of 'enhanced OR' show potential in this respect. Checkland(19) has suggested that his 'soft systems methodology' can help enrich and structure debates approximating to the model of 'communicative competence' which Habermas believes must underpin any rational society(27). Beer's work in Chile(12) illustrated how organisational cybernetics could be used to design a form of economic co-ordination that might prove more acceptable than the market mechanisms employed in capitalist countries and the centralised bureaucratic planning which, until recent experiments, dominated in East European communist states.

THEORY

A consideration of the purposes outlined above suggests that the Centre for Community OR should engage in action research. The purposes embrace both a commitment to practical problem alleviation and to science. These two commitments can, to a large extent, be realised together through action research. Existing knowledge will be employed in the choice and use of appropriate OR methodologies and techniques to help clients for whom, at present, little OR gets done. This experience will then become the basis for learning to what extent and in what ways existing knowledge needs to be modified to provide better guidance and more effective practice in future.

Successful action research demands a set of integrated and clearly formulated theoretical hypotheses and a closely monitored programme of practical intervention. In this section of the paper we concentrate on the first of these requirements.

In order for any action research programme to realise its aims it needs to be built upon theoretical premises which can guide practice and against which the results of practice can be interpreted. The idea that it is possible to start with 'pure' observation on practice and, on the basis of this, construct theory is not defensible. All observation and all practical intervention is already and always premised upon some theoretical assumptions - whether made explicit or not. Science and technology best progress if theoretical and methodological assumptions are made explicit at the outset. This permits other scholars and practitioners to carry out 'falsification' tests and to learn and contribute to knowledge in a discipline. A body of work and literature can develop around the original contributions. The process of

incrementally building up knowledge in the field of interest is set in motion.

We need some theoretical guidelines on which to base community OR practice. In order that our search is not limited by any pre-conceptions about the current nature of OR, let us begin by offering a very general account of organisations as 'systems'. This will allow us to develop a theoretical codification of the problems likely to arise within organisations for OR practitioners, from which it is a short step to specifying the nature of an enhanced OR suitable for steering community OR work.

Organisations are often characterised in management theory as open socio-technical systems(28). This means that they have a technical aspect and are systems which seek to efficiently pursue goals in often volatile environments. They also have a human and social aspect and depend for their viability and effectiveness on the establishment of shared meanings among the actors who make them up. Either social or technical characteristics may predominate in particular organisations or particular parts or levels of organisations, but the successful evolution of organisations would seem to depend upon sufficient attention being given to both.

Although it is not generally recognised, there are some interesting parallels between socio-technical systems thinking and the sociological theory of Habermas(29,30,31). Habermas' work can be read as providing a deep understanding of the nature of organisations as open socio-technical systems. According to Habermas there are two fundamental conditions underpinning the socio-cultural form of life of the human species. These he calls 'work' and 'interaction'. Work enables human beings to achieve goals and to bring about

material well-being through social labour. Its success depends upon achieving technical mastery over the natural and social environments. The importance of work to the human species leads us to have what Habermas calls a 'technical interest' in the prediction and control of natural and social systems. The technical interest is one of two anthropologically based cognitive interests which Habermas recognises the human species as possessing. The other is linked to 'interaction' and is called the 'practical interest'. Its concern is with expanding the possibilities of mutual understanding among all those involved in the reproduction of social life. Disagreement among different groups can be just as much a threat to the reproduction of the socio-cultural form of life as a failure to predict and control natural and social affairs.

While work and interaction have for Habermas (at least in his later work) pre-eminent anthropological status, the analysis of 'power' and the way it is exercised is equally essential, Habermas argues, for the understanding of all past and present social arrangements. The exercise of power in the social process can prevent the open and free discussion necessary for the success of interaction. Human beings, therefore, also have an 'emancipatory interest' in freeing themselves from the constraints imposed by power relations and in learning, through a process of genuine participatory democracy, involving discursive will-formation, to control their own destiny.

As organisations form the very basis of the socio-cultural life of the human species, it seems clear that they will be the primary centres of social labour, social interaction and the exercise of power. Human beings will have a technical, a practical and an emancipatory interest in their functioning.

It is now possible to use these insights to consider the types of problem situation likely to confront OR practitioners addressing social systems. The starting point is the two anthropologically based cognitive interests of the human species - the technical interest and the practical interest. The technical interest is concerned with the prediction and control of natural and social processes. It follows that problems arise for the human species if the systems with which they deal become difficult to predict and control. The practical interest is concerned with securing and expanding the possibilities of mutual understanding among all those involved in the reproduction of social life. It follows that problems also arise for the human species when there is a lack of genuine agreement among 'participants' about the objectives they wish to see realised through organisational systems. Jackson and Keys(32,33) have constructed a grid of 'problem-contexts' based upon a classification of systems and a classification of participants. These classifications, which are now provided, reflect the way these two key dimensions can prove difficult for would-be OR analysts.

Systems can be classified in various ways. Very generally, however, we can talk about a continuum of system types. At one end of the continuum are systems which will be relatively simple and are characterised by having a small number of elements with few, or at least regular, interactions between them. Such systems are likely to be governed by well-understood laws of behaviour, to be closed to the environment - in von Bertalanffy's sense(34) - and to be unaffected by behavioural and social factors such as sub-systems pursuing their own goals. At the other end of the continuum of system types will be systems which are very complex and are characterised by having a large number of elements which are highly inter-related. Such systems are probabilistic, open to

the environment, are subject to behavioural and social influences, and have purposeful parts. Ackoff(35) has used the terms 'machine age' and 'systems age' to refer to eras characterised by a dominant concern with these two different types of system. Applying Ackoff's terminology, reference will be made in what follows to 'mechanical' problem-contexts which contain relatively simple systems and 'systemic' problem-contexts which contain very complex systems, naturally manifesting more difficult problems.

The kind of relationship existing between participants is the other factor which can greatly affect the nature of problem-contexts. If the participants associated with a particular problem-context are in genuine agreement about objectives, then that problem-context will be easier to handle than if their objectives conflict. Where there is, in general, genuine agreement among the relevant participants, then the problem-context will be called 'unitary'. If the participants have to some extent differing objectives, but a genuine compromise can be reached upon which all agree (because their fundamental interests are not irreconcilable), then the problem-context will be called 'pluralist'. If, however, any consensus that exists is only achieved through the exercise of power and by domination (overt, or more or less concealed) of one or more groups of participants over others, then the problem-context will be called 'coercive'. This final distinction points to the additional emancipatory interest as identified by Habermas.

If the classifications of systems and participants are now combined to yield a six-celled matrix, problem-contexts can be seen to fall into the following categories: mechanical-unitary, systemic-unitary, mechanical-pluralist, systemic-pluralist, mechanical-coercive and systemic-coercive. Each

differs in a significant way from the others and its characteristics determine the nature of the problems found within it and the degree of difficulty posed for the OR analyst. Important differences between problem-contexts should be reflected in the type of theoretical guidance available and in the different kinds of problem-solving methodology that exist. This sets the standard for enhanced OR. If its ability to help alternative clients is not to be constrained then it should possess the facility to operate in each of the six problem-contexts identified. It is an exacting standard, but pessimism gives way to a degree of hope once the distance already traversed is recognised. Community OR can again take sustenance from the work of those outside the OR mainstream who, nevertheless, are closer to the original intention of the discipline. It is worth asking, therefore, to what extent the six problem-contexts are already served by existing OR, cybernetic and systems approaches. This examination of the present strength of enhanced OR can be studied in detail in other publications(32,33) and it is only necessary to make some brief points here.

Mechanical-unitary problem-contexts are well served by the kind of impoverished OR perfected during the 1950's, '60's and '70's and still dominating the discipline. The methodology of impoverished OR (and the same can be argued for systems analysis and systems engineering) is useful as long as the problem-solver can establish the objectives of the system in which the problem resides and represent that system in a quantitative model which will simulate its performance under different operational circumstances. These two conditions are only found together in mechanical-unitary contexts.

In systemic-unitary problem-contexts the systems of concern are what Beer(8) calls exceedingly complex, probabilistic

systems. They are not easily represented in a quantitative model or optimised. There is, however, general agreement about the objectives to be pursued. The tools provided by what can be called a 'cybernetic' approach are most useful in these circumstances. This is taken to embrace the organisational cybernetics of Beer(12,36), general system theory(37), socio-technical systems thinking(38,39) and modern contingency theory(40,41). The emphasis is on the design of adaptive systems. It is claimed that organisations designed according to 'cybernetic' principles will be self-regulating and even self-organising in the face of environmental perturbations.

Mechanical-pluralist problem-contexts cause difficulties because of disagreement among the participants about the objectives to be pursued by the system of concern. Work by Churchman(42), Mason and Mitroff(21) and Eden(18) provides valuable suggestions about how such situations can be alleviated. The emphasis is upon dialectically developing 'world-views' until a temporary consensus is achieved. There is little attention paid to any structural principles that might underpin successful systems design.

Particularly suitable for systemic-pluralist problem-contexts is the soft systems thinking of Ackoff(20) and Checkland(19). The soft systems approach can be used to tackle contexts in which there is a lack of agreement about objectives among the participants concerned. Ackoff and Checkland are also prepared to give advice on how to deal with difficulties stemming from the systemic character of the context. They offer cybernetic guidelines for the design of whatever systems we might wish to bring into existence.

Finally, mechanical-coercive and systemic-coercive problem-contexts should be discussed. If OR practitioners are simply content to serve the powerful in organisations, they can use one of the approaches already mentioned (impoverished OR, cybernetic, dialectical, soft) in these contexts, content that the exercise of coercion will help guarantee success, at least in the short term. Often the existence of power can make coercive situations resemble the unitary and OR workers can take advantage of this fact to progress their analyses. Impoverished OR approaches, for example, often 'work' not because they are the most suitable for the situation in which they are employed, but because they reinforce the position of the powerful, and implementation is therefore enforced. Community OR workers will, however, wish to bring about 'whole system improvement' and must, therefore, find some way of equalising the balance of power in the situation and getting rid of the structures of inequality which allow some groups to dominate others. Enhanced OR is only just beginning to admit the existence of coercive contexts. However, Ulrich's 'critical system heuristics'(43) offers a way of proceeding in mechanical-coercive situations, while Jackson(44) has suggested an approach based upon Habermas' thought as being apt in systemic-coercive contexts.

If, therefore, we abandon the narrow scientism of impoverished OR, an enhanced OR can be identified, embracing approaches such as cybernetics and soft systems thinking, which has gone some way towards developing the necessary range of methods that will be required in doing OR work in the community situation. The classification of enhanced OR methodologies, outlined above, demonstrates this case. It can also be used to help further enrich the methods available to community OR. It insists on the continual development on the theoretical side of the work and hints at the areas for which theoretical

support might be forthcoming. For example, once pluralism and coercion are encountered, the social sciences become the obvious source of insight, however underdeveloped they may be at present. Increased dialogue between operational researchers and social scientists is to be encouraged. The classification can also help on the practical side, giving cohesion to the work undertaken, guidance on the choice of appropriate tools and techniques and providing criteria for the choice of projects. It is to the practice of community OR that we now turn.

PRACTICE

No doubt all of the problem-contexts identified in the preceeding theoretical section will be discovered when doing community OR and, therefore, all of the different methods and techniques mentioned (and many more) will be appropriate in different circumstances in serving alternative clients. There will be times when the techniques of impoverished OR will be the best choice because a system can be optimised in pursuit of agreed upon goals. The optimal way to deliver services efficiently to the members of a trade union may differ not a jot from the optimal way of carrying out the same activity in a private business organisation. Nevertheless it is reasonable to expect a shift in the balance of problem-contexts found when serving non-traditional clients, away from the unitary or, at least, assumed-unitary type, towards the pluralist and coercive. There will be fewer situations where a clearly defined goal can be agreed or can be enforced through the managerial hierarchy. There will be more situations where debate and consensus building will be necessary before action can be taken. And more situations where the client needs to be supported in the face of powerful opposing interests.

All is not quite as simple as this, of course, because problem-contexts are not unambiguous features of the 'real-world'. To claim they are would be to fall prey to a completely indefensible form of positivism. Problem-contexts are formed from the perceptions and interactions of human beings as purposeful actors. To state that a problem-context is unitary (for example) implies no more than that the perceptions of participants - actors inside the system and relevant observers outside - are all in agreement regarding the purposes to be achieved and about the need to pursue these purposes efficiently. Once this is admitted, it must follow that perceptions and opinions about the character of particular problem-contexts are quite likely to differ. Because they are not 'objective' features of the 'real-world', problem-contexts rarely display their nature with certainty. The way any problem-context is classified, therefore, will depend very much on the person who observes it. In postulating a shift from unitary towards pluralist and coercive contexts, therefore, we are suggesting that community OR workers will, along with the alternative clients themselves, feel inclined to define more problem-contexts in this way.

With these comments in mind we shall attempt to show, in the remainder of this section, how the theory and the methodological procedures mentioned can be utilized in community OR practice. The examples which follow are meant to illustrate the sorts of problem that can arise in community OR and the kind of enhanced OR approach that can be adopted. They are drawn from projects undertaken by members at the Centre at Hull, but are not intended to be accurate reports of these projects. The examples are arranged in order according to whether the context was defined as unitary, pluralist or coercive.

The first example concerns a project with a small Entertainments Group(45). We can take this as a community organisation because of its commitment to the local area and strong orientation to conservation. The converted warehouses it uses for some of its activities are highly regarded by conservationists and have won five major awards. The organisation which had begun originally as one club had grown considerably in size and had plans for further expansion. The directors felt the need to move towards a more formal structure with proper planning, control and information handling procedures. At the same time they did not wish to lose the informal management style that created a particular atmosphere within the company. It was decided to treat the problem-context as systemic-unitary (there were other possibilities) and to try a cybernetic approach to the problem based upon Beer's work(36,46). Various models were produced and recommendations made for an essentially decentralised structure of decision-making with overall control being maintained through efficient information flows. The recommendations were geared to maintaining informality at the human level while formalising routine business processes.

The majority of problem-contexts encountered in dealing with small community and co-operative organisations are probably best defined as pluralist. Though there will be strong divergencies of opinion on the exact aims to be pursued and the best means of achieving these, there is usually an underlying shared value system which can be tapped as the basis for a temporary consensus around a particular issue. There will often be, as well, some commitment towards democratic decision-making. Two examples might suffice to give an indication of this type of situation.

The first involved an assumption surfacing exercise using Mason and Mitroff's 'Strategic Assumption Surfacing and Testing' approach(21). The aim was to give the development workers, in a Co-operative Development Agency, insights into their behaviour as a collective and to help them in decision-making in the future. The particular focus of the exercise was a disagreement in the Agency over the relative merit of 'top-down' as against 'bottom-up' co-operative development work. The 'top-down' approach, which involves identifying business opportunities and then recruiting individuals to form worker co-operatives in these fields, is usually viewed with great distrust in co-operative circles. The preferred approach is 'bottom-up', essentially encouraging and assisting groups already thinking about starting co-operatives in particular fields. Group formation, stakeholder analysis, assumption surfacing and synthesis sessions were staged in accordance with the approach, and the exercise helped clarify where differences of opinions lay and produced consensus on the need for experiments with a modified top-down approach. The second involved assisting the staff of a Council for Voluntary Service, and others, to establish some criteria for evaluating the performance of the Council. It was recognised that the established 'goal' and 'system' models of organisational effectiveness were inappropriate, given the multitude of different viewpoints possible about what success for the Council would entail. Using stakeholder analysis, part of the Mason and Mitroff methodology, it was possible to draw up a list of relevant stakeholder groups, to develop a richer appreciation of the various expectations that the different groups might have of the Council and to consider how these might be taken into account in conducting the evaluation.

The two examples discussed in the last paragraph were relatively short interventions as part of longer projects. They did not themselves involve any redesign of procedures and structures and can therefore be perceived as taking place within mechanical-pluralist contexts. The Co-operative Development Agency provides another example, this time of a problem-context defined to be systemic-pluralist. The Agency was disappointed with the number of co-operatives being set up, by the number of enquiries received from the public and by the number of people coming to the agency to ask for help. It was presumed that something was wrong with the marketing strategy and Checkland's soft systems methodology(19) was employed to look into this activity. Various possibilities for improving marketing were considered in systems terms - planning, organising, and controlling marketing activities; mobilising potential support for marketing; using more appropriate techniques; a more aggressive 'top-down' strategy; and ways of improving the image of the Agency and the idea of workers' co-operatives. Recommendations were made asking for a more positive attitude to marketing, a division of labour to ensure marketing was not neglected (structural change) and regular marketing audits (procedural change). The context facing a voluntary organisation, a Community Furniture venture was also considered to be systemic-pluralist. This organisation collects furniture from people who no longer need it and provides it, after refurbishment if necessary, to those in need. Demand for the services of the venture was decreasing and problems loomed associated with the possible end of funding. Checkland's methodology was again used to investigate advertising strategy and possible income generating activities, including selling surplus furniture.

Another project was in a distinctly coercive setting, and, since the sources of power imbalance were relatively clear,

might be regarded as being within a mechanical-coercive context. This involved the proposed development of a piece of land as a nuclear waste disposal site. Test drilling had already begun on the site. The resources available to the company concerned, and the Government, were clearly much greater than those of the local protest group and the local councils who were opposing the development. An attempt was made using Ulrich's 'critical system heuristics'(43) to clarify the value judgements embedded in different proposals for the site, with a view to securing more meaningful debate on the issue.

As a final example, it was decided that a particular business organisation could be most appropriately viewed as providing a systemic-coercive context. The owners of this enterprise liked to regard it as a family firm with a genuine concern for the workforce. However, this image was in danger of shattering in the face of increasing industrial unrest. Managers were eager to paper over the cracks that were emerging with appropriate human relations techniques. We were asked to see the industrial disputes as a result of a short term break-down in communications. It was much more insightful, in fact, to view the situation as systemic-coercive. The firm actually operated in a very traditional manner and employed autocratic control procedures. The coercion had at last come to the consciousness of the workforce. The question of consultant obligations came to the fore and a somewhat tense situation ensued.

The purpose of this section has been to give some examples of community OR work using enhanced OR, and to show how the theory outlined in the last section can both guide community OR practice, and assist reflection on it.

CONCLUSION

In this paper the idea of community OR has been introduced and an attempt made to show how it links to a long tradition of enhanced OR work. The purposes of pursuing community OR were outlined and a framework provided which can assist in realising those purposes by linking theoretical and practical endeavours. Finally some examples of community OR projects were given, showing how these relate to the classificatory framework. There is every reason to expect that an enhanced OR can be of significant use to a wide range of non-traditional clients. There is every reason to believe that this activity will yield significant advances in enhanced OR theory and methodology. Community OR has a major contribution to make in helping to realise the full potential of OR as a discipline and profession.

ACKNOWLEDGEMENTS

I would like to thank the M.A. students who worked on projects referred to above - B.O. Alabi, E. Chung, F. Lajumoke, and S. Medjedoub.

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THE SEMANTICS OF CO-OPERATION

Norman JACKSON

INTRODUCTION

The necessity of co-operation within work organisations is a much lauded principle, to the extent that Barnard, for example, sees it as the defining characteristic of an organisation. The implication of this belief is that the organisation will function optimally when every actor co-operates with every other actor in the organisation, as required by the demands of the organisation's goals. Furthermore, the imperative to co-operate must transcend any distinctions, real or imaginary, which may be seen to impinge on the organisation, regardless of individual interest. However, whereas co-operation is indeed the sine qua non of both social existence and the creation of social good, the idea of contemporary capitalist bureaucratic work organisations being co-operative systems, although a much treasured phantasy of the functionalist, hardly serves as an adequate description for those theorists who see such organisations as arenas of social conflict and domination.(1)

In this paper I suggest a distinction between 'co-operation' as a necessary way of creating social good, and 'co-operation' as a mask for a system of social order, based on the domination of the 'masses'. I take this approach because of the power of an authoritative discourse to make the irrational appear rational, bad appear good, domination appear as freedom. Although language may not have any definitive meanings, certainly some meanings are better than others in releasing the experience of particular social conditions. Given that man is condemned to use language, imperfect though it is, and even if we do not aspire to a Habermasian

communicative competence, we can at least move nearer to a use of language which facilitates man's emancipation.

An ability to distinguish between what I would call 'genuine' co-operation, and co-operation which is a euphemism for conflict and coercion, together with their attendant benefits and dis-benefits, may then allow us to release the rewards of co-operation, rather than to stifle them, as conflict based organisations inevitably do.

WORK AS MANAGEMENT: MANAGEMENT AS WORK

I start from the premise that 'management' is a process concerned with the ordering of the world's resources. This can be done in such a way as to 'benefit' mankind in some optimal sense, or it can be done in such a way as to generate sub-optimal benefits, or even disbenefits. Most human activity - indeed, most animal activity, though I will concentrate on the human animal - is concerned with management as process. For example, in writing this I am arranging the juxtaposition of paper and pencil and thought, (the world's resources should not be thought of as solely material or physical), in a way which does not occur spontaneously in nature. The child who piles one wooden block on top of another, the gardener who plants flower seeds, the cook who prepares an omelette, are all managing the world's resources in an essentially artificial way, but hopefully, in such a way as to add something to nature - to create something (good or bad) that nature did not. Furthermore, most managerial acts take place within some sort of formal organisation - the family, school, work, etc. - and it is particularly with the latter that my arguments are concerned. However, I must stress that I am using the idea of the formal organisation in the sense of a shell or an enfolding concept with which individuals might identify, in other words as a heuristic. For example, I work in a University - a notion that I have no

trouble identifying with. If, however, I were to specify what exactly a University was, especially what are its substantive characteristics vis a vis me, then this would be problematic: is the University a legal construct, a set of buildings, a place of learning, etc.? Obviously, it is all of these, and none of these, and more. Thus the formal organisation, in the sense in which I am using it, is primarily to do with individual perception and would thus include what in other circumstances has become understood as the informal organisation. This is perhaps just another way of saying that people do not work (manage) in isolation, but within social groups, albeit defined subjectively, rather than objectively.

However, I appear to have raised another confusion here - have I not just claimed that work is management? How can this be? Well, certainly to me work is management, but let me develop this a little further. As I suggested, much mangement takes place within formal organisations which we can understand conventionally as work organisations. In such work organisations we typically distinguish between something called 'work', and something called 'management', the former done by workers and the latter by managers. Notwithstanding that such categories function heuristically to help us understand (attenuate the variety in(2)) our world, they are amazingly imprecise terms, substantiated absolutely by neither duties, nor status, nor income, nor circumstances, even though there may be definite tendencies. For example, managers may tend to be paid more than workers but not all managers are paid more than all workers and thus pay per se is not a defining characteristic. Similarly, all managers are not necessarily called managers, and all those called managers are not de facto managers. My own preferred way of distinguishing manager from worker is power - managers are responsible for others, workers are responsible to others. Now, as most people in formal work organisations exhibit both characteristics, it follows that there are very few of either

pure type. However, whichever popular conception is used, clearly managers are organising the world's resources, just as workers are, ie., both are managing. Thus managing as a process needs to be properly distinguished from the role of a social elite called managers.

Having spent many years as a manager, in the popular sense, in industry I was left with two very particular impressions. Firstly, much of the organising (managing) of the world's resources undertaken by managers (social group) did not substantively improve on what would have happened without their intervention. Secondly, the purpose of management (social group) was not to improve optimally on nature, but to exercise social control.(3) If this is indeed the case, then at best managers (social group) act as a restraint on optimising the efforts to improve on nature, and, at worst, totally negate these efforts in the name of a 'sectarian' social order - surely a situation which does not benefit mankind.

I have suggested that work is management, and that what is popularly called management is just a particular form of work. I have further suggested that much work (managing) takes place in a social context. What I will now try to demonstrate is that work (managing the world's resources) is, or should be, based on co-operative action, whereas management (as performed by a particular social group) is, and should not be, based on conflict, notwithstanding claims to the contrary.

CO-OPERATION

Co-operative action is, to my mind, simply two or more people acting together for some common good. However, such a definition requires some elaboration. The eleven members of a football team are clearly engaged in co-operative action when they play (competently), if we assume that they share a common

objective, say to win, and the same applies to the opposing team. If we assume that the two teams have different objectives, (Team A wishes Team B to lose, Team B wishes Team A to lose), then clearly the two teams are not engaged in co-operative action, as they have a different objective. But this is clearly a nonsense, insofar as, if the objective is to win (rather than to succeed through default), then the opposing team must co-operate in this by opposing them - in playing the game. Thus what is clearly non-co-operative action by one definition, is clearly co-operative action by another definition. How then are we to assess whether or not action is co-operative? I think the mechanism for resolving this is relatively simple - in principle. The rationale for co-operative action is SYNERGY - the idea that the whole is greater than the sum of its parts - sometimes expressed in the equation 2+2=5. In our above example, two teams playing together can achieve what they cannot achieve independently - a football match. Eleven men can achieve together what they could not achieve individually - the defeat (possibly) of another team. In other words we are dealing with two different concepts of a system - the team and the match - each with its own demands which, whilst at one level antagonistic, can be shown at a different level to be perfectly compatible. As with all systems, to specify their success or failure we must concern ourselves with purpose, and, as such, with the fact that what creates positive synergy by one understanding, may create negative synergy (2+2=3) by another definition. Clearly, at a societal level, it is necessary to be able to choose between such competing claims, which can only be done in the light of some specific social praxis.(4) In other words, co-operative action should be understood as that which takes place with the intention of creating a synergetic effect. If synergy is not created, then co-operative action is just mere whimsy, which, from a societal point of view, is irrelevant. (I exclude intentionally co-operative ventures which fail through error or lack of information, etc.).

Given, therefore, that some rubric is necessary to judge co-operative action, then I would argue that it must be the concept of the emancipated society.(5)

My own concern is with the possibilities for creating social benefit through co-operative management of the world's resources, within the framework of a social work organisation. So let us return to first principles. Let us assume that we wish to build, for the benefit of society, a stone wall, but the stones at our disposal are too heavy for one person to lift. Without help - co-operative action - the wall remains unbuilt: society remains impoverished. However, if two people work together we find that they can lift the stones and the wall can be built. Here we clearly have the basis for justifying co-operative action. 2+2 has clearly made 5. It should be noted that there is no pre-supposition of equality or democracy here. Co-operative action may reasonably entail asymmetric distribution of authority and responsibility, for purely functional reasons, eg., when a number of people attempt a co-ordinated lift of a heavy object, it is normal for one person to issue the instruction 'lift', to ensure that action is co-ordinated. Whether or not such authority degenerates into the acquisition of arbitrary power is however another matter!

Let us now consider another case, where the wall is to be built of brick, of a size easily lifted by one man. Arguably, no greater whole can be created by two people co-operating than by them working individually - certainly no obvious wall-building synergy is created. However, given the social nature of man we could suggest that some social concept of synergy is possible through people working together. At best they may, dialectically, find a 'better' way to build the wall, at worst they may just provide companionship, make life a little more meaningful for each other, which is surely a worthy outcome. Thus, at a societal level, we can create material benefits -

physical or spiritual - from co-operative action. It is my contention that life is enhanced for mankind by co-operative action. Conversely, I also contend that conflict, as the antithesis of co-operation, produces disbenefits, insofar as it, at least, sub-optimises the potential benefits of co-operation. It is, of course, a cherished belief of the proponents of contemporary individualism that it is conflict (as competition) which creates social benefit as, for example, in that invidious location - the market place. This idea, with its appeal to the ideals of Social Darwinism, can only be tenable where competition, or creative conflict, is distinguished from conflict per se. There may be some credibility in this argument if one ignores the social systemic implications, eg., football hooliganism, by the reductionist concentration on the sub-systemic level, eg., the football match - or ignore unemployment by concentrating on corporate efficiency - but the extension of such an argument to the production of a ubiquitous social good must be rejected, if only on the grounds that social good cannot be predicated on the suffering of the individual.(6) As with the mechanical resolution of forces, conflict consumes some of the total energy in the system - for no benefit. Inescapably, conflict implies a win-lose situation, whereas an emancipated society must be based on a win-win (or no loss-no loss) situation achievable only through co-operative action.

This then brings me to the nub of my argument as regards management. Whilst co-operation between managers and workers is conventionally emphasised as a pre-requisite for creating social wealth through efficient production, what I wish to suggest is that it is not co-operation as a means of achieving social synergy which is signified, but, on the contrary, conflictual relationships of authority and obedience.

LANGUAGE

In essence there are two distinct understandings of the concept of co-operation, one based upon a congruency of interest, and one on a conflict of interest - in other words, the precise opposite! How then can this be so? Well, as Lacan(7) has pointed out, the function of language is to evoke, not to inform, not to tell the 'truth'. The word 'co-operation' acts as a signifier which achieves its particular meaning in relation to its location in a chain of signification, determined both paradigmatically, in terms of words which could have been used but were not, and syntagmatically, in its relation to other words in the same sentence.(8) Thus, if we take the concepts 'labour' and 'work', whereas the paradigmatic use of these concepts can be fairly arbitrary and they can be used more or less synonymously, in other situations they are perceptually different. For example, 'the labouring classes' could reasonably be substituted for 'the working classes' without any great violence being done to the image evoked. However, 'the nobility of work' does not do justice to the evocation of 'the nobility of labour'. To a person who is not a natural speaker of a particular language, differences in meaning, possible from such substitutions, may be lost. And yet to a native speaker there is no guarantee, even where differences are perceptible, that it is the same difference which is perceived. As Foucault has demonstrated, the great power of language derives from the apparent ability of certain groups in society to share in the understanding of specific meanings.(9) Where these can be prioritised over other meanings then we have, of course, the basis of Foucauldian discourse. This situation is compounded when we take account of the syntagmatic use of a word, ie., how we use other words in relation to it, to emphasise its putative meaning. In the expressions 'My wife has gone into work' and 'My wife has gone into labour', 'work' and 'labour' are no longer

paradigmatically compatible. Their syntagmatic relation to 'wife' brings out the sense intended in the statement. However, in the statements 'My husband has gone into work' and 'My husband has gone into labour', no such illumination of extra-paradigmatic usage occurs, yet there is still syntagmatic release of the intended meaning. Thus meaning is evoked through specific paradigmatic use of words, syntagmatically linked to other words, which, of course, are themselves paradigmatically implicated within the chain of signification. In other words, there is no absolute sense in which words correspond to real phenomena. No transcendent truth is evoked. Words can as easily 'lie' as tell the 'truth' - Derridean play.(10)

Thus with 'co-operation'. The sense of the word in 'workers co-operating with workers' is certainly not the same as in 'workers co-operating with managers' - in the latter expression a different imagery is evoked. I would argue that 'workers co-operating with managers', as used by proponents of the managerial interest, implies the sub-ordination of worker interests to those of managers. To some this is, perhaps, a betrayal of class interest, and yet to others it is merely sensible workers doing what is best for them. Neither understanding may be the 'truth', but it is certain that both cannot be.

CO-OPERATION OR CONFLICT?

To illustrate my point further I would like to turn to the work of Barnard.(11) Although it is 50 years since Barnard proposed his idea of organisations as co-operative systems, I would suggest that this naive view of organisations still has great currency, and is still the dominant model in managerialist thinking.(12)(13) For those with a functionalist inclination, it clearly provides a common sense explanation of how organisations operate - the rational

division of labour, hierarchised according to market forces, performing necessary tasks at the correct point in space and time in a co-ordinated manner. However, for at least two reasons, this does not define a co-operative system. Firstly, the above definition does not presuppose the creation of social synergy - in fact, such a system could equally as well create negative social synergy - for example, it could define a prison. Whereas a prison may be socially desirable, it is stretching matters rather much to claim it produces synergy. However, I will return to this point shortly. The second weakness is a confusion between co-operation and co-ordination. Barnard(14) argues that

> "The co-ordination of efforts (is) essential to a system of co-operation ..."
> (p.215)

In fact, Barnard further argues(15):

> "When the acts of two or more individuals are co-opearative, that is, systematically co-ordinated, the acts by my definition constitute an organization."
> (p.113, emphasis added)

Although this may be a popular view, (see also Donaldson(16)), I would suggest that it is not so. Co-ordination refers to the relationship between the occurrence of events in time and space and, as such, is an empirically verifiable condition, in so far as there are any such phenomena. However, it implies nothing about intent or even purpose. This I would argue is not the case with regard to co-operation: intentionality is a pre-requisite, as, indeed, Barnard recognises. Certainly, if (an anticipated) co-ordinated action does not occur we would understand events as un-co-ordinated. But if a co-operative action fails we do not necessarily see it as an un-co-operative action. Thus a definite end state is not presupposed by co-operation (it can fail), but it is with co-ordination. Whereas I would accept, for the moment, that

organisations may be co-ordinated systems (if that is not a tautology), I see no reason why they should be co-operative systems.

Exploring Barnard's(17) arguments a little further, in relation to the management of such systems we find:-

> "The executive functions serve to maintain a system of co-operative effort. They are impersonal."
> (p.216)

Furthermore:

> "The most important single contribution required of the executive, certainly the most universal qualification, is loyalty, domination by the organisation personality."
> (p.220)

We also note the importance of

> "The contribution of loyalty and submission ... "
> (p.220)

Now certainly Barnard is here using the concepts of domination and submission with reference to the executive (vis a vis the mythical organisation personality). However, the dominated submissive executive whose task is to maintain, impersonally, a system of co-operative effort has, as one of the 'essential' tasks of the executive, the selection, promotion, demotion and dismissal of men:

> "The selection in part, but especially the promotion, demotion, and dismissal of men, depend upon the exercise of supervision or what is often called 'control'."
> (p.223)

and, in fact, it is control which is the essence of the executive function in Barnard's system - to restore system

stability. Undoubtedly Barnard was under no illusion as to the 'need' for executive power to secure the 'co-operation' of the recalcitrant masses.

However, it is not Barnard's theory per se with which I am concerned, nor do I intend to undertake a comprehensive textual deconstruction of his oeuvre, interesting and instructive though this would be. What I am concerned with is whether or not concepts such as 'domination', 'submission', and 'control' are logically entailed in the concept of co-operative action. It is my contention that they are not. To illustrate this I will concentrate on the executive function of control, and its concomitant - power.

Control implies the power to make someone or something do what it would not otherwise do. With reference to the control of people there appear to be two circumstances in which it becomes necessary. The most benign explanation is where the controller and the controlled share a common goal, but the controlled is under some mis-apprehension as to how this goal is to be achieved. In this case the gentle controller carefully but firmly guides the poor ignorant subject onto the paths of righteousness, for this is indeed what the poor unfortunate truly desires. The less benign interpretation is that the controller and the controlled have fundamentally different goals, either accidentally or through sheer willfulness on the part of the controlled. Now the desideratum of a congruency between organisational goals (in the guise of those of its executives) and those of the workers, which in practice means the worker adopting those of the organisation, has long been hunted by the organisation theorist and some continue so to do. However, certainly in the more critical reaches of organisation theory, such a proposition has been long buried.

From this we must conclude that the manager's function is to ensure that worker goals do not usurp those of the 'organisation', indicating a conflictual relationship rather than a co-operative one, coercion rather than consensus. If organisations do function on the basis of conflict and coercion, how can we possibly desribe them as co-operative, when the only empirical evidence in support of such an epithet is that workers (sometimes) do as they are told by a more powerful other? If this was a necessary and sufficient condition to define co-operation, then, to return to an earlier example, the prison could be understood as a co-operative system - prisoners and warders in a co-operative venture. Even more ludicrous, we would have to understand the Nazi persecution of the Jews as a co-operative venture in so far as the Jews 'allowed themselves' to be transported to the concentration camps and murdered. Certainly, the black trade unionist in South Africa, on strike for basic recognition as a working human being, co-operates with the white policman when he stands there and receives the blows of the sjambok. Certainly, if he moved or struck down his assailant this would destroy their co-operative relationship. But can we really accept mere acquiescence in the face of the more powerful as co-operation? To return to Barnard's executive function of dismissal, because a worker accepts being dismissed for reasons of changing organisational need rather than his own inadequacy, does this demonstrate the co-operative nature of organisations? Surely not. Barnard claimed that the purpose of a co-operative system is the 'satisfaction of individuals'.(18) Are/were prisoners, concentration camp Jews, black South Africans, workers, satisfied within their organisations?(A)

A further illustration of Barnard's concept of co-operation as a concern with the exercise of power can be furnished. One meaning of co-ordination - a supposed characteristic of co-operation - is to classify in the same order or rank, yet

Barnard speaks of sub-ordinacy of organisational parts, ie., ranking lower in order(19), which is obviously incompatible with the idea of co-ordinacy. For example, say my car engine consists of 50 components which have to co-ordinate their actions in order for the engine to work. If any one of these components fails to act in the correct place and time, then the engine will not run. How then can I say that any component is super-ordinate or sub-ordinate? - clearly, this would be a nonsence. Similarly with Barnard's demand for organisational co-ordination. If one part fails then the organisation ceases to operate correctly. How then can some parts be sub-ordinate? Clearly in an efficient organisation with low redundancy of parts, which is what Barnard seeks, we cannot speak of functional sub-ordinacy. Sub-ordinacy, in Barnard's sense, must relate to a hierarchy of power and status - a coercive/conflictual situation.

I would now like to suggest that the concept of co-operation in organisations has two distinct dimensions, which I shall characterise as the horizontal and the vertical. The horizontal dimension is co-operation in the synergetic sense - one individual with another to achieve what neither could alone for the common social good - not vastly different from Barnard's claim for the concept (signifier). The vertical dimension is co-operation in the managerial sense, which is substantively about conflict and control - in effect, Barnard's de facto understanding (signified).

The recognition of the benefits of worker 'co-operating' with worker has long been appreciated by managers, its most obvious realisation being the factory, or, more recently, multi-skilling and reduced job demarcation. Now, whereas this is more correctly understood in terms of co-ordination rather than co-operation, in the sense in which I have used it, the basic principles of genuine co-operative action are contained within such co-ordinated action. All that is necessary is the

supercession of the coercive context of the contemporary organisation by one based on a genuine commonality of purpose and interest, ie., the absence of domination.(B)

In contrast, the idea of manager - worker co-operation, as a source of social synergy, has never been popularly promoted. On the contrary, what has been important has been to maintain boundaries between managers and workers, boundaries which define the power and status of the manager against appropriation by the worker. Braverman's(20) de-skilling thesis provides some support for this view, as an example of how managers have been able to reinforce their position by reducing the discretion of workers. On this vertical dimension co-operation is classically defined in terms of division of labour, not by task or skill per se, but by status, such that there are (supposedly) identifiable managerial tasks and worker tasks. Yet there is nothing in the idea of co-operative action which pre-supposes status.

Interestingly, Pondy(21) has argued, not unrelatedly to Barnard's position, that conflict

> "... is consciously created and managed by the politically astute administrator."
> (p.319)

In other words, managers can (and should?) generate conflict between worker and manager, and worker and worker, for their own ends. Now many would recognise that such conflict leads to strikes, absenteeism, sabotage, low productivity, etc., and whilst conflict theorists would see this as inevitable within the current relations of production, it is difficult to see how such wilful creation of conflict, such blatant manipulation by the powerful of the less powerful, can be sensibly described as co-operation. However, many of the unitarist/pluralist tendency would see such conflict as aberrant. Thus, for Drucker(22):

> "Any business enterprise must build a true team and weld individual efforts into a common effort. Each member of the enterprise contributes something different, but they must all contribute towards a common goal. Their efforts must all pull in the same direction, ... without friction, without unnecessary duplication of effort." (p.150)

It sounds like a prescription for an ideal co-operative venture, does it not? Yet such a condition could equally be achieved through coercion - would it not nicely describe the organisation of a slave-powered Galley? From the manager's point of view it works well, even though the workers may not see it the same way. Thus, can 'wage slavery' furnish co-operative action in the eyes of management. However, the inevitable conflict of both galley slavery and contemporary 'wage slavery' must consume part of the total energy in the system, if only in the costs of enforcement, which fails to allow optimal creation of synergy.

For those genuinely interested in co-operative action the question must be, what system synergy could be generated if the contribution of each component was maximised?

SUBSTANTIVE CO-OPERATION

Let me at this point recap on my arguments. I am suggesting that, in contemporary organisation theory, the description of organisations as co-operative systems (though, admittedly, I have focussed on this in terms of a worker/manager opposition) is, in fact, misleading, in so far as they function on the basis of coercion and conflict. I have argued that mere obedience by the powerless to the powerful cannot sensibly be understood as co-operation. Further, I have suggested that the only rationale at a social level for co-operative action is the production of synergy. But as co-operative action, in so far as it means working together, is a necessary condition

of our society, then, if its results are less than optimal, society would benefit from rectifying this situation. Of course, I have not demonstrated this shortfall in potential synergy. However, I have argued that conflict draws energy from the system merely to maintain its agonistic state and thus reduces possible synergy.(C) Interestingly, the original meaning of synergy is literally 'co-operation' and so one could suggest that, by definition, conflict is certainly not synergetic! Thus all I am seeking to demonstrate is a shortfall in system potentiality, which, in principle, could be eliminated or reduced.

Some will argue no doubt that this is all very Utopian but that we live in the 'real world'. In this world people have to be driven. Otherwise we would all still be living in caves, etc. In other words, the only sensible management strategy is one based upon, say, the conflictual approach of McGregor's 'Theory X'.(23) This may very well be correct, though personally I do not believe that it is. However, if it is, then why do we not admit it? Why do we insist on masking what we do by claiming that coercion is really co-operation?

If coercion is not the inevitable answer, then what are we left with? It seems we are left with a rather ludicrous situation where we spend lots of energy limiting the possibilities of our 'co-operative' organisations. If we are to correct this situation, then we must remove the sources of conflict. Social good will be maximised when the capabilities of all members of society are utilised in the service of that society, to the extent that is compatible with the need to establish and maintain an emancipated society, ie., one free from social domination. Obviously, unemployment, for example, cannot be justified in terms of such a need. But equally many of those in employment spend much of their efforts in ways which do not contribute to social good.

It seems, therefore, that we are presented with two challenges. One is to remove the obscenity of unemployment, the other is to rescue those in employment from pointless labour. Unfortunately, the popular prescription for the former is more of the latter. However, there is an alternative. It may not be immediately possible to rescue those currently employed in conventional organisations - capitalists and managers are unlikely to change their demands on the labour they use. There is, though, the possibility of providing new forms of organisation which escape the dysfunctions of organisational conflict. These are organisations based upon the principles of (genuine) co-operation. Certainly where such co-operation is the aim, a praxis-oriented management science can contribute to its attainment.

I argued earlier that work is management of the world's resources, and that management, as popularly understood, is just a particular form of this work. If the task of management 'science' is to find the best ways of organising the world's resources, within the demands of a specific social praxis, then its concern must be with process rather than status, or, to put it another way, with content rather than form. This, of course, locates such a concern squarely within the post-modernist debate. The institutions of modernity having failed (in either a Rortian or a Habermasian(24) sense), we are left with the choices of a regression to some pre-modern solution (Victorian values), which is the popular solution in the U.K., or the 'discovery' of systems (rationally or politically) which reflect the realities of the approaching 21st century. As an illustration of this problem Russell(25) noted, many years ago, the idiocy of increased leisure being structured as the punishment of unemployment. In other words, if there really is too much labour about, why don't we all do less, rather than some a lot and some none at all? It is interesting to note, therefore, that two recent

Union/Employer agreements in the U.K. were actually based on an increase in hours for those in employment, thus potentially exacerbating the unemployment problem - an example of regression to Victorian values (post-modernism of reaction) to deal (inappropriately) with today's problems.(26)

However, whereas for capitalism there may be an excess of available labour, certainly in terms of social welfare this cannot be said to be the case. There is still work to be done in Health, Education, Public Transport, Housing, Environment, etc., and there are people available to do it. Whilst in any reasonable society much of this needs to be done by the state, there is much that can be done through the co-operative efforts of ordinary people, either as voluntary community organisations, or as income-generating producer co-operatives. There is, of course, as I have indicated, nothing to prevent people combining in yet more capitalistic bureaucracies, but those who do will find their needs well catered for by mainstream management science.

Work organisations are predicated upon the division of labour, structured by market forces and the actions of managers. As Braverman(27) notes:

> "In capitalism, the social division of labor" - (e.g. manager/worker) - "is enforced chaotically and anarchically by the market, while the workshop division of labour is imposed by planning and control. ... While the social division of labour sub-divides society, the detailed division of labor sub-divides humans, and while the sub-division of society may enhance the individual and the species," - (if horizontal rather than vertical) - "the sub-division of the individual, when carried on without regard to human capabilities and needs, is a crime against the person and against humanity."
> (p.73, last emphasis added)

I would suggest that genuine co-operative action provides the antidote to Braverman's 'crimes'. When people work together in genuine agreement about tasks and purposes and structures, albeit negotiated, but in the absence of power, then we move towards an emancipated society. I do not claim that there can be no interpersonal dis-agreement, nor that co-operative groups may not select some 'authoritative' mechanism for resolving dispute, but if this mechanism is the subject of agreement and ultimate control by the organisation's members, then the principles of co-operation are not violated. Clearly, I have been describing a pure type of co-operative action, which could not be realised in practice. However, the principles of co-operation are robust, and will suffer any amount of bending and yet remain intact, in the absence of conflict based on power. In the real world what we need is a move towards such principles and away from the sustained inanity of modern organisational life.

Perhaps the last word on the subject of co-operatives should be left to Marx(28). He notes that the "philistine English periodical, the Spectator", found that the main defect in an early successful co-operative - the famous Rochdale Pioneers - was that it demonstrated that workmen, whilst improving their conditions, "could manage shops, mills, and almost all forms of industry with success", but "'they did not leave a clear place for masters' - Quelle horreur!" Indeed.

NOTES

(A) My concern is to establish that co-operation is not merely a synonym for obedience to authority, wherever it manifests itself. However, some may argue that Barnard was clearly referring to intra-organisational relationships, whereas at least some of my illustrations could not be so considered. Leaving aside the problem of determining the de facto boundaries of a Barnardian organisation, and that if a co-operative system could be demonstrated it would, ipso facto, be an organisation, there is little doubt that prisons and concentration camps could reasonably be understood as organisations. Perhaps one aspect of Barnard's theory which has been significantly modified over the years is the idea of closed systems. Thus from a more open systems perspective it is less easy to specify organisational boundaries than Barnard would have supposed. Relationships of authority and obedience cannot be marginalised as in-consequential merely because they do not conform to some pre-conception of an artificial organisational boundary. In fact, it could be argued that conditions of authority and obedience pre-suppose some organisational relationship. Otherwise, why would they persist?

(B) There is, of course, the possibility that workers wish to be dominated.(29) Certainly one could conceive of particular individuals exhibiting pathology in this respect, but that would not constitute a justification for a generalised domination of workers. However, Deleuze & Guattari(30) have gone farther and suggested a fascistic inclination in people, whereby they embrace conditions of domination.(31) This condition is engendered by the mechanisms of capitalism and manifested as a schizophrenic cleaving of desire and interest made necessary by the demands of capitalism. However, such a generalised pathology cannot justify the maintenance of power and domination. It does perhaps throw added emphasis on the social dysfunctions of capitalist bureaucracies with their prioritisation of production and consumption to the detriment of those characteristics which make us human. Because the ideals of co-operation go beyond mere production and consumption and specifically address social interaction, co-operative organisations provide both a release from managerial domination and the opportunity for more rewarding human relationships.

(C) The idea of co-operative action for which I have argued should not be thought of as antithetical to Lyotard's(32) claims for the social dynamics furnished by agonistics, which relate more to ontology than to

action, though they have been extended into the latter domain.(33) Agonistics may impart the inevitable drive to social development and change but they do not imply any moral purpose - outcomes can as easily be socially bad as socially good. Total agonism - in effect, 'the war of all against all' - would preclude any social synergy through co-operative action and would in fact destroy the concept of a social existence. Agonism, therefore, requires a focus of social good if its benefits are to be realised, ie., it must be related to a specific social praxis.

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CO-OPERATIVES, CAPITALISM AND THE PROBLEM OF ORDER

Pippa CARTER

Anyway, just who's way
is this way; this urban clearway?
This motorway
Not our way
it's no fairway
just their way
leaving us no leeway

(from "The Modern Day Flâneur" by Johann ckh Riedel)

It is widely held that the institutions of modernism have failed. One response to this has been to regress to pre-modern (anti-modern) values in search of a solution, sometimes called the post-modernism of reaction(1), and which is characterised by a right wing neo-conservatism. The more progressive response has two major forms, the first being 'critical modernism', of which Habermas may stand as the exemplar, and the second being the 'post-modernism of resistance', typified by the work of Rorty, Lyotard, for example. Whilst these two forms are fundamentally divided by the issue of the existence or otherwise of transcendent rationality, they are united in their focus upon the central importance of language in determining social praxis. The Habermasian views language as currently distorted and thereby facilitating particular forms of social order, but ultimately redeemable by reference to rationality. On the other hand, the post-modernist views language as ultimately relativistic, the prioritisation of specific meanings giving rise to social domination, a condition which is only remediable by changing the dominant discourse.

Within both these positions, organisation, as a word and, concomitantly, as an activity, is both important and problematic - indeed, organisation is itself conceptually analogous to language, in so far as it too is rooted in the

concept of difference. Since the work of Saussure and Peirce we have become familiar with the idea that language functions by the recognition/perception of difference, but Derrida has extended this understanding with his neologism 'différance', which combines the idea of difference with that of the deferring in space and time of that which is signified.(2) Thus, in the Saussurean sense, if one speaks of a bureaucracy, that acts as a signifier in so far as it is distinguishable from any other signifier, but in the Derridean sense the word bureaucracy is not itself that which is signified - in other words, that which is referred to is absent, and this absence allows considerable discretion in interpreting what is signified, what Derrida calls 'play'. This absence of any direct correspondence between language, as a signifier, and that which is signified, and, therefore, the opportunity for 'untruth' to be accommodated, is emphasised by Lacan in his assertion that the function of language is to evoke, not to inform.(3) When language is thus separated, on the one hand, from intrinsic meaning and, on the other, from the object of which it speaks, the superordinacy of a particular meaning for a particular word is only gained in the agonistic arena of language use, by the ability of certain adherents to particular meanings having the power to prioritise their choice. The aggregation of prioritised meanings into a privileged language prepares the ground for the establishment of a Foucauldian discourse, which by numerous means protects its users' interests from critique(4,5), prevents either the attainment of the Habermasian communication free from domination, or supercession by another discourse. This then becomes what Rorty(6) calls 'normal discourse', (which is structurally analogous to Kuhn's normal science(7)), claiming to be an accurate representation of reality,and fortifying the privileged interests against the depredations of an 'abnormal discourse' which argues that representations of reality are both constructed and relative. However, given Derrida's point about 'différance', there could be no accurate representation

of reality, and, therefore, this normal discourse will always be 'played upon' and the subject of unwelcome challenge.

One of the failures of modernism has been the work organisation and it is with this that I am concerned. A concomitant failure is the ahistorical method of explaining what is wrong with these organisations. The Foucauldian project of an archaeology/genealogy of knowledge, of which discourse forms a central part, overcomes this problem. Within the post-modernist canon there can be no absolute correspondence between language and event, particularly with regard to history. Foucault conceptualised this as the dichotomy between total history and general history, where the former is the (doomed) attempt to re-present history as a continuous flow of rationally connected and rationally explainable past events, and the latter re-presents history as being fundamentally discontinous, and having a structurating relationship with the present.(8,9) In general history, historical understanding is focussed in terms of a particular problematic. By focussing on history in such a way, general history emphasises the relative and partial character of historic, indeed any, knowledge and highlights the interests of the inquirer, thus reflecting the normal conditions under which knowledge is created, but which are usually unstated and unrecognised within the dominant scientific method. In this paper I want to look at the development of co-operation and co-operativism as a viable alternative, and direct challenge, to conventional organisations, using a historical perspective within the tradition outlined so far.

INDUSTRIALISATION AND INDIVIDUALISM

Because of the binary nature of language, no concept has meaning without an awareness of its opposite, or, in other words, what something is is defined by what it is not. This characteristic is reflected in any theorising about

organisations which does not attempt to present itself as a positive truth. Thus, Burrell and Morgan(10) note what they call key dimensions of alternative (organisational) realities in terms of a series of dichotomies, such as productivity v. conviviality, technocratic consciousness v. romanticism, classicism v. romanticism, work v. craft, creativity, interaction, etc. (The gemeinschaft/gesellschaft dichotomy of Tonnies is also very pertinent.) At another level of analysis, Krauss(11) cites, for example, property rights v. personal rights, technical requirements v. human rights, competition v. co-operation, violence v. sexuality, concentration v. distribution, means v. ends, and so on. Clearly, radically different perceptions are represented by these dichotomies. Yet each of these perceptions can be related to the problem of individualism. The concept of individualism is a contested one(12), in that it has two distinct and dialectical meanings, "the divided and the undivided".(13,p.718)

Dumont(14), for example, distinguishes between the empirical individual subject and the independent, autonomous and, therefore, intrinsically non-social person. In the first case, the ideal of the individual derives from social organisation with respect to ends (ie., society is the end), and, in the second, society's ends are deemed to coincide with those of each individual (ie., society is the means). In modernism the second case is prioritised over the first, and individualism has come to represent the autonomy of the individual, the (illusion of the) individual's separateness from other individuals and the privileging of individual needs over those of society - classic utilitarianism. The perception of the opposite case is one of society made up of non-individuals, whereas the proper antithesis is a society in which individuals, while retaining their unique individuality, co-operate for the benefit of society as a whole. The second case is that of individualistic capitalism, and represents the

first term in each of the above antinomies. They are antithetical to the very idea of co-operation.

Ionescu(15) has commented that (within capitalist societies) individualism and what he calls ideological politics are simply incompatible, since the utilitarianism which characterises modern existence defines happiness in material terms, and thus morality and virtue become re-defined in terms of individual achievement. The social content of morality becomes subservient to individual needs. It is only in terms of the first sense of individualism cited above that general social benefit can be derived as commensurate with individual benefit - indeed, as being a structuring relationship. The justification of individualistic capitalism is rooted in welfare economics. Its modern corrollary is the phenomenon of corporatism, whereby business values, ethics and needs are transmuted into a social form, and social concepts such as morality become defined in terms of how well they serve business standards. We, as individuals, are expected to adopt/adapt the standards and values of business, and our society, and its institutions, such as schools and hospitals, is expected to perform by the criteria of successful business organisations, (see, for example, Lyotard's concept of performativity(16)). Business organisations, as the mechanisms for creating social wealth and the repository of social values, are clearly, by these tokens, of primary significance to the whole of society - if business declines, so does the social.

The crucible of modern capitalism and modern organisational forms was the Industrial Revolution. Indeed, the context in which this period was revolutionary was precisely that of work organisation. Despite the predilection for seeing the revolutionary impetus as technological change, it is, rather, the case that, without the temporally prior changes in forms of work organisation, such technological change would hardly

have been possible. In any case, the technological change of the period was a process continuous with preceding and following periods(17,18), and thus did not even represent the discontinuous quality that the word revolution implies. Furthermore, machinery cannot in itself provide an impetus to anything at all, it is the purpose to which it is put which is significant - its praxis. It has been cogently argued(19) that the purpose for which a solution was needed was the perceived need of the capitalist to gain control of both product and process in the manufacturing cycle, and this was fundamentally achieved by the development of the factory. The evidence shows that embryonic factories existed in some industries long before appropriate machinery was developed.(20,21,22) Prior to the establishment of factories, technological development was remarkably slow - it was not until machines were designed to be put into factories, rather than simply to perform a particular task, that the real changes in technology began to evolve. The problem of control of the production process was primarily an organisational problem, to which mechanisation was only part of the answer, and a relatively late one at that. It was a problem which was most truly served by the development of the factory as it represented a system of production and a symbolisation of the socio-economic relationship between worker and employer. Amid all the minute differentiations from industry to industry, and area to area, the common factor is the fundamental and dramatic re-organisation of work, resulting, probably without exception, in the social, political, economic and symbolic domination of worker by employer.

The Industrial Revolution also represented the apotheosis of the principles evolved during the Enlightenment, which were thenceforward, as modernism, to become the foundations of the dominant rationality, and which in themselves provided the grounds whereby any critique or challenge to them could be dismissed as irrational - and which the claims to

transcendence for technology also ably serve by adding substance to the predominance of the metaphor of the machine so incontinently applied to all aspects of social existence in general and work organisation in particular. The prioritisation of formal logic, its separation from its sub-systemic role in Aristotelian logic and the consequent down-grading of the logic of argumentation (rhetoric), which form highlights and celebrates both the relativity and the praxis-orientation of all theory - (later to re-emerge as the new rhetoric, a component force in post-modernism(23)) - opportunistically served the need of the powerful to mask their interests, and the fact that it was their interests which were primarily served, by presenting them as formally rational. For formal logic demands that all propositions have only one correct solution, which, when translated from the mechanical and tautological arenas in which it might be appropriate to the essentially qualitative arena of socio-economic power, becomes the instrumental rationality of 'the one best way', and, by implication, represents the demands of a particular form of order. Formal logic being morally neutral, in its social guise it therefore claims to be non-ideological, at the same time classifying all other logics as ideological - though, of course, outside its own narrow remit, the prioritisation of formal logic is no more or less ideological (ideo-logical) than any other logic, as rooted in value and interest as any other belief.

Together with the ramifications on social existence that the claimed transcendence of such an inappropriate metatheory has, the ramifications on social theory are equally debilitating, with the domination of scientific method and its corrollerative funtionalism consistently failing to ameliorate social conditions, but remaining entrenched despite the thorough-going critique of their applicability. Yet another aspect of all this is the celebration of the idea of progress, but progress defined in a mechanistic and singular way,

equated with the outputs of science without regard to general utility, as an end in itself. Ironically, this is one of the respects in which modernism is perceived, even by some modernists, to have failed. For when science, natural or social, fails to serve the general social good there must be some re-assessment of the criteria which it sets for itself, including its ontological, epistemological and methodological assumptions. Nowhere is this failure more obvious than in the area of work and its organisation.

ORGANISATION

However, the relationship between organisation and science is an essentially structurating one. Organisations, as social arrangements for the synergetic utilisation of the world's resources and the production of social wealth, are simply a special case of the activity of organisation itself. It can be argued that organisation is the primary ontological activity, the sine qua non of knowledge itself. In other words, the process of creating knowledge is essentially dependent upon the faculty of organisation, and the primary instance of organisation is language, without which there is no social existence(24). This ontological process of organisation is a necessary human activity, of which the constitution of formal organisations can be seen as a derivative, but different, activity, in that, traditionally, it rests on the acquisition of power.

What is intrinsic to organisation is the activity of bounding, of differentiation. Differentiation is the selection of a signifier (and a signified) from a homogenous background and the privileging of what is differentiated as having significance and meaning. It is, essentially, to bound something, to separate it from what it is not. But, because of the binary nature of language, what is differentiated and prioritised is dependent for its meaning on what it is not,

and thus the process of bounding is not the creation of a limit, a finite ground which isolates and contains that which is prioritised, but the creation of a ratio, the symbolisation of the process of interaction and mediation by which, on the one hand, the differentiated acquires its meaning and, on the other, it is recognisable as a prioritisation. (Rationalisation has, in the past, signified the process of making rational, of legitimation, but, according to the principle of ratios, what is unprivileged must be equally rational.) Boundaries both separate and join.(25,26) Boundaries are not limits but permeable median terms linking what is with what it is not, and which represent the act of differentiation itself, the act of organisation. This act of differentiation is an evaluation, a value judgement, simply because of the intrinsic homogeneity of the ground from which the prioritised is selected - it is deciding the undecidable.(27) It is an utterly inevitable human activity, but it is important to emphasise that the results of prioritisation are the effect of choice, not of some imperative based in nature. When a sign is prioritised its signification represents a (paradigmatic) selection from many possible significations, and, because of the impossibility of boundary closure, all possible significations remain available but are merely unprivileged. To prioritise a particular meaning is not, as formal logic implies, to make that meaning 'truth', it is simply to unprivilege other possibilities. This organisational act does not create transcendent rationality, it does not signify the only tenable, rational possibility, it is a choice, fundamentally rooted in what Habermas calls knowledge constitutive interests(28), a preference based on some, usually hidden, purpose which is to be served.

An example of the ramifications of this process on the social world can be seen in the prioritising of the economic over the social, the result of a modernist predilection for acquiring

categories of thought which apparently allow (global) comparison, system, determination, quantification. The social is indeterminate, qualitative and culturally specific. But without the social there would be no economic, and the elevation of the economic to the status of supremacy is just a way of thinking, a value preference which, no matter how many espouse it, cannot be objectively justified or legitimated. Without implying an originary realm, it can be simplistically suggested that all things affecting human existence flow from the social, and flow back to it - the social is the forum within which all other things have meaning. Thus we can say that the economic should serve the social, not vice versa. The economic is a sub-system of the social - if the characteristic element of the economic can be roughly described as a quantitative, materially based concept of order, whereas the characterising element of the social is a qualitative, sensually based concept of order, then to prioritise quantitative order (sub-system characteristic) over qualitative order (system characteristic) is only to be expected to product the dysfunctional effects that are indeed produced.(29)

Since the organisation of work is a particular case based on this more fundamental sense of organisation, the same process is replicated, both in the design and structure of organisations, and in the rationale which informs that process. And, equally, the claim for transcendent rationality, for the one best way , which underlies the persistance and predominance of a particular form of work organisation - bureaucratic, hierarchical - is the prioritisation of one form over many possible forms. It is a prioritisation upheld by power, chosen/differentiated by those who have the power to enforce their view of the world. It is sensible and rational only in terms of how well it serves certain purposes and, because those purposes are fundamentally evaluative and ideological - as are all purposes(30), it could

not be expected that these values and purposes are freely held by all people. But the power of 'the one best way' is precisely that it claims to have only 'rational' purposes, to be morally neutral, and so the interests which are so served are masked.(31) But, because this organisational form is a prioritisation, it follows that other possibilities are simply unprivileged. It is not the case that there is only one way to organise, merely that one way is selected from amongst a myriad of possibilities. When such a prioritisation takes place it does not make what is prioritised a truth, or an ultimate reality, with all other possible significations for the concept of a work organisation unreal. Those other significations still exist, they are simply lines of development not followed, decisions not taken, possibilities not explored. At any point where a change takes place a discontinuity is created, an 'aporia', signifying those alternatives which might equally have been chosen.

It might be suggested that, if organisation is the ontological activity which I have indicated, could it not, therefore, be seen as in some way representing the fundamental, even unconscious, desires of people who participate in the system which is then created? Yet to accept this view it would be necessary to accept that each person is equally free to express such desires, given the Freudian caveat that some repression of the instincts is necessary for the existence of civilised society. It would be necessary then to ignore the existence of repression beyond that level(32,33), of the sense of powerlessness which so many people express, and of the empirically observable deprivation which many people suffer so that this form of work organisation may persist (or at least to assume of this last that it is what people want). Within the terms of the post-modernist interrogation of the concept of rationality, it can be suggested that the notion that people always consciously act towards some goal, perceived or actual, is a myth, a post facto rationalisation. Those acts

which have the greatest force are those performed by actors with the greatest power to enforce them. It might also be claimed that the desire of some people is to be led, even to be repressed, while that of others is to lead. Deleuze and Guattari(34) have characterised the existence of such a desire as rooted in the inculcation of desire for the productions of capitalism and as a fundamental conflict between desire and interest.(35) Such an analysis would indicate that any justification of the predominant organisational form on these grounds would rest on a pathology, which would cast considerable doubt upon the legitimacy of such an explanation. Thus, whilst it may, indeed, be suggested that the ontological character of organising may reflect the deepest desires of individuals, it cannot be argued that this is a true reflection of everyone's deepest desires, but more a reflection of the desires of those who have the power to prioritise thir definition of reality.

ORDER

That organisation has this ontological character, and is thus a universal activity, does seem to reflect a ubiquitous need for order - though not every definition of order is equally accepted. Within the rationality of the one best way this desire for order becomes a central focus, a motivating spirit. In this form, the apparently inexorable compulsion to create/discover order is a search for universal principles, for a quantifiable simplification of the complexity that assails us. But is it possible? Are there not always 'exceptions', dis-orders, discontinuities? To state it thus is to emphasise the negative attributes normatively ascribed to such events. But if we accept the position that each and every concept is defined by, and contains, its opposite, this negativity must be dispensed with. Disorders and discontinuities are intrinsic to any rationality, and give it the energy to be thought.(36,37) But the impact of the search

for universality and determinacy has profound implications for society and the individual, and the mutual forces which bind and envelop them.

The most basic impact in the post-World War II era, especially in the Western world, has been the establishment of the bureaucratic organisation as the paradigmatic model for the whole of society.(38) From this has emanated the further establishment of the role of the manager as the prime organiser in social life, the most powerful, the most important, the most exemplary.(eg.,39) Two particular effects of this can be indicated which are relevant in this context. The first is the already noted increasing domination of all social life by corporate values and (a)morality. The second is the corrollerative prioritisation of performance and what has been termed by Lyotard 'performativity'. This concept can be related in socio-psychological terms to Marcuse's adaptation of Freud's Reality Principle into the Performance Principle, which Marcuse sees as dominating modern industrial society and as a stuctural characteristic in technocratic rationality.(40) Briefly, the Reality Principle is repression of the instincts necessary for co-existence in civilised society, whose essential characteristic is that it is geared to a rationality externally imposed on the individual; the Performance Principle is the same principle extended to the social level, where the structural mechanism is competitive economic performance. Lyotard(41) argues that performativity is so pervasive that it incorporates rationality itself, so that rationality becomes subserviant to it, ie., rationality is defined as that which achieves 'performance'. Performativity legitimates competitive behaviour in the pursuit of corporate values, translated into social values, over and above any other normative considerations - values such as justice, equality, co-operation, etc., are legitimate only in so far as they contribute to the goals of production. The ability to succeed, and success itself, become defined in

terms of how well a system achieves production. In order to be able to do this, predictability becomes of paramount importance - success for any system is commensurate with its ability to control its environment, internally and externally, by reducing complexity.(42) And predictability pre-supposes order.

The function of order at any level is to reduce uncertainty. But does it? Heisenberg's Uncertainty Principle gives the lie to this, from the micro-physical level. Arguably, this reduction of uncertainty is only apparent, and this applies at both abstract and concrete levels. In any case, to make such a statement is to say nothing about the content of any such order - to define it exclusively in terms of formal logic, scientific method, technocratic rationality, is a privileging. Equally, to make that statement does not necessarily imply that people in general have a low tolerance of ambiguity. Certainly, the proliferating variety in our environment means that we must make some reduction of uncertainty for psychological comfort(43) - though, again, this does not in itself imply the nature of such order - but, in the interests of those who define our dominant rationality, we are socialised from the cradle to believe that not just order is important, but a particular type of order. Because of the structurating relationship between society generally and its work organisations, the bureaucratic, hierarchical order of the latter, on the one hand, enhances acceptance of order in the former, whilst, at the same time, reproducing it, so that other forms of order are not seen as genuinely possible. If this particular type of order is so effective at inducing psychological comfort, what are we to make of the enormous quantity of evidence which suggests that people at work suffer from high levels of dissatisfaction, powerlessness (perceived and actual), alienation, anomie and repression? Surely these are psychologically very discomforting? If these are genuine psycho-social reactions to order, then even the most benign

utilitarianism must find it hard to justify the continued existence of a system of work organisation which persistently produces them. Certainly, they cannot be justified in terms of a social philosophy whose concern is the general social good, or even the fulfillment of the heartfelt desires of the majority. Much management theory, if not virtually all, since the Human Relations School, has recognised that people at work desire to be involved in the control of their own lives.

It has been argued that the changes which took place during the Industrial Revolution can be characterised as organisational changes, both in general and in particular. This is not to deny the detailed characteristics of such change, but is to argue that the technological, commercial, social, legal, even demographic, changes of this, and, indeed, any other period, are structurating but subsidiary factors in organisational change. The Industrial Revolution as a period is apparently characterised by the exponential rate of change which took place, yet this is really not so different from the contemporary period. The levels of hardship issuing from these changes seem awful to us now, but is this not a perception of history, ie., something we mistakenly see as separate from us now? The hardships that are suffered now are no less awful - the comparison is one of relative degrees of deprivation, not absolute difference. During the Industrial Revolution and the growth of industrialism in the nineteenth century, working people lost control over their practical existence. The legacy of that is that today people have lost social and psychological control over their existence as well. But the desire to regain that control has never faded - it has been repressed but it has not been killed. Community organisations and co-operatives provide a real opportunity whereby these desires can potentially be fulfilled.

In the climate of technocratic rationality it is hardly surprising that community organisations in general, and co-operatives in particular, tend to be regarded as peripheral, even trivial, organisations. Of course, they have attracted some attention and even some funding, on the basis that they are a means whereby those who are suffering from the dysfunctions of the system may re-integrate themselves into it. Co-operatives are not regarded as <u>real</u> organisations and co-operators are not <u>really</u> workers - they are seen to represent no more than a temporary solution to transient problems which will all disappear when we have finally discovered the universal principles which will provide us with the utlimate order, and whose discovery is always just around the corner. So while it is precisely this assumption that people can be re-adjusted to the system which characterises, and justifies, the focus, such as it is, on co-operatives, the fact that they represent fundamentally different principles of organising and producing, of co-existence itself, renders them, on the other hand, unworthy of serious attention. Yet it is this very characteristic which makes them so important. The distinctly patronising trivialisation of co-operatives is a symptom, yet again, of the prioritisation of established order over that which does not extol the same precepts, values and goals and which, thereby, is dis-orderly. It is because of this very 'dis-orderliness' that co-operatives once again represent a real challenge to the established system.

<u>CO-OPERATIVES</u>

It has previously been suggested that any concept is defined by what it is not. In any period of change where one particular definition of reality is dramatically developed and extended, and becomes dominant, therefore, it must be expected that its antithesis, (that which by its opposition defines it), can also be found in the same period. The Industrial Revolution, which was the crucible of modern capitalism and modern bureaucratic forms of organisation, also marks the

development of co-operativism. Of course, co-operatives, in some form, have a much longer history than this, as do the forces which produced modern capitalism, but prior to the Industrial Revolution it is arguable that the spirit of co-operation was more thoroughly integrated into social existence. In order to be able to bound something, it must be possible to differentiate it from its background. The profound differentiation and fragmentation of the social which attended the Industrial Revolution highlighted the integration which was, by then, lost. (I do not mean to imply that life prior to the Industrial Revolution was particularly rosy, simply that it was very different.) The processes of mechanisation, industrialisation, factorysation, urbanisation all combined to produce a situation which, however beneficial to the capitalist, for the worker was characterised by fragmentation of community, deprivation, degradation.(eg.,44) Forced into factories for material survival(45), working long hours inside, housed in jerry-built dwellings without a plot on which food might be grown, the worker had no other means of survival than to sell his/her labour, in an over-crowded labour market. Labour was the only surplus commodity over which the worker had any degree of control, and that control was severely circumscribed, not just by circumstances, but also by law. Not only that, but the infamous truck system, whereby people were paid in kind or in the form of tokens to be spent at a shop owned by the employer, (a system not fully remedied in the U.K. until 1940(46)), laid waste what spending power there was. Small wonder that some workers sought another, alternative, form of work organisation.

That working people saw co-operatives not just as an alternative means of survival, but as a fundamental challenge to the re-organised and re-inforced status quo can be demonstrated by a glance at some of the founding statements which were made. Thus Thompson(47) quotes the weavers' co-operative established at Ripponden in 1833, which stated

> "First - that labour is the source of all wealth; consequently the working classes have created all wealth.
> Secondly - that the working classes, although the producers of wealth, instead of being the richest, are the poorest of the community; hence, they cannot be receiving a just recompense for their labour."
> (p.873)

The statement goes on to suggest that the society's objectives should be the mutual protection of all members against poverty and the attainment of independence through common capital, to be achieved by a weekly subscription into a common fund whose capital should be employed in trade and the employment of the members, and that the members should live in community with each other on principles of "mutual co-operation, united possessions, equality of exertions, and of the means of enjoyment."(48) Examples of contemporary tracts (eg.,49) show similar ideas.

By 1832 there were 500 co-operatives with some 20,000 members. Many of these were short-lived, but throughout the next decades co-operatives were increasingly seen as an important and viable alternative. Institutions such as the Equitable Labour Exchanges of Birmingham and London were understandably popular, because they negated the over-all trend towards monetary exchange in which working people were largely denied active participation. But they had obvious problems. Based on a forum for the exchange of surplus products of labour, some workers were excluded from participation simply because their labour did not result in a comparable end product, eg., shipwrights, miners, etc., and, as workers increasingly lost control over product and process of production, more and more were excluded. The move to co-operatives based on trade, of which the Rochdale Pioneers (1844) was the most famous example, broadened the scope of co-operativism and competed against capitalism on its own ground, (though it must be added

that the co-operative shops were not themselves usually non-hierarchical organisations). Yet work organisations based on co-operative principles persist and, in conjunction with mediating organisations such as co-operative shops, can be seen to represent the basic principles of a system of production and consumption which negates the claim to transcendent rationality of the dominant one. It is worth noting that, for example, Thompson(50) argues that the co-operative movement had an inestimably important role in the establishment of class consciousness, which, it might be suggested, can be seen as a socio-political form of the awareness of difference, a differentiation based on a recognition of common interest and co-operation within that boundary.

The co-operative movement has had a very chequered history. The fact that the trades union movement finds many of its roots in it indicates some of the issues involved. Whilst recognisably founded on principles of co-operation, trades unions also represented a basis for, on the one hand, a movement for change within the system and, on the other, an opposition to the over-arching domination of capitalist rationality as a whole. Indicatively, the substantial and important pressure for change within the system, often spear-headed by essentially middle class radicals such as Fielden(51) and Ruskin(52), was profoundly influenced by the philosophy of Robert Owen, whose 'experiments' with work organisation showed that, contrary to the popular belief of the time amongst many manufacturers, productivity could actually be improved by ensuring better conditions for the workforce. At the same time Owen was a party to the provision of a foundational philosophy of co-operativism. Owen's efforts can be seen as the early base for two widely disparate trends in the organisation of work, the belief in the value of co-operation based on equality amongst the participants and the belief in the value of co-operation based on hierarchy,

providing good working conditions in order to incorporate workers into acceptance of organisational/managerial goals. The continuous existence of co-operativism based on equality poses a serious threat to acceptance of the hierarchical system. But incorporation of the concept of co-operation by the latter also poses a boundary dilemma for the former - should it operate as a challenge within the enfolding rationality of capitalism and risk incorporation, or should it try to opt out of that system entirely, thereby risking marginalisation because of the predominance of what it opposes? Mumford's(53) typology of alternative philosophies as utopias of escape, which are negative, and utopias of reconstruction, which are positive, neatly encapsulates the issues. It is ironic that the various significations of the concepts of co-operation and co-operativism should ever succeed in placing the two in opposition to each other, but this has been the case. And a normative signification of one always seems to place it in direct contrast to a practical signification of the other - evidence of the problems of developing such significations within the terms of an opposing dominant rationality. Only by achieving an undominated signification can there be hope of uniting theory and practice, without risking serious weakening of the concept itself.

The tensions generated by this issue can be seen as demonstrated by the cycles of success and failure which the co-operative movement has experienced. In the latter part of the nineteenth century the effect of the philosophies of co-operation began to establish an awareness of the existence of genuine alternatives to the status quo. The blatantly oppositional attitudes of the powerful, having failed to eliminate this awareness, began to be moderated. Foster(54) argues that the hidden agenda of the rapidly increasing liberalism of the period was, ultimately, to incorporate the working class to the status quo, thus isolating radicalism -

whilst working conditions did improve, their underlying effect was the internalisation of the hegemony of capitalism through paternalism. The early co-operative movement went into decline under the reinforcement and dissemination of the ideals of individualistic capitalism. Yet it has continuously re-emerged, sometimes in other guises, such as the guild socialism of the 1920's(55), and, more recently, as a new movement based on co-operativism.

The modern phenomenon of co-operativism is just as diverse, if not even more so, as its predecessors. In part this is because many forms of work organisation are given the name of co-operative which do not in fact represent the ideals of co-operation in the fullest sense. Watkins(56) enumerates six principles common to all forms of co-operative - association (or unity), economy, equality, democracy, liberty and education. He stresses that all these principles derive from both theoretical and practical sources, but particularly that they are all fundamentally ethical. Yet in this exposition the moral quality of co-operativism is not altogether explicit. Alternatively, Melnyk(57) argues that the appellation of co-operative implies three characteristics, working together, living together and owning together. For Melnyk the ultimate success of a co-operative enterprise is the extension of its principles to the community as a whole - what he calls social co-operativism. Adizes(58), too, places particular emphasis on the relationship of the work organisation to the wider society, and the ultimate objective of changing that society and its values - he argues that this factor must have a high priority in the organisation. In this sense, co-operation and co-operativism are intrinsically praxis-oriented.

It is, however, possible to distinguish co-operatives on the basis of their most important characteristics in terms of co-operatives of ownership or co-operatives of management. In

the former case, whilst ownership may be shared, this does not carry any implications for the way the organisation is managed and they may indeed be conventional hierarchical organisations. But in the latter case a fundamentally different organisation of work is implied, with equal participation and equal control for all members. It is this type of co-operative which satisfies the conditions of genuine co-operativism and which represents the genuine alternative to conventional organisation of work, a way in which the individual's material, social and psychological needs can be met, in harmony with the needs of society as a whole.

The need to make such a distinction is demonstrated by the already noted diversity of work organisations which may be called co-operatives. Thus some management buy-outs have been characterised as co-operatives, though, as Oakeshott(59) comments, they are probably the least suited for such a name, particularly as the objective of such a buy-out is usually eventual quotation on the stock exchange. Equally, sometimes co-owned enterprises are called co-operatives. However, whilst a co-owned enterprise may satisfy the ownership criterion of co-operativism, it may not be, or intend to be, managed on principles of equal participation and control by all members. Thus employee buy-outs also do not necessarily conform to the ideals of co-operativism - they may seek to change the immediate conditions of work, not primarily to represent a radically different model to that of the established socio-economic system, but rather to increase the possibilities within that system. Whilst this is a positive contribution, and one that is becoming increasingly attractive to some owners and some employees alike, it is not co-operativism. However, many work organisations which intentionally follow the principles of co-operativism do exist, and the number is growing - in the U.K. in 1976 there were 27 such co-operatives, by 1986 there were 1,200, the largest employing over 500 people. Despite the impression

that these organisations are marginal, and the aura of eccentricity sometimes attributed to them, they clearly represent a significant productive element in contemporary society. They are no longer an unreal possibility.

CONCLUSION

In capitalist society the organisation of work is defined in terms of its suitability for satisfying the criteria of profit and efficiency, on the basis of hierarchy and status attaching to the function of control. It is assumed that profitability and efficiency generate social good. But the prime focus of capitalist organisations is the production of private property. Because of the objectives of capitalist organisations it is not possible that the generation of social good could be a major consideration - they can only contribute indirectly, through the market place: the community benefits only in so far as there is a market for what is produced. Furthermore, the social good that is generated in this way is, in effect, an average, a total amount about the distribution of which the philosophy of capitalism has little to say. Because of the dominance of capitalist rationality it is further assumed that this is the best, if not the only, way to achieve social good. And, indeed, if we only want the level of social good that has been achieved after nearly two centuries of modern capitalism, and if that level is considered to be sufficient to justify the social ills that attend its production, then this assumption must be correct. But if we consider that, in any sense, capitalist rationality can be seen as failing to achieve an acceptable level of social good, should we not question the assumption and thus consider whether there might be a better way to organise for the achievement of social good?

Clearly, co-operatives can contribute to social good in a more direct manner than capitalism, both at the level of the

immediate benefit of those who work in them, and, potentially, in society at large. Historically, co-operatives have been perceived in direct opposition to capitalism, as attempts to break the domination of worker by capitalist. Today it is different - co-operatives are set up because of the irrelevance of capitalism to the needs which are characteristic of modern society, both for those within its organisations and, more directly, externally to them, for those who are, in effect, rejected by the capitalist system. Capitalism has created these problems but is generically incapable of furnishing solutions. Co-operatives embody fundamentally different values to those espoused by the management of capitalist organisations - perhaps these values will prove more productive of social good than capitalist values have been able to be. The institutions of modernism, as the context in which capitalism has flourished, have failed by their own criteria - they have demonstrated that they are unable to produce the universal benefits that were promised. Thus modernism can be longer justify its absolute prioritisation. It is time to change the boundaries of what is considered to be legitimate and acceptable. Co-operative ventures are hamstrung by the necessity of operating within an essentially alien and antagonistic infrastructure. Perhaps it is now time for them to establish a space of their own in which to operate, and thus to create the opportunity for them to prove themselves by their praxis.

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SOME OBSERVATIONS ON MANAGEMENT IN SMALL WORKER CO-OPERATIVES

Andy CARLTON

Little formal research has been done to date on the organisational problems and peculiarities of very small, co-operatively owned, democratically run small businesses. This is perhaps because of their newness, perhaps because they are very varied and individual in character, and probably also because, like families, they are relatively opaque to outsiders, and resist easy understanding or interpretation.

What follows is a hasty, unresearched, incomplete, over-generalised and utterly subjective view of small co-ops. Its value will, I hope, be in giving some insight from the perspective of someone helping co-ops to tackle day-to-day problems of organisation and relationships, internal and external. My experience of small co-ops comes from two sources: as a founder-member of a building co-operative which varied in size between 3 and 8 people, and more recently as a development worker with a number of newly established co-ops and co-operative groups, the largest having 7 workers and the smallest only two.

At that kind of size, everything that happens in a co-op is a global event which affects everybody. It is difficult to separate out management and organisational factors from the many other threads operating in the co-op, such as interpersonal relationships, historical events, the external environment, social objectives, etc.

In a conventional company, hierarchical organisation produces various tiers of authority, status, responsibility, and financial rewards. At the bottom are unskilled workers, at the top, owners/directors. The function of management is normally embodied in particular individuals with particular

skills, called managers. This makes conventional companies easy to "read" both from within and without. None of this holds true in a typical small worker's co-operative. Authority is, in theory, distributed equally between all members, on either a one-person, one-vote system or by consensus decision-making, in which majority voting as a way of reaching a decision is seen as a last resort.

While authority over a particular area of operations may be allocated to an individual, co-ops very often have a commitment to skill-sharing and job-rotation, which can sometimes conflict with the clear allocation of responsibility. Collective working, a commitment to the ideal that everyone should be involved in all aspects of the business, can easily blur the distinctions between areas of responsibility. The idea of leadership is anathema to many co-operators, particularly those coming from an "alternative" background, and particularly in small co-ops. Therefore, the sort of empire-building that goes on in most organisations is actively opposed in many co-ops. This can be very productive, in terms of the equal involvement of all the workers in the future of the business, and it can tap into peoples' unused creativity, but it can also easily become a block to certain individuals who wish to make innovations or try things out. The commitment to democracy has many advantages, but it has the corresponding disadvantages in that it requires a great deal of time and effort by all workers to ensure that it really is democracy, that individuals feel they actually are in control.

Status, which normally accrues to people according to how much power they have, is not an overt characteristic of co-ops. This is partly because skill-sharing and job-rotation mean that status cannot be so easily identified with individuals. It is also because there is a commonly held ideological

commitment to the principle that all jobs have equal value. A restaurant needs clean toilets as well as edible food.

Power can accrue to individuals in co-ops in a number of ways, however. Power according to position is classically illustrated by the person who controls financial information. This is often an area which other co-op members find baffling and frightening, and power can be exercised by not communicating relevant, clearly explained financial information often enough. This is usually a negative form of control: "We can't afford it", but often too the co-op can find itself in financial difficulties because decisions are taken on the basis of inadequate information. Seniority, being a founder-member, length of membership, can confer power, if only in the form of control which states "We've always done it like this". If one member has more money invested in the co-op (or loaned to the co-op, as is the case normally) that person is seen as having more to lose, therefore their opinion will carry more weight. This can lead to over-cautiousness, and is strictly against co-operative principles.

Power of personality becomes very significant in a small organisation in which decisions are made by consensus. Differences in personal power, in terms of charm, articulacy, strength of opinion and forcefulness of character can very easily unbalance the delicate organism of co-operation. This can show itself in different ways. Factions can develop, even in tiny groups (one of the characteristic problems of the 3-person co-operative is the 2-person in-group and the outsider). Individuals may become alienated and leave the co-op, or, less dramatically, under-function within the co-op, causing tension and perhaps damaging trade. Or there may be a great deal of time spent on sorting out internal conflicts, to the detriment of productivity and general business activity and atmosphere. If a person does leave a co-op after a

conflict it can sap the energy and commitment of all the members in a quite dramatic, and sometimes long-lasting, way.

An opposite problem of co-ops is that the high level of commitment by workers to each other as friends and equals can make it difficult to handle certain problems, to do, for example, with an individual's technical competency or manner in dealing with people external to the co-op. Equally, internal discipline can be a genuine difficulty, particularly if the co-op has a very informal structure and way of working. The degree of formality in running meetings, communicating information to all workers, reaching decisions and allocating responsibility for carrying them out is a potential source of conflict for all co-ops, and increases in seriousness, from my own experience, the smaller the co-op. It becomes very difficult to structure the business of the co-op on a regular formal basis if there are only two people involved, yet the need is as great as in a larger co-op, possibly greater, because of the danger that the relationship between two people will structure the business according to the wrong priorities, or hidden priorities. But there is a natural resistance among workers, who have set up a co-op partly to provide themselves with a working environment which is more relaxed and congenial, to setting up formal structures for interaction between each other. Issues thus are dealt with on an ad hoc basis, and it is easy to side-step difficulties if they are large or intangible. If records are not kept, disagreement can easily arise over what has been decided and informality, which is seen as a way of avoiding conflict, can generate it. Informal decision-making can cause problems when a small co-op expands, as new members may feel excluded from the process of decision-making based on mutual understanding of an informal nature.

Co-op workers rarely see their co-op as casual employment, and taking on a new worker can be a major difficulty.

Responsibilities that have been held since the start-up of the business may have to be let go, and older members may be too critical of new ones making changes. The smaller the co-op, the more limited are the resources the business has to draw on, and each person has to have a larger proportion of the skills the business needs within themselves.

Conventional businesses are characterised by clear objectives: the production of goods or services at the maximum profit obtainable. These objectives are easily measurable. By contrast, co-ops are characterised by a whole host of competing and conflicting objectives. Examples are: the creation of stable employment for the workers, which rules out the possibility of laying people off or taking on casual workers as demand fluctuates; the provision of a high quality service to the community rather than the maximisation of profit; flexible working conditions; democratic control of the business; learning new skills; job satisfaction. These are policy decisions, but there is a grey area, since almost any management decision has policy implications, and at the worst every decision becomes a policy decision, giving infinite opportunities for conflict. The more conflicting objectives a company has, the harder it is to formulate policies which meet them all. A common example of this is the conflict between members earning a good wage and the co-op providing an inexpensive service or product, perhaps to people who might otherwise not be able to afford it. The 'alternative' ethos which many co-ops share does not really help in the long term as this is a real conflict of interest, which has split many co-ops down the middle, some never to recover.

Often social objectives of co-ops are in direct competition with the expectation of the potential customers. Thus organisations which are run by voluntary management committees may not want to pay the market price for a service, such as child-care or children's entertainment, or architectural

design, and the co-op providing the service is faced with the choice of not charging an economic price or not providing the service to groups they originally set up to help. Part of this is lack of a realistic market, part of it is resistance by consumers to paying the real price for a service, particularly if they can get it on a voluntary, although less professional, and reliable basis.

All of these problems are amenable to various forms of solution. Research is needed, and a build-up of published expertise and case-study material would help co-ops and other workers in the field. Training in all these areas needs to be made available, and counselling and advice is absolutely vital if the impressive start made by the co-operative movement is to continue and flourish. This training needs to be developed from practical experience of co-ops. There is no other way. One only really learns about co-ops by working in them and working with them. The co-operative movement is a self-generated grass-roots movement, and that is its huge strength. But, in order that each co-op does not have to re-invent the wheel, more work needs to be done on common problems.

The emphasis in a sketch such as this is necesarily on problems. But any attempt to understand these problems needs to be founded on an appreciation of the work which small co-operatives are doing to break down existing patterns and prejudices about how work should be organised and conducted, what it should achieve socially and how it should be structured politically and economically.

The problems worker co-ops encounter come directly out of the manifold objectives they have set themselves. The problems are directly proportional to the difficulty of the tasks. This should be born in mind in order not to take away a negative impression of their success, which in reality is considerable and increasing.

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THE COMMUNITY OPERATIONAL RESEARCH (OR) NETWORK

Nigel MASON

The debates over the last year on the philosophy and practice of Community OR have stimulated much interest amongst OR workers.

The motives behind this interest vary enormously. Some are keen to pioneer the use of softer problem-solving methodologies in new contexts, in small groups with multiple objectives, scarce resources and vaguely defined structures. Others are stimulated by the special challenges of forging a client-consultant relationship when the client has no perception of OR and the consultant has no pre-ordained legitimate status. And many simply see new scope for using their professionally-acquired skills in a group with whom they strongly identify but whom they had not previously considered to be a customer.

The renewed interest has also revealed a large number of OR practitioners already engaged in Community OR work in all but name, often in a voluntary capacity, and often with minimal support. With no common identity for Community OR workers, and the feeling of isolation that results, only the most committed and tenacious OR workers have been persevering against the odds to break new ground for OR. How much more could be achieved if there were a simple means for people to talk to others who had worked in a similar field, or who had encountered similar problems, or who were simply available to help out?

The most significant initiatives so far in this renaissance are the establishment of a 'Community OR Unit' at Northern College in Barnsley and the 'Centre for Community OR' at Hull University, both part-funded by the OR Society. These will be

focal points for Community OR work in the UK. They will complement the existing activities of several universities whose research programmes already include work with non-corporate bodies, although not necessarily under the Community OR banner. In fact, only when institutions came to make bids to the OR Society for the proposed Unit did the full extent of this work come to light. These developments are very welcome and encouraging, but inevitably they will be somewhat selective in their coverage of work, by virtue of their politics, historical research emphasis or geographical location.

The rationale for the Community OR Network can be found in all these issues. Something was needed quickly to harness the renewed interest in Community OR before it faded away. Something was needed to give support and an identity to existing Community OR workers. And something was needed that would not be constrained in its coverage or definition of Community OR.

Like the Unit and Centre whose work it will complement, the Network is being set up in the belief that OR can serve decision-makers of all types. Participation with new client groups will broaden the appeal of OR, equip OR workers with new skills and methodologies, and provide them with the confidence to tackle a wider range of problems.

The Network will operate on three levels: it will be a membership body, a clearing house and a source of case material for research.

At its simplest level, the Network is a collection of individuals with a shared interest in developing the concept of Community OR by action research. Some of these individuals are already involved in Community OR, full-time through their work in a dedicated consulting practice, part-time through the

research efforts of their academic department, or spare-time through their own voluntary endeavours. Others are new to the notion of Community OR but may feel more confident to make a contribution in the knowledge that support is now available.

Even before the Network is formally established, and without the benefit of any marketable track record, some 50 people, from throughout the UK and from all walks of professional life, have registered their interest in joining.

At a second (more active) level, the Network is a clearing house for matching willing OR workers with receptive client groups. The Network has at its centre a Co-ordinator who will maintain a register of members' experience, interests and availability for project work. The register will distinguish between members who consider themselves proficient to work alone or to guide a less experienced practitioner, and members who would prefer not to take a lead role. The register will also catalogue the experience of Network members with problem types, client groups and techniques, so if at any time support is needed in a particular geographical area or in a particular technical subject, then a referral can be made. In its early stages, most project work is likely to be generated in-house from the contacts of Network members. In time, the Network will assume an active role in promoting OR and soliciting work.

One "top-down" way in which the Network will generate new project work is by establishing contact with corresponding national federations of community groups, such as the National Council for Voluntary Organisations. Many of these federations maintain their own registers of sources of advice for their members.

At a third level, through publicising its case-load and holding meetings and events, the Network will help to enhance

OR itself. Its contribution will focus on both methodological and practical consultancy considerations.

The methodologies used in the Network are likely to be open, democratic and participative. They are likely to involve clients in constructing pictures of their own problems, breaking them down into manageable pieces, and focusing on the critical areas. They will need to recognise the existence of conflict and be capable of reconciling divergent objectives. Already, OR can call upon a sizeable collection of appropriate tools, like Checkland's Soft Systems Methodology(1), Eden's Cognitive Mapping(2), Beer's Cybernetics(3), Ackoff's Interactive Planning(4) and Friend's Strategic Choice(5). But what an intimidating array of jargon! Nothing is more likely to sound less relevant to a community client's needs. Community OR will have to work hard at packaging and presenting the services on offer in an accessible and enticing way.

The Network will also be tackling issues at the heart of the client/consultant relationship - issues that are as crucial to successful OR in the multinational corporation as they are in the local community group. A host of questions will be raised. How should the consultant introduce the idea of OR to a client who has no preconceptions of OR and no appreciation of the relevance of problem-based advisory skills. How should an "outsider" win the confidence of a closely-knit group of highly entrepreneurial individuals whose whole raison d'etre might be to tackle problems which the "establishment", whether it be government or business, is unable or unwilling to tackle. How should the client/consultant relationship be nurtured? Charging for professional services not only secures the clients commitment but also ensures that the consultant performs to a satisfactory standard. But if charging is not possible, then some alternative form of contract will probably need to be agreed. Can Community OR ever become economically

self-sufficient, or must it always be subsidised by cash or by altruism? How should the politics of the client organisation be handled? Just as in large organisations, a client's views or actions may be influenced as much by the pursuit of power, self-esteem and personal ambition as by a willingness to serve the organisation. How should the client/consultant relationship be closed? Unlike in conventional OR, where the in-house OR group has a good claim on new problems as they arise in the organisation, or where the external consulting group has its eye on the next assignment, both the Community OR client and the Community OR worker will want to see the relationship end within an agreed time period, with no lingering dependence on the outsider but with some tangible and renewable benefit to the client. The Community OR Network will confront all these issues, giving its members an opportunity to share experiences, develop political and social skills, and acquire versatility and flexibility in their consulting styles.

In these respects, OR could learn a great deal from the experiences of other "professions" such as accountants, lawyers, planners and architects whose clients have not been restricted to government and big business. It is true that, in all these areas, the community client may have some underlying statutory requirement for the professionals' services, whether it be a financial audit, or representation in a court case, or a planning application. But other types of consultant such as marketing specialists and small business counsellors have not been deterred by the lack of any obligatory requirement for their services. These consultants have packaged and labelled their skills in a way which makes their value quite obvious, and where necessary, have sought subsidies for their work which they argue is as worthy of society's support as agriculture, the arts or the elderly. Independent groups such as the Marketing Resource Centre and Popular Polling were set up to satisfy, and in part to

stimulate, the demand for market research and marketing skills in co-operatives and community groups. The government's Manpower Services Commission and the private sector-funded Project Livewire scheme pay for concentrated bursts of consultancy support to small businesses, particularly in the areas of new product development. Meanwhile, OR remains the exclusive preserve a few large, rich organisations.

Community OR is very much in the eye of the beholder. Debates about "What is OR ?" have raged since the term was first coined 50 years ago, and are only likely to be fuelled by a further diversification into these relatively uncharted areas. But what exactly do we mean by the nebulous term "Community"? Does this rule out national organisations, or groups with hard-nosed commercial as well as social objectives, or well-organised and comparatively well-resourced clients such as trade unions? The Network will unashamedly dodge all these difficult questions by refusing as far as possible to get embroiled in definitional disputes. Instead, the Network will be the sum of the activities of its individual members, who can make up their own minds about whether or not they are happy to label their activities with that term.

It's still very early days, but the enthusiasm and potential for good work is definitely there. If you are interested in joining the Network, please don't hesitate to get in touch with:

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DOING OPERATIONAL RESEARCH WITH THE COMMUNITY

Colin THUNHURST

INTRODUCTION

The early months of 1988 will see the launch of a Community Operational Research Unit to be located at the Northern College, near Barnsley in the North Midlands of England. The Unit will be half-funded by the Operational Research Society of the U.K. It will have two full-time workers and will be supported by staff from the Northern College and by Operational Research specialists from the Department of Applied Statistics and Operational Research at the Sheffield City Polytechnic.

Interest in Community Operational Research has been re-galvinised, and the Community Operational Research Unit initiative launched, following the election of Jonathan Rosenhead as President of the Operational Research Society. Jonathan Rosenhead made the extension of the client-base for OR a central plank of his election platform. But the roots of the initiative lie much deeper.

Critical analysis of the partial and limited role of operational research began to emerge in the early 1970's(1,2,3). Out of this critique emerged a call for a new outward looking radical operational research - called, at that time, critical operational research.

The call was limited in its immediate translation to concrete activity. But, coincidentally or consequentially, a new clientele did slowly start to emerge. (This is illustrated by other contributions included here). In the main, though, the new initiatives have tended to focus on assisting voluntary groups working in the community. The relationship with the

community has been one-step removed, mediated by the successful or unsuccessful operation of the voluntary group. The Community Operational Research Unit, exploiting the unique relationship enjoyed by the Northern College, will work directly with the community groups themselves. This will inevitably present challenges and opportunities of a new order.

THE NORTHERN COLLEGE

The Northern College is a residential adult educational college. It was established in 1977. Its creation and continued existence owe much to the support, financial and otherwise, that it has received from proximate local authorities and from parts of the national trade union movement. It runs three two-year long courses on Social and Community Studies, Trade Union and Industrial Studies, and Liberal and Gateway Studies, which aim to provide mature students, most of whom have been away from the formal education system for many years, with 'second chance' educational opportunities.

Running alongside and educationally integrated with the College's long course programme is an extensive programme of short courses. These courses run from a weekend to a series of four or five linked weeks. In a typical year as many as 1500 students will pass through the College on a short course of one sort or another.

A large number of the College's short course students come as individuals. From a background of workplace or community involvement, they will be seeking to widen the knowledge base or develop the practical skills that will enhance their contribution within that environment. The educational bug often bites; and significant numbers will subsequently, often via the medium of the College's long course programme, come to

pursue a further or higher educational programme in a Polytechnic or University.

But the College also specialises in group development. Rather than as individuals, students will enter the College as a management committee, a steering committee or merely as a group of activists within their local tenants association, unemployment centre, womens group, community health group, history group, writers group, etc. Whilst in the College, they will pursue a course of study designed specifically around their particular group needs, moulded by them together with one of the College's short course organisers working 'in the field'.

It is this aspect of the College's work that provides unique opportunities for community operational research. Whether entering the College in response to a specifically identified problem situation or merely as part of a more routine review of their operation and effectiveness, community groups will find themselves grappling with problems of uncertainty and complexity bearing very similar general characteristics to those found in OR's more conventional setting in industry, business, commerce, or the public sector.

THE DISTINCTIVE CHARACTERISTICS OF COMMUNITY GROUP WORKING

But if the general characteristics of the problem situations are similar, the ways of exploring and resolving them can be quite different. Unlike their hierarchically managed counterparts, community based organisations place a high premium on involvemet in decision-making, thus the process of decision-making must be open and inclusive. And the techniques that assist that decision-making must be readily understood by all concerned in that process.

In addition, objectives pursued by community groups, or sections within them, may be conflicting and antagonistic to a degree which is directly irresolvable and not susceptible to a simple priority ordering. They will often be uncertainly formulated. Resolution must be sought in the process of democratic operation and not in technical procedures. Again, it is essential that decision-making aids, and the way that they are employed, must assist these democratic processes. They will, almost inevitably, operate in an exploratory "what if" mode rather than in the optimising mode, which can reduce decision-making to a mere technical process.

Such distinctiveness of approach is clearly understood by the staff at the Northern College and forms the underlying basis of the relationship they currently enjoy with community groups through the College's short course programme. At the moment, this relationship is largely pedagogic - teaching and developing skills that groups can then take back into their own community in order to provide a more effective base on which to build their activities. The Community Operational Research Unit will provide the opportunity to extend this to a newer relationship which is directly problem-solving.

Through a combination of working with the groups in their own geographical setting, and from time to time as development dictates, employing the residential facilities of the College to pursue a more concentrated programme of group work, the Unit's full-time workers will identify and advance the solution of problem's amenable to operational research's methodological approach.

ON WORKING DIRECTLY WITH THE COMMUNITY

This scenario of activity will clearly present a new dimension of working for the Unit's two full-time practitioners. Not least of these will be merely gaining the confidence of the

community groups and explaining to them what the precise contributions of operational research and the Community Operational Reseach Unit to their perceived situation might be. In the formative stages of project development the nature of this projected contribution may, necessarily, be very vague. As the case-load of the Unit grows this process of articulation will become progressively simpler as examples can be proffered of earlier successful engagement. But in the early days contact work will be very time consuming.

Again, in this context, the ordinary residential short course programme of the College will provide quite unique opportunities. It will be possible to build into an existing group development short course a session of practical problem-solving into which operational research's model building approach is gradually and gently introduced. Where successful, follow-up work in the field will be a natural progression and the words 'operational research' may never enter into the engagement.

Even within its more conventional setting, operational research has experienced great difficulty explaining to prospective clients, or even interested third parties, what its particular body of knowledge or practical contribution might be. This difficulty was most classically characterised in the now-seeming bizarre competition that the OR Society staged in the early seventies to produce a satisfactory definition of operational research.

Community groups are not interested in abstract concepts or definitions. They rarely have the time, nor the pre-disposition, to enter into discourse of an apparently solely academic nature. They operate in a very concrete world (many quite literally) and thus will demand concrete demonstration before investing portions of their most valuable possession -

time - in a potentially (as they will see it) unproductive venture.

THE TECHNICAL CONTENT

The precise OR contribution within the illustrative areas identified is impossible to predict at this formative stage of the Community OR initiative. The form of each problem depends upon, and needs to be clarified by the interests of, the particular community group. It will be a major role of the OR Unit to guide this process of exploration and self-discovery. Thus, the specific approaches which will be used cannot be so clearly identified. The Department at Sheffield City Polytechnic, from which the bulk of the Unit's technical support will be drawn, is not wedded to a specific 'soft' OR methodology approach - there is no 'Sheffield methodology' as such - but rather it aims to draw upon and make use of those elements of comtemporary OR wisdom which appear to provide the maximum potential for the client group with whom the Unit is operating. Such a catholic repetoire of methods could appear to be no more than a 'rag-bag' approach without any underlying philosophical or disciplinary base. But the Department can point to a successful and extensive history of work with community groups as evidence for worthwhile and practically enabling intervention. The work of the Unit will draw out guidelines for others who may become involved at a later stage in Community OR. Such methodological formalisation represents a critical strand in the Unit's programme.

The development of innovatory OR methodological procedures will constitute a significant potential 'pay off' for OR and the OR community. Appropriate techniques will be needed which specifically draw out and clarify contrasting systems of personal and political beliefs rather than endeavouring to conceal them. These methods will stress flexibility and negotiation in decision-making rather than placing a high premium on achieving 'optimality', as has been suggested. To

develop such methods will require working closely with a wide cross-section of the OR community.

To be more specific, there is plainly a case for the use of the insights and perspectives provided by such diverse approaches as 'soft systems' methodology and modelling methods(4); game-theory derived 'methodiques' such as the hypergame framework(5); problem-structuring devices including mapping(6); decision-oriented schemas such as the strategic choice approach(7), and so on; as well as for composite ideas such as those incorporated in the hypermapping methodology(8). There is also considerable potential for the use of such conventional 'hard' techniques as linear programming or simulation, which, as our experience has shown, can lead to a productive shaping of complex, messy situations (e.g. the use of concepts of the feasible region in the food policy area (9)). Neither would we wish to diminish the importance of more straightforward analytic and data-manipulative or interpretative skills such as those provided by conventional statistical methods. They will form part of the armoury of techniques which our client groups, who inevitably become involved in adversarial situations, need at least to be able to appreciate if they are to be able to hold their own in the fora in which they are likely to become engaged.

NETWORKING AND REPORTING

It follows that two elements of the Unit's working practices will be key to its ability to fulfill its general and its specific objectives. These are the successful design and operation of networking and reporting procedures.

The network of community groups, from which the OR clientele will come, largely pre-exists in the form of the college's current user groups. As the Community OR initiative develops, and as successful case-work builds, this will invariably

and as successful case-work builds, this will invariably enlarge and broaden, both in terms of geography and interest matter. But the Community network will, as we have suggested, need to be complemented by a practitioner network. The catholic technical base of the Unit, at the very least, will demand this. But so too will the need to ensure that the impact of the Unit within the wider world of OR practitioners is maximised. The creation of the Community Operational Research Network within the Operational Research Society, is extremely fortuitous in this respect. The Unit - again, it can be anticipated, exploiting the residential facilities provided, at the Northern College - will want to bring together such networked practitioners either to discuss particular technical issues or to consider the more general success of the initiative.

In parallel with, and helping to assist the development of, the two, community and practitioner, networks will be complementary reporting procedures. Together with individuals who have been most closely involved in the conduct of particular projects, the Unit's workers will produce reports for the client group. But of equal, if not perhaps greater, importance will be reports on the broader accomplisments of particular projects. We will be wanting to review constantly the extent of the involvement of community group members, how well they understood and utilised the techniques that were introduced and, perhaps more importantly still, what lasting skills they acquired during the conduct of the project. These aspects will form a very major part of project reports.

MANAGING THE UNIT

The spectrum of interest in the progress of the Community OR initiative, and the variety of the parties involved in its conduct, are reflected in a seemingly fairly cumbersome management arrangement. In overall managerial control,

protecting patrticularly the Operational Research Society's not inconsiderable financial investment in the initiative, is an already established Management Committee. This is composed of representatives of the three primary interested parties, the Society itself, the Northern College, and the Sheffield City Polytechnic, and has the power to co-opt others with a specific longer-term contribution to make.

The day-to-day running of the Unit will be carried out under the supervision of a Director and an Associate Director, whose services will be provided respectively by the Northern College and the Polytechnic. The Directorate will ensure the requisite liason with and provision of services by the institutions from which they each come. The Directorate will, inter alia, meet with the Unit's workers in regular weekly meetings which will, on a monthly basis, be constituted as more formal Steering Committee meetings. These will draw in representatives from user groups with whom the Unit is currently working as well as currently involved OR practitioners.

Bureaucratic as such arrangements may appear on paper, it is anticipated that the style of working will be far from that. And, if we are to retain the involvement of community groups on more than a one-off project basis, absence of undue bureaucracy must be guaranteed. But the multiplicity of interested parties necessitates a degree of involvement which allows them to effect more than a nominal degree of direction over the development of the initiative.

THE LONGER TERM

The Operational Research Society's support for the Unit is for a limited period of time. Throughout, we will be looking to build the basis for the Unit's longer term existence. Some of the work of the Unit will undoubtedly be income generating,

and we will be planning to build this element up over the initial life span; but it would be impractical and indeed counter to the purpose of the whole initiative to anticipate that the Unit will be self-sustaining through entering normal market arrangements with client groups.

We hope therefore to demonstrate, over the Unit's first three year period, that the initiative offers sufficient justification, by way of practical community group development and by way of theoretical academic development, that continued external support will still be forthcoming.

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SCOS

SCOS was born in a Glasgow pub,

in 1981, out of a talk between P.O. Berg, B. Turner and R. Nauta, who were attending a symposium run by the European Group on Organisation Studies (EGOS). Its first public event, after being constituted as a Working Group of EGOS, took place in 1982 with the organisation of a symposium at Exeter which elected a Board of 6 members. Subsequently, there have been the meetings at Groningen (1983), Lund (1984) and Antibes and Trento (1985).

The SCOS motto is "We do it for fun",

which is the best description for the atmosphere at the SCOS symposiums and board meetings, where symbolic events of the most varied kind are apt to take place.

SCOS is also an international network,

with already more than 150 paid-up members representing nearly 30 different nationalities throughout the World. Contact is maintained by a quarterly information bulletin called "Note-Work" which publishes information relevant to our field of study: conferences, publications, lectures, etc.

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