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Connective Planning

From Practice to Theory and Back¹

This paper tells the story of an innovative program of research, consultancy and training in the field of collaborative planning; a program which began in the early sixties, when the Tavistock Institute took the bold step of agreeing to provide an organizational home for a new Institute for Operational Research. The program received its initial impetus from a major research project on policy-making in city government. This was a project which offered unusual opportunities for social scientists and operational research scientists to work together in observing and understanding the behavior of groups involved in complex planning tasks. This experience led to a distinctive theory of planning seen as an adaptive process of strategic choice; and this theory was, in turn, to provide the foundation for a set of practical planning methods that have since become widely used as a framework for interactive working in decision making groups.

During the 1970s, this new approach was extensively tested, and progressively refined, through action research projects in Britain and other countries. Meanwhile, a further observational research project concerned with inter-organizational decision making in regional development led to further advances toward an ecological perspective of planning in the public domain. From this perspective, the adaptive capability of inter-organizational planning networks could be seen as largely dependent on the development of personal networking or "reticulist" skills among actors in key interface roles.

The 1980s saw further advances in two directions. First, the practice of facilitating interactive strategic choice "workshops" came to maturity, influenced in particular by extensive work for the Netherlands government on major environmental policy issues. Second, work started on the development of software for personal computers, as a means of making this broad philosophy of planning more accessible to individuals and to "intimate groups" working on strategic issues in their normal office environment.

By the early 1990s, there had been further diffusion of the ideas emanating from this program in several directions. This paper tells the story of the origins

¹ A new paper.

of the program within the Tavistock Institute and the subsequent emergence of a concept of “connective planning,” involving a dynamic balance between interactive group processes and the deployment of personal networking or reticulist skills. Finally, some speculations are offered about the opportunity to recognize an emergent field of grounded theory concerned with developmental decision making.

Origins: The Coventry Project

The Institute for Operational Research (IOR) was formed in London in 1963, as a new semiautonomous unit of the Tavistock Institute under the leadership of its first director, Neil Jessop. Prior to this, he had been intimately involved in developing the proposal to set up such an institute in his role as a council member of its other parent organization, the national Operational Research Society. The formation of IOR was seen as offering an opportunity to break new ground in tackling important societal policy issues through the joint application of operational research and social science skills within an action research philosophy.

This mission underpinned the design of the first joint project undertaken by the staff of IOR and the Tavistock Institute’s Human Resources Centre; this was a project on communication in the building industry, commissioned by a consortium of professional associations and other relevant national interest groups (Chrichton, 1966). The same philosophy also lay behind a second research proposal, which was submitted by Neil Jessop to the Nuffield Foundation in 1963, entitled “Policy Research for Local Government” and ambitiously subtitled “the Development of a Planning Process.” This proposal—which was approved in time for a start early in 1964—arose from discussions with the City Council of Coventry, a city of some 330,000 people in the English midlands where Neil Jessop had previously been working as operational research manager in a large textile company. The notion was that the city council could be seen as “a microcosm of government as a whole” in that its organization, if it was to be effective, had to mirror the complexity of the wider community which it was intended to serve.

The Nuffield grant covered a four-year period; a generous span when compared to that of the building communication project, which lasted little more than 12 months. This four-year term was to become significant in creating a protective setting within which adaptations—some of them quite painful—could be achieved between the thinking of the social scientists and the operational research scientists on the team. I was appointed as the team’s full-time operational research scientist, having had no previous experience in working with social scientists; while social anthropologist Paul Spencer joined the team as my social science counterpart. Meanwhile Neil Jessop and Hugh Murray,

who had worked closely together in developing the project proposal, replicated this inter-disciplinary perspective in part-time senior support roles.

Coventry in the early 1960s was a city which prided itself on its image as a leader in the field of urban planning; so its leading elected members and officers readily agreed to offer facilities for our research. From the outset, open access was offered to all meetings which might help the team in developing their understanding of the city's decision processes. Paul Spencer and I soon found ourselves sitting as observers not only in the council's formal committee meetings, but also in meetings of many other less formal departmental and inter-departmental groups. After a short probationary period, we were given the even more unusual privilege of being granted open access to the private caucus meetings of both the council's opposing political party groups: the Labour Party which was then in control and the Conservative Party, at that time in opposition.

From Paul Spencer and Hugh Murray, I gradually began to acquire some of the more basic skills of applied social science research; skills of which I had been previously quite unaware. Among these were the skill of observing group behavior and recording my interpretations so that they could be compared with those of colleagues after the event; the skill of conducting a semistructured interview; and the skill of tuning-in to interactions and events within the wider community fabric of Coventry seen as the broader social milieu within which the city's decision makers played their various roles. We found ourselves immersed in a continually changing web of interconnecting processes. Within this, we gradually began to piece together a view of four persistent dilemmas which the decision makers faced:

- They held differing and continually shifting views about the "shape" of the strategic issues which confronted them, and about how broadly or tightly the boundaries of their current area of concern should be drawn.
- However committed they might be to the ideal of taking a broad synoptic view of their problems, they were under continual pressure to work toward decisions in a piecemeal, incremental way.
- There was a persistent challenge in attempting to maintain a dynamic balance between the concern to make decisive commitments and the concern to retain flexibility in the face of uncertainty.
- There were persistent difficulties in distinguishing the political from the technical and administrative aspects of decision making, even though the main role differentiations in the decision process were built on distinctions of this kind.

As an operational researcher, I found the experience of the early months in Coventry a profoundly uncomfortable one. My previous experience as a member of industrial operational research groups led me to expect to treat my hosts as clients; and to want to justify my existence from an early stage by being able to offer them some practical advice on their problems, based on relatively firm

theoretical foundations. Yet the kind of complexity to which I was now witness seemed all too resistant to this kind of approach. The four years of the Coventry project saw a succession of crises. Prominent among these were crises of confidence within the project team and crises in our relationships with one or another set of actors on the local political stage. On reflection, the sustained atmosphere of crisis played an important part in creating a climate of methodological turbulence; a climate in which it eventually became possible to discard many cherished theories and beliefs as to what operational research might contribute to planning processes, whether in its own right or in concert with the social sciences. Among these cherished beliefs was not only a belief in the power of mathematical modeling as a device for bringing order to difficult planning tasks, but also a belief in a strategy of seeking to build bridges between the frames of reference of operational research and social science at a broad synoptic level of systems thinking. For it was at the level of shared day-to-day observation of Coventry's on-going processes of decision making and planning that we first found ourselves able to reach out across our different frames of reference and begin to construct a new theoretical base.

An Emergent Theory of Strategic Choice

As Paul Spencer and I gradually absorbed more and more of the complexity around us, we began increasingly to draw together insights from different aspects of our work. I spent much time analyzing the content of some of the formal planning documents which had recently been produced by the council's professional officers. Although the idea of deconstruction of texts was not then in currency, I can now see myself as having in effect been seeking to "deconstruct" the carefully built chains of reasoning and assumptions that led to major planning recommendations; for example, to a recommendation that the land allocated for shopping in the city center should be marginally increased, or that one city road pattern was to be preferred to another.

Meanwhile, Paul Spencer had been carrying out a perceptive analysis of the various procedural options for steering complex issues through the council's various formal and informal channels of decision making. These options ranged from that of referring an issue back to the officers for further technical study, to that of leaving it in the hands of the committee chair and vice-chair, so that a political debate could take place within the majority party group.

Drawing on studies such as these—and also on the many opportunities open to us to trace reactions to plans and decisions in committees, in the wider community and in the columns of the local press—we began to form a new view of the *management of uncertainty* in planning; a view which became increasingly central to our approach. In this view, we identified three broad classes of uncertainty in decision making, each calling for a different kind of response:

- *Uncertainties in the Working Environment (UE)*. Uncertainties of this kind prompt calls for some form of investigation (research, analysis, forecasting, modeling, consultations with experts etc.).
- *Uncertainties about Guiding Values (UV)*. Uncertainties of this kind prompt calls for some kind of policy-clarifying activity (formulation of goals or objectives, reconciliation of conflicting interests, consultation with politicians or representatives of other stakeholder interests etc.).
- *Uncertainties about Related Choices (UR)* beyond the boundaries of the problem field which is currently being addressed. Uncertainties of this kind prompt calls for some kind of negotiation, collaboration or joint planning—often involving interactions with other decision makers outside the organizational context of the current decision process.

Figure 1 places these three types of uncertainty into a decision-centered perspective. The picture is one in which there is some degree of pressure to make decisions here and now, yet there is also some recognition of the ob-

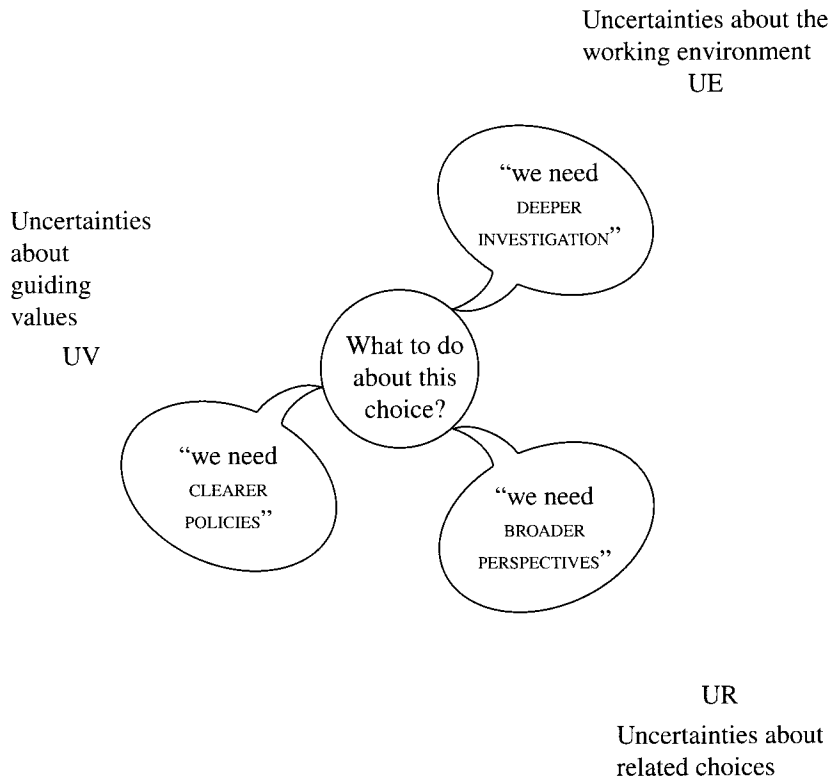


Figure 1. Three types of uncertainty in decision making.

stacles—or areas of uncertainty—which make it difficult to agree what to do. In Coventry, we repeatedly saw members of a decision making group striking opposing positions in relation to the management of these different kinds of uncertainty. We also saw that the participants in the process lacked any kind of shared conceptual framework within which the implications of alternative strategies for the management of uncertainty could be discussed. Yet we saw that the choice of balance in responding to these different types of uncertainty could have profound effects not only on the outcomes of a decision process, in the form of the choices that emerged, but also on the future course of the process itself. The choices as to how uncertainty should be managed raised important practical questions concerning who should become involved in the future process—how soon and through what combination of formal or informal channels.

In operational research terms, the challenge could be seen as one of agreeing on a strategy for the investment of scarce resources—skill, money, the time of busy people—in order to increase the level of confidence with which future decisions could be made. From this perspective, any complex process of decision making or planning could be seen as one of “managing uncertainty in a strategic way.” We were aware that this was a perspective which departed radically from those more idealized prescriptions of rational planning which held sway during the 1960s both in the world of urban development planning and in that of corporate planning within the firm. Yet it was a perspective that made much sense to us in interpreting the challenges with which the officers and politicians in Coventry were all the time engaged.

Gradually, a view began to crystallize of a continuing and often diffuse process of decision making, underpinning the more formal and accountable procedures of decision *taking*. This process was one which transcended the conventional distinctions which people in Coventry’s local government continually sought to draw between the realm of “policy” and that of “administration,” and between the provinces of the politician and the bureaucrat. It was a process which drew people together in intricate webs of mutual influence, with a shared task of making interconnected decisions through time. It was a process which meant continually confronting many sources of uncertainty, yet also often continually facing up to relentless pressures to decide.

Although this new view of planning emerged primarily from the experience of the Coventry project, there were also some other important influences on its development. Prominent among these was a research paper which came to our attention from the University of Pennsylvania, offering a new concept of “robustness” in sequential decision making (Gupta and Rosenhead, 1968). The idea was that one of the most practical approaches to uncertainty in planning lay in choosing short-term actions in such a way as to leave open as many as possible apparently “good” paths for the longer-term, and essentially unknowable, future.

Meanwhile, from the IOR building communications project, there had been emerging a new approach to mapping perceptions of the “shape” of complex decision problems. This method—known as *analysis of interconnected decision areas* (AIDA)—involved building a graphical representation of a partially connected network of nodes representing areas of choice or “decision areas” (Luckman, 1967). These decisions could be of many different kinds—decisions about what, who, whether, where, when or how. So AIDA offered a generalized language of problem structuring, through which the perceptions of people with many different professional or other contributions to make could systematically be brought together.

Once the options within each of the interconnected decision areas are identified, and relations of compatibility or incompatibility with options in other decision areas explored, the AIDA method makes it possible to unfold a rich picture of the range of possible strategies so that their implications can be debated and negotiated choices can be made. It was not until well into the third year of the four-year Coventry project that these various insights and ideas began to come together within a coherent philosophical framework; a view of planning as a *process of strategic choice*. This was first articulated in published form in 1969 in the book *Local Government and Strategic Choice*, which represented the most tangible product of the research (Friend and Jessop, 1969). In this book, we were able to put forward our speculative suggestions as to the shape of an “appropriate technology of strategic choice,” designed not for expert use but as an aid to communication among decision makers of diverse backgrounds and skills. At the same time, we offered our tentative ideas on appropriate organizational arrangements. As a vehicle for this speculation, we presented a set of imaginary case studies relating to the fictitious town of Fluxton, set in a fictitious city region.

Action Research in the 1970: A Program Evolves

Tragically, Neil Jessop died only a few days after *Local Government and Strategic Choice* was published. So, when local authority planners and managers began to express interest in putting our speculative suggestions on planning methods to the test in practice, it fell to me to create opportunities for doing this, within a negotiated action research framework. The first such opportunity arose in 1970, through the award of a modest six-month grant from a new governmental research agency, the Centre for Environmental Studies, to help us launch an ambitious action research program. This program, codenamed LOGIMP for “local government implementation,” embraced six local action research projects in parallel. Each of the six projects involved a team of local authority officers—town planners, engineers, finance staff, administrators and sometimes other professionals—from a particular locality in England. In each

case, we jointly selected some pressing problem of urban development or re-development which was currently on the local government agenda and which was of sufficient complexity to make the application of the new strategic choice methods potentially worthwhile. The six problems selected ranged from the upgrading of a green corridor in outer London to the threat posed by a new highway proposal to a low-income urban neighborhood on Teesside.

A different member of IOR staff was attached to each of the six “mini-projects” as consultant, visiting the local team at weekly or fortnightly intervals to advise on the application of the new strategic choice methods and to help in addressing any obstacles that were encountered. The six teams also met monthly in a wider program, “forum,” where progress was reported and ways of overcoming any difficulties were discussed. Also the six IOR consultants met regularly, with myself as program coordinator, to guide the progress of the program as a whole. At the end of the six months, some of the six projects were agreed to be highly successful in terms of their impact on the quality and speed of decision making; others less so. In a questionnaire exercise at the final forum, the new methods of strategic choice were judged to be of value both as aids to communication and as planning techniques; but of rather greater value in generating a new “attitude of mind” to planning. A deeper evaluation carried out by a visiting Australian planner, John Power, three years later confirmed that the experience of LOGIMP had continued to influence the work and the thinking of many of the participants at a personal level; however, it seemed to have had a less enduring influence on planning practice at a broader organizational level. Another significant effect of the LOGIMP experiment was that it offered experience of public planning processes to six other members of IOR staff. It was these staff who were subsequently to form the nucleus of a new Planning Processes Program Group within the Tavistock Institute.

In 1973 an opportunity arose to carry out a second and more substantial action research program organized in a broadly similar way. In that year the UK government’s new Department of the Environment commissioned IOR to carry out a three-year project on the development of policy options in strategic land-use planning. This project again involved working in parallel with several local authority planning teams—four County Councils, later extended to six. In this case, the County Councils had all recently been charged with the responsibility of preparing broad-scale land use policy plans, known as “Structure Plans,” within a new national Development Plan System.

The essence of the new planning system was that County Councils should concentrate on producing broad written statements of land-use policy, leaving more detailed physical plans to be produced at a more local tier of local government. Soon after the project started, I took the opportunity to attend some of the first “Examinations in Public,” at which the earliest of the new structure plans came under intense scrutiny from other public agencies and from pres-

sure groups of various kinds. In this public arena, it was interesting to see that apparently trivial choices of wording in published policy statements could draw the fire of highly paid planning lawyers representing powerful commercial interests. For example, the insertion of a word such as “normally” into a policy statement ruling against the provision of new out-of-town shopping centers could become a matter of surprisingly intense and articulate debate (Friend, 1977; Friend et al., 1981).

This project, in which IOR staff again worked alongside local government planning teams as consultants, led to some further significant extensions in the methods developed through the Coventry project. In particular, an extension of the AIDA method was introduced to test for mutual consistency between policy options expressed at different levels of generality (Hickling, 1978). These methods offered an alternative perspective to the conventional precept that broad statements of goals should always precede more specific statements of policy intent. What we demonstrated was that it was quite possible to open up a two-way exploratory dialogue in which statements of broad goals as well as statements of more specific policy were treated as areas of choice, enabling options to be kept open at both levels.

Another concept to emerge at this time was that of the “commitment package”—now sometimes known by the alternative name “progress package” to emphasize its incremental nature. This is a general framework used to organize the tangible products of a planning process at any moment, striking a conscious balance between commitment now and flexibility of future choice. A commitment package consists of four elements:

- actions agreed now in relation to some decision areas;
- actions agreed now in relation to some areas of uncertainty;
- future intentions in relation to other decision areas; and
- future intentions in relation to other areas of uncertainty.

To build up a commitment package, it is usual to start by drawing up a large grid, often covering two or more flipcharts posted side by side on a wall. Four columns are drawn to cover the above four elements, and the grid is also ruled off horizontally to represent different areas of responsibility—individuals, departments or agencies according to the context. In entering the content of the package within this grid, conscious choices have to be made as to which decisions can be made now and which should be left until later. It also has to be judged which areas of uncertainty it is worth tackling now through some kind of short-term action—investigation, consultation, negotiation—in order to build a more confident basis for these later decisions. Then, for those uncertainties that are judged not worth addressing in this way, there are judgments to be made as to whether or not they should be dealt with by some form of explicit monitoring or contingency planning.

When working with a group, the construction of a commitment package in

effect provides a new kind of framework for negotiation about the balance between flexibility and commitment, centered on debate about sources of uncertainty and how they should be managed. However, we have come to realize that such a framework has to be used with care. Some elements of a commitment package may be sensitive in terms of inter-personal or inter-organizational relationships. Especially in situations where people feel uncertain about the intentions or attitudes of others, there may be powerful inhibitions in writing up on the wall the full range of uncertainties that have been identified (Friend, 1983, 1990).

Also in the 1970s, expressions of interest in the new strategic choice methods led to exploratory projects in which members of the IOR planning processes group paid working visits to Germany, Spain, Canada and Brazil. In Vancouver and in Sao Paulo, training programs in strategic choice methods were sponsored by agencies of regional government. Both these programs were designed on action-learning principles, in that they involved conducting experimental strategic choice “workshops” on current urban planning problems, in association with local counterparts. These experiences had the effect of further extending the collaborative networks of what was now becoming known as the “IOR School” (Faludi and Mastop, 1982). At the same time, they brought an international dimension to our growing awareness of the complex organizational ecologies within which planning processes were embedded in the public domain.

The Inter-Corporate Dimension

Meanwhile, the late 1960s and early 1970s saw an upsurge of interest, in Britain as elsewhere, in formal models of corporate management and corporate planning which were intended to introduce a greater sense of cohesion into the direction of large organizations.

Such methods, which generally involved developing a formal hierarchy of corporate objectives as a framework for strategy development, were attracting wide interest not only in the business world but also in the public sector—not excluding Coventry City Council. However, our own close involvement with elected members and officials in Coventry, and our subsequent collaboration with town planners and related professionals in the early IOR action-research programs, had been leading us to see the corporate perspective as of extremely limited value in the complex areas of strategic choice with which we were concerned. It was apparent that even a “unitary” city council, that is, a council with a full range of local authority powers, was subject to many competing sources of policy influence of external origin. Prominent among these sources were the contending political parties, each with its own internal organizational

structure, and the separate departments of national government which exercised policy responsibilities in such diverse functional areas as housing, transport, education and social work. Through their power to allocate resources and to demand conformity to central policy guidelines, these central ministries were able to exert a powerful influence over the local authority's specialist departments. This had the effect of severely diminishing the local authority's ability to develop a fully "corporate approach"—even if the dimension of local party politics were to be ignored.

The inadequacy of the corporate planning perspective had also been emerging clearly from other IOR work. A seminal paper on operational research for multiorganizations (Stringer, 1967) drew on the experience of several of IOR's early projects, including an action-research project in the field of health service management, and also the pioneering research study already mentioned of communications in the building industry (Chrichton, 1966). Stringer saw the classical construction project as a typical instance of an ad hoc organizational structure drawing together diverse experts who did not share a common corporate base. So, when the opportunity arose in 1968 for IOR to submit research proposals to the newly formed Social Science Research Council (SSRC), it was decided to focus on the topic of inter-organizational decision making as a potential integrating theme.

Proposals were submitted and the first outcome was a grant to IOR for a short pilot study on inter-organizational processes in regional development (Friend and Hunter, 1970). After this, a three-year grant was awarded to enable the field to be explored in greater depth. As in the case of the Coventry project, a single location was chosen for this research; in this case, the small town of Droitwich, where a planned expansion program was under way. This program was being managed through a joint committee of two levels of local government—Worcestershire County Council and Droitwich Borough Council—within the context of a broader regional program for the planned dispersal of population from the city of Birmingham.

This project, like the earlier Coventry project, called for a readiness to spend much time observing group decision processes and interviewing the various actors involved. Yet there were significant differences in the way in which research access was negotiated in the two situations. Whereas in Coventry it had been possible to secure wide access at an early stage through obtaining the blessing of the council's leading members and officers, the process of negotiating access in Droitwich proved to be a much more incremental one, with new challenges presenting themselves throughout the three-year period. First, the local development group's chief administrative officer solicited the agreement of his joint committee to our research in a deliberately low-key manner—in contrast to the public fanfare which had greeted the launch of our Coventry project. This gave us the access we required to the committee members, drawn

equally from the two local authorities, and to the small core of staff who reported directly to them. However, it soon became apparent that many other influential agencies and actors were involved in the rich web of activities which contributed in one way or another to the development of the town. We found that a combination of initiative and persistence was needed in seeking out and interviewing individuals who had a stake of some kind in the changes that were taking place in and around Droitwich. These people had a variety of organizational allegiances: public authorities at local, regional and national levels; commercial enterprises, large and small; and various local voluntary organizations and informal pressure groups.

Nor was it always a straightforward matter to present our research credentials and to establish our impartiality in relation to the various dimensions of conflict we encountered; indeed, it was in this project that we began to learn through experience that, in multiorganizational fields, the negotiation of research access could itself be regarded as one of the most important sources of research data (Friend, 1993). Another significant difference between the Droitwich project and the Coventry project lay in the formal role of plans in the planning process. During the time of our Coventry research, a major focus of activity was the production of a much revised and updated version of the city's first development plan. In Droitwich, however, we had appeared on the scene approximately half-way through the planned implementation period of a 15-year development program. The content of the original development plan had been agreed to—with considerable difficulty—by the two local authority “partners”; but the process of preparing it was now no more than a distant memory. The plan, as such, had now become part of the deep background rather than the foreground of the local decision processes. Instead, the local decision makers had now become preoccupied with a continually shifting set of current policy influences, many of them emanating from departments of central government.

Decision Networks and Reticulist Skills

The chosen title of the Droitwich project was “Decision Networks in Regional Development”—a “decision network” being seen as a transient, semiformal or informal structure through which inter-agency relations were managed. We saw such networks as serving the purpose of providing a dynamic pattern of links between formal, relatively stable “policy systems,” the distinction being that the latter provided durable frameworks through which people worked to established rules or policies governing the ways in which decisions within certain defined categories or classes should be made. Although the classical commercial firm can be treated as a clear instance of a corporate policy system,