

TOWARDS MODELS FOR IMPROVEMENT
OF THE PLANNING PROCESS IN
DETROIT AND EDINBURGH

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CENTER FOR URBAN STUDIES

Set of Papers by Professor Anthony S. Travis

- Paper 1: General lead-in paper on conceptual approach, in lay terms: 'Towards a Re-evaluation of Planning as a Process'
- Paper 2: 'Outline Summary of Work Programs' as it affects Fellows in 1970/71.
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TOWARDS A RE-EVALUATION OF PLANNING AS A PROCESS

Paper given at York University, Toronto on 2nd December 1970

by

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a) A Construct for Process Development

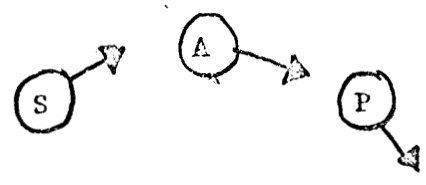
Tonight I wish to take this opportunity of offering to you the beginning of a new construct; it is a re-evaluation of urban regional planning as a continuous process, for the general guidance and monitoring of change - but allowing for the maintenance of maximum feasible and reasonable choice for the individual citizen, whose diminishing rights make him more and more like an innocent victim in a Kafka plot.

A view of planning is needed which is not constrained by the guild-like protectionism of professional institutes. The serving of the community's interests should cause us now to evolve and apply an integrative model of the continuous-flow-process we call planning, and into which we need to fit the as yet separate processes such as physical planning, economic planning, transportation planning, social planning and local government policy planning; - functions which may now even be located in separate agencies.

Firstly, let me define some of the terms I am using: -
 by re-evaluation, I mean to 'appraise again or redetermine the worth of'; 'planning' is more than 'a detailed method formulated beforehand for doing or making something.' Planning is a 'process' i.e. 'a continuing development involving many changes.' Furthermore, if planning is seen as an integrative continuous process then it is 'the adding together of what we now perceive as several separate processes into a continuing development which extends without interruption.'

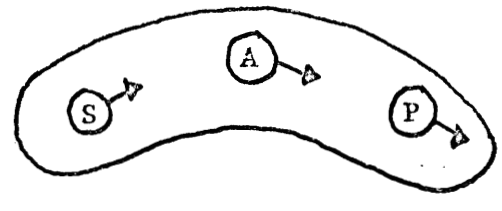
To simplify this proposition, let us first examine the evolution of the comprehensive physical planning process. Patrick Geddes, the father of modern urban planning theory, saw the process as a simple linear one - proceeding from survey via analysis to plan, with implicit values and objectives preceding these three major steps, and assuming that completion, and use of a built-environment would result from such a process.

Stage 1:

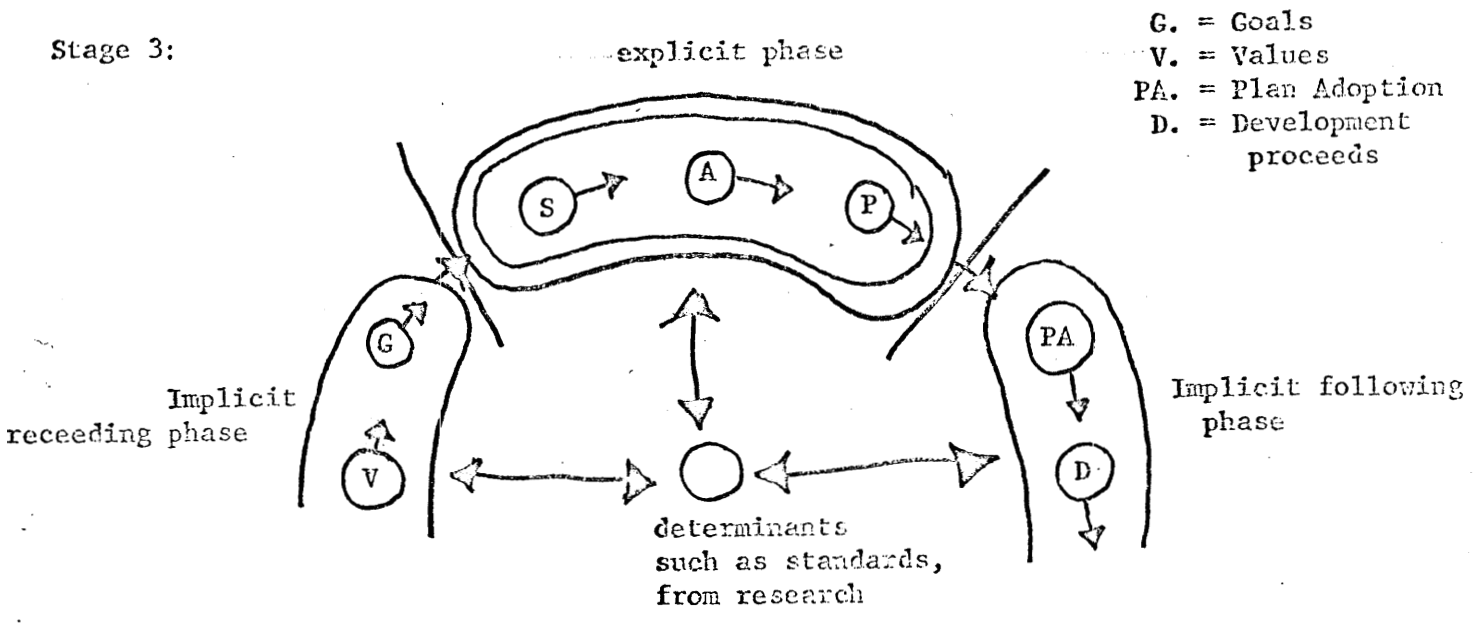


S. = Survey
 A. = Analysis
 P. = Plan

Stage 2:



Stage 3:



G. = Goals
 V. = Values
 PA. = Plan Adoption
 D. = Development proceeds

Stage 4:

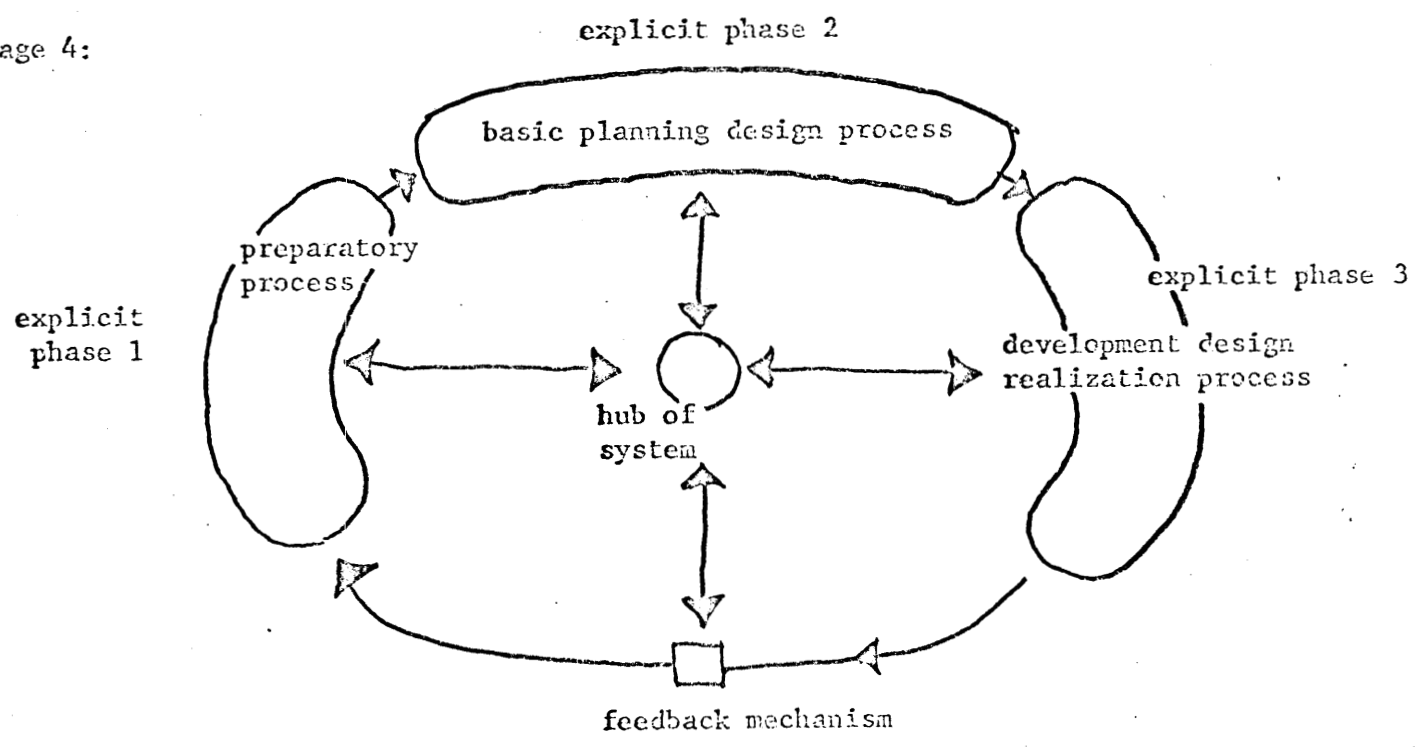


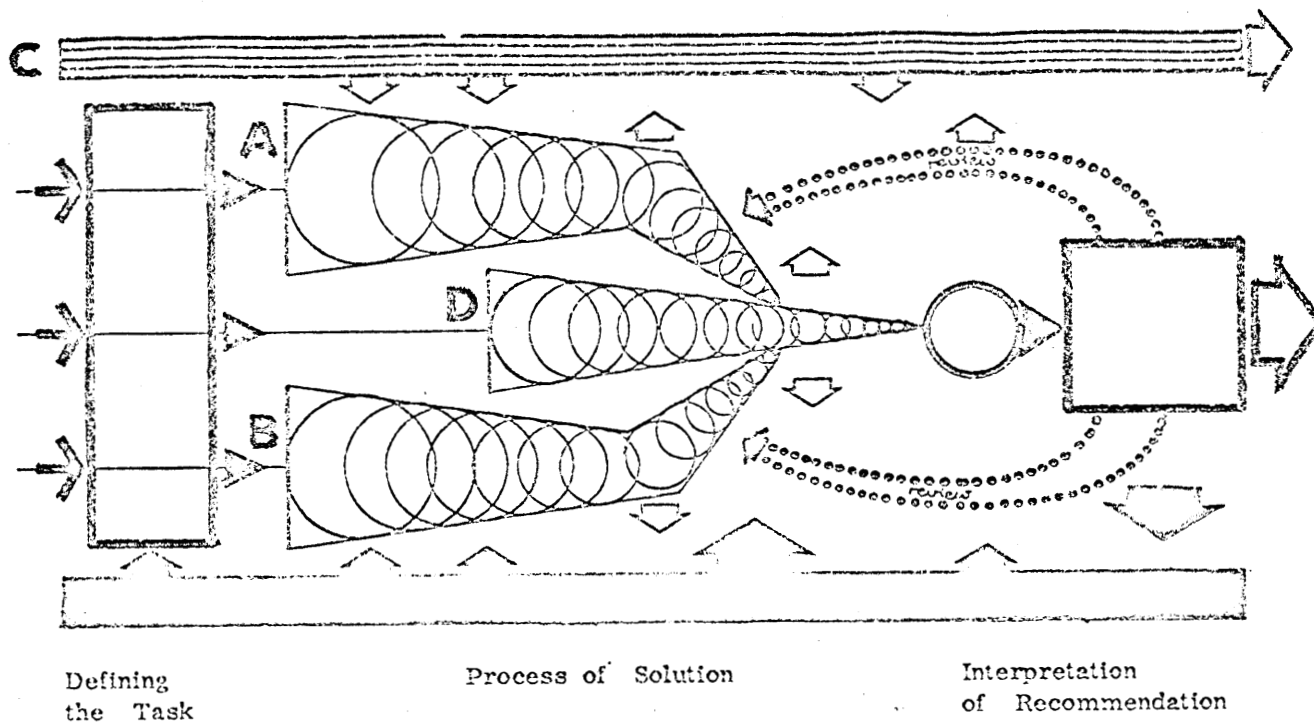
Figure 1. Development of desired physical planning process from Patrick Geddes 1911 paper, through to 1970.

Planning under the 1947 Town and Country Planning Act in Britain effectively reflected such a view. However, it must be emphasized that process is not linear but cyclical or continuous. Therefore, I want you to note this fundamental difference between the illustrations of Kozlowski's model (Figure 2) and my own process model (Figure 3).

If you accept the full definitions given for planning in my published paper 'Ends and Means - Planning for a Changing Society' (Ref. 1) then it follows that physical planning is not only short-term project - or programme-orientated, concerned with area-developments and provision of movement-systems, but it is also concerned with the long term monitoring of the complex urban-superstructure, and guiding the use, and intensity of use, of natural and inert environments during their varying life-cycles, with a key social-user feedback mechanism being seen as a critical element. The comprehensive physical-planning process has as its focus, the physical environment, but this must be based on appraisal of significant social and economic factors, as shown both in Kozlowski's (Ref. 2) and my own process models.

Figure 2

PART A. IDEAGRAM



KEY:

- A Direct Physical Analysis
- B Model Structure Research
- C Socio-Economic Studies
- D Process of Synthesis

PART B. MODEL METHOD

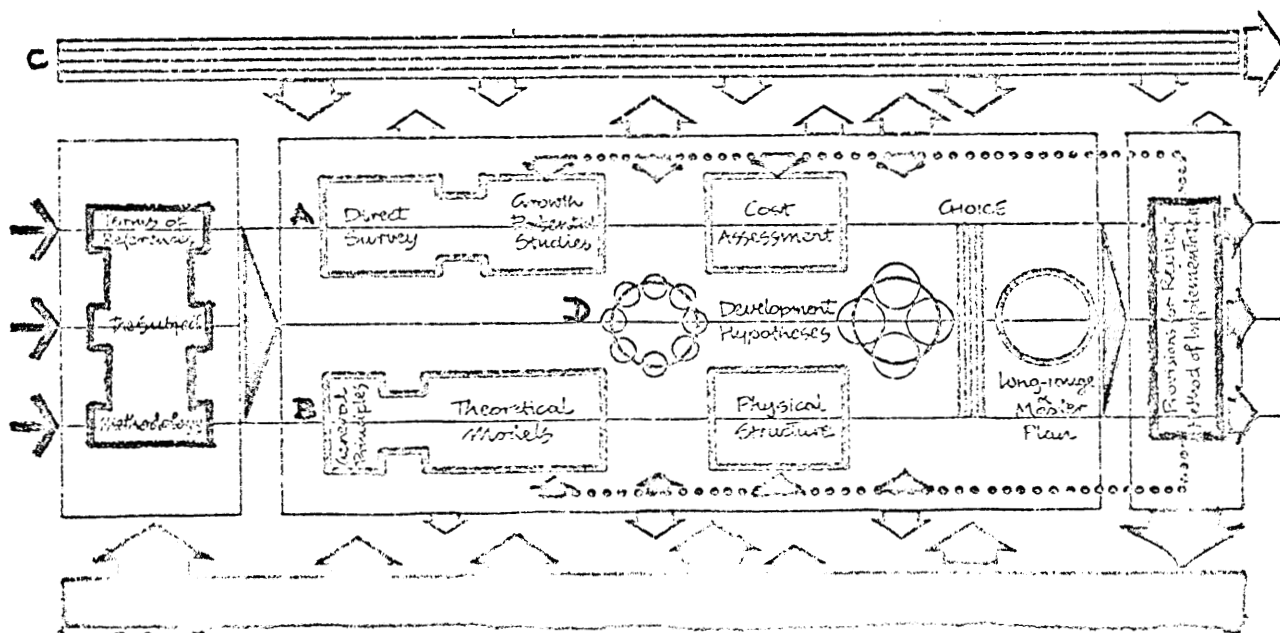
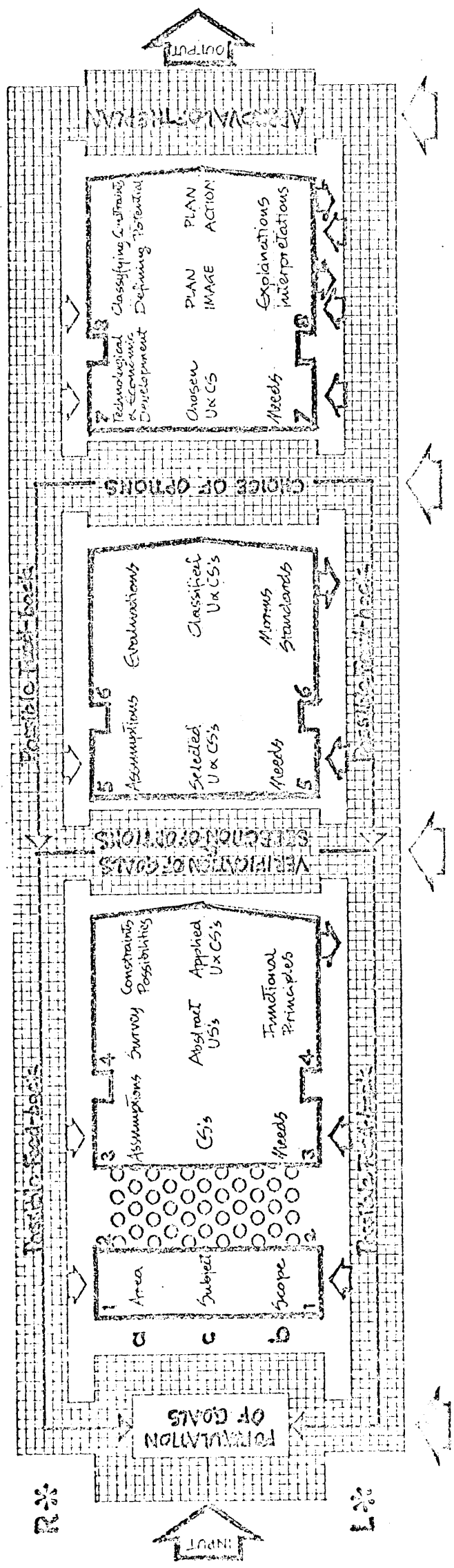


Figure 2

PART C. Outline Prescriptive Model of an Integrated Physical Planning Process



Public interest expressed through GOALS and represented by Authorities, Political Parties, Associations, Individuals etc.

Regional Level
Local Level

CRITICAL POINTS
in the Planning Process

MAIN STREAMS OF DESIGN

- a. Identifying Potential
- b. Formulating Programme
- c. Developing Models

Exchange of Information and mutual interactions between Planning Team and Community

US - Urban Structures
CS - Community Structures

PHASES OF THE PLANNING PROCESS :

1. Defining the Task
2. Formulating Methodology
3. Hypotheses
4. Conceptual Process
5. Prognosis
6. Optimisation Process
7. Plan
8. Defining Imperatives

Reference: 'Towards an Integrated Planning Process', J. Kozlowski. 1970.

VIDE Bibliography

2 • BASIC PLANNING DESIGN PROCESS

3 • DEVELOPMENT DESIGN REALISATION PROCESS

1 • PREPARATORY PROCESS

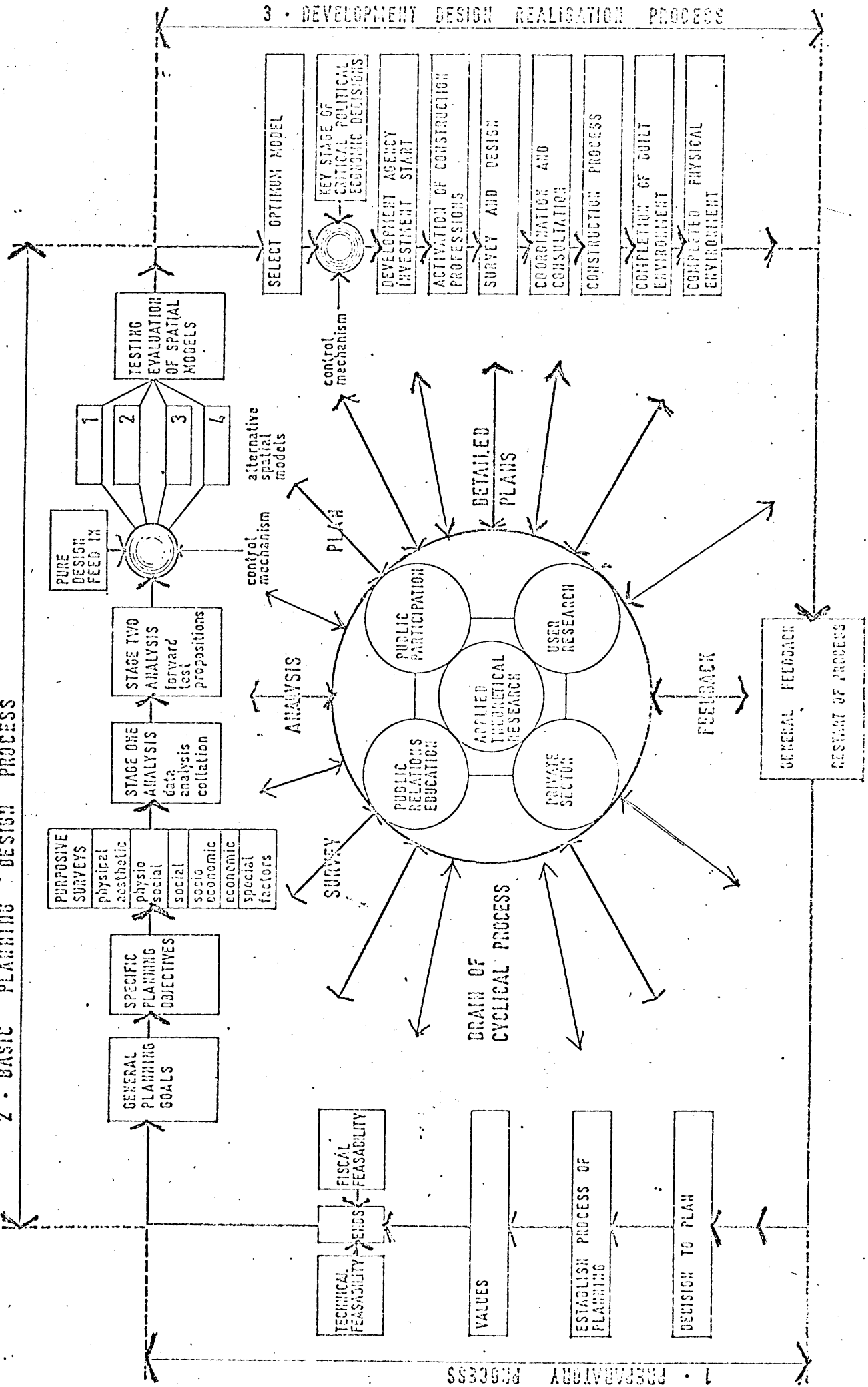


Figure 3. Prescriptive Model of the Urban Physical Planning Process for a British City, with an American Input.

A.S. Travis

b) The Need for Re-Evaluation Now

Even at this stage in this paper you may wish to challenge why I want to speak of re-evaluation, rather than of evaluation. My justification for this is based on a 2-way transatlantic feedback, from my academic and planning consultancy work in Britain, on the one hand, and from my observations and limited research over the last four months on this Continent - primarily as a Senior Research Fellow at the Center for Urban Studies at Wayne State University, Detroit. The term re-evaluation is used deliberately because currently on both sides of the Atlantic, planning is still generally seen as a linear-problem-solving activity and not as a cyclical-process. (Ref. 3)

This observation becomes all the more critical when so many other forms of planning activity are emerging, being defined and described, (I believe) wrongly as further simplistic linear, problem-solving activities. If these various forms of planning are to be linked, then it is important that the basic nature of the process must be right. Comprehensive appraisal is equally timely now in Great Britain, Canada, and in the United States of America.

In Great Britain, the introduction of a revised national system of planning, based on the 1968 and 1969 Town and Country Planning Acts, (Ref. 4) has extended physical-planning to include selected aspects of transportation planning, and linked both to determinants provided by economic planning. Coventry and Liverpool provided partial models for the new urban planning approach, and the 1963 Central Scotland Plan gave a limited model for urban-regional growth strategies. The differentiation between strategic- (or structure) planning, and local or action-area planning is also established, both for a range of spatial scales, and of functions.

Social planning - based on the findings of the Kilbrandon Committee in Scotland, and the Seebohm Committee in England (Ref. 5), is being realized via the ultimate establishment of unified social-service departments in every major local authority in the United Kingdom. However, the definition of a process for social planning is barely in an embryo form. Other current changes are notable, e.g. the recognition of the need for effective public participation in planning, recommended by the Skeffington Report (Ref. 6a), is denied by the new planning legislation - which speaks of 'publicity' or one-way communication, and never uses the word-dialogue. Reports of the Haud (Ref. 6b) and Wheatley Commissions (Ref. 6c) on the Reform of Local Government, give no indication of the formal processes whereby the stated objectives (Ref. 6b) relating to Power, Effectiveness, Local Democracy and Local Involvement are to be achieved.

In the USA, the growing urban crisis focusing upon the central cities, disadvantaged minorities, lack of public safety, polarization of attitudes, the urban funding crisis and environmental deterioration call for a timely re-evaluation of process. In a city such as Detroit energies are dissipated, for a multiplicity of agencies both in and outside of local government are separately dealing with linked and interacting urban problems. The pending Planning Programming Budgeting System now contemplated by Detroit's new administration, should help to focus effort on values, goals and legitimate policy options available to the City. The more extensive Detroit Urban Area - served by the voluntary South East Michigan Council of Governments, lags behind the much older Metro-Toronto (Refs. 7,3) organization and associated bodies in coping with area-wide problems and needs in utilities, public transportation, public education and questions of air and water pollution. Social questions at two levels will need to be identified - 1) general social objectives of city and regional management and 2) social service programmes of the special social-planning agencies, especially in the Central City.

In Canada the high rate of metropolitan growth in cities like Toronto has already challenged traditional planning and administrative mechanisms and the emergence of Metro Toronto (as with TVA, the Appalachian Regional Planning Commission and

the Dutch Polders Authority) may be seen in retrospect as a belated response to an area's crisis condition and management. Fiscal and social management may now present as big a problem for growing urban regions in Canada, as is the effective restructuring of their physical form. Two-tier systems of local government especially need comprehensive process-models with clearly defined goals, plus the machinery, political will, and funds to achieve resultant programmes.

In all three countries, therefore, can be seen a lopsidedness in the stages of development of the fields of physical, social, economic, and transportation-planning. This strengthens the need to establish integrative methods for development to an appropriately even level of quality in urban service provisions, right across the board. This is not likely to be achieved if all these planning tasks are treated as isolated linear problem-solving activities. Indeed, as has been suggested by Dr. Wilfred Burns in London (Ref. 9), physical-planning and policy-planning may need to nurture social-planning and other new fields to help them quickly achieve maturity.

c) Levelling-up the State of Development of Planning Processes

A levelling-up is necessary in terms of the theory and techniques of each of these now separate processes of planning, if they are to be equally well-developed elements in an integrated and systemic process of urban and regional management. Taking the example of the urban physical planning process (and for the benefit of my U.S. colleagues, may I state that I am using the phrase 'urban physical planning' in the comprehensive sense used in Britain, and which includes within it urban renewal, community development, area-planning, zoning, development control, etc., unlike in the U.S.A. where each of these activities may represent a process separate from the next).

I should like to refer to my model of the urban process (Figure 2) which recognizes total process as continuous and cyclical, but distinguishes some four separate phases: 1) Preparatory, 2) Basic Planning Design, 3) Development Design-Realization and 4) User Feedback. This greatly extends the role and notion of planning from the linear-process covered simply by phase 2, through to a perpetual political, design, monitoring and management task. Some five key factors are shown in a 'central' brain of the process, permeating and

interacting with all of its phases: applied theoretical research, user-research, public participation, private sector participation, plus public-relations and education - these give the yardsticks and key inputs to the whole system. In a sense, therefore, the process is more than cyclical - it is multi-lateral.

A model such as this allows the placing and use of specific techniques or methods (with variable weightings ascribed) placed in an appropriate sequence ranging from goal setting techniques via threshold method, via factor co-relates, and various forms of matrix analysis through to public-participation methods. Kozlowski in his work contained in the published Grangemouth/Falkirk study in Scotland (Ref. 19) as well as in his more recent paper on the subject of 'Towards an Integrated Planning Process,' (Ref. 2). (Figure 2) has further articulated the basic planning design process with its constituent physical, economic and social streams. He has helpfully gone as far as locating the exact position of four major work methods (or techniques) in the process - namely Threshold Analysis, Optimisation Method, Planning Balance Sheet and Goals Achievement Matrix, (Figure 4). This is the beginning of a development whereby each of the sub-processes of planning may have slotted into them the range of relevant and necessary techniques in appropriate sequence and with ascribed weights.

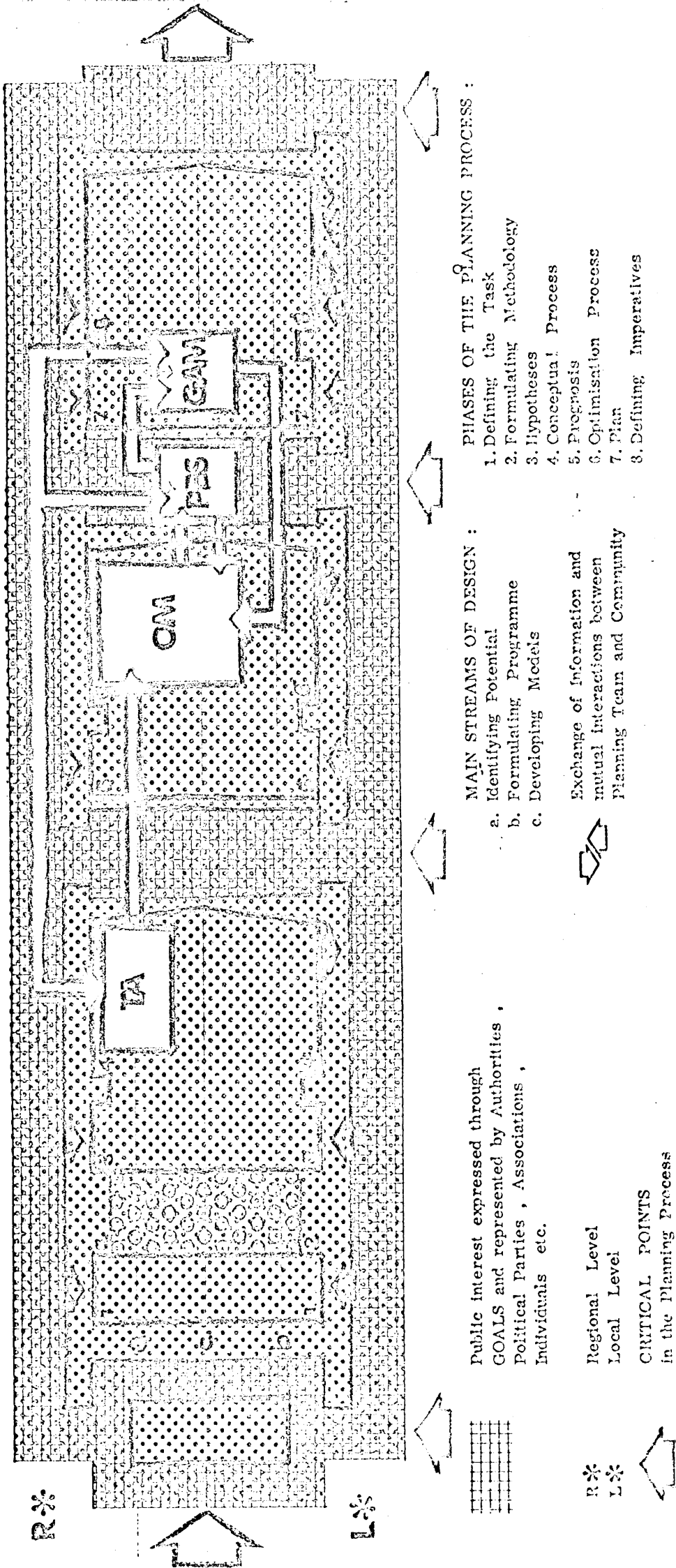


Figure 4. The Placing of Four Techniques and Their Interdependence Within the Framework of an Integrated Physical Planning Process.

Secondly, let me touch on economic planning. Economic model-building and process-planning has often tended to be oblique in its interests to the concern of comprehensive physical-planners. Indeed this was one of the reasons for physical planners in Poland, for instance, initiating a simple economic technique - such as Threshold to establish common ground with the economists. The relatively recent build-up of interest in the spatial parameters of economic decisions, the belated development of urban and regional economics (in Britain at least) and the data availability problems for urban input-output analyses, has made it difficult to co-relate the time-spans and spatial scales of economic and physical planning decisions. The experience of the Highlands and Islands Development Board in Scotland as a programme-orientated Regional Economic Planning Authority, is fruitful, especially as the Board's regional boundaries may now coincide with the boundaries of an upper-tier strategic authority for physical planning and general administrative purposes. Both the Haud and Wheatley Reports developed the principle of spatial parameters in respect of the economic provision of public services.

If, as a third case, one selects the transportation planning process, a good example is found of a technical field which is fairly sophisticated in method, which accepted systematic analysis and programme-design at a relatively early date, and was possibly the first of the environmental fields

to draw upon the cybernetic revolution, through the use of the computer in data selection, collection, collation and analysis, as well as in some aspects of decision-making. Transportation planning - though highly developed in many aspects of theory, has had at least two notable weaknesses: a) a lack of evaluation of social impact and tests in the goals, objectives and goal verification phases of its work process and b) a relative lack of attention to the interaction between activity location-theory, and future route-networks with their power of generating new activities along them - either within or outside the development control function.

In Europe, if not on the American Continent, modeling of political decision-making processes is a new area of technical exploration, but the evolution of decision-making theory, of systems-analysis and of Planning Programming Budgeting Systems is rapid and notable. Jessop and Friends recently published study of Coventry, entitled 'Local Government - Strategic Choice - An operational research approach to the processes of public Planning' (Ref. 10), is a most notable example of selected new techniques applied in a West European study.

From these foregoing comments, it may be seen that there is still some way to go to get the separate planning processes up to an equally mature stage of development.

d) Functions and Needs reveal the real nature of desirable process

Comprehensiveness of approach has been the key to success in the physical realization of plans in West European experience whether one looks at the renewal of blitzed city-centres, or the building of new-towns in Britain, regional developments in France, Italy and Norway, or at new urban communities in Scandinavia. Effective administrative machinery, adequate funding and management capability have coincided with the will to act - often as a belated response to a crisis situation.

Malfunctioning, or inadequacy of utilities, education problems, housing needs, decline of public safety in the streets, high fares in mass transit systems, haphazard organization of social service, etc., may have to become obvious issues and of crisis proportions, before they enter the political arena. Many past local political (and even national political) elections have been fought in Britain over the topic of 'housing shortage'... but only in the last few years have 'environmental protection' and 'environmental quality' entered the political arena. Lay perception of the failure of existing urban services is not, however, an adequate take-off point. Professional recognition of the need for comprehensive planning has to come well before its political discussion. W. B. Hansen's paper in 1963 on 'Metropolitan Planning and the New Comprehensiveness' (Ref. 11) usefully laid a basis for comprehensive policy-planning, but even in the older project-planning field there are notable shortcomings in comprehensiveness.

In British cities, we may now provide system-built housing environments, subject to haphazard social management policies for relocated populations from industrial slums, where though physical environmental-quality had been poor, social environmental cohesiveness and even economic mutual-aid was sustained. We live with a transitional technology in which many essential service-systems (street lighting, telecommunications, etc.) are nailed, on or draped across the newly built environments, because this is designed and implemented as a separate process. This is as true in suburban Edinburgh as it is north on Avenue Rd. in Toronto, or in new subdivisions in Southfield, Michigan. Hyper-compartmentalisation in urban life and organization has been given its head - activities, decisions, techniques, and financial allocations are illogically isolated in a separate series of organizational power hierarchies, and society suffers the chaotic output or results of separate systems. Analysis of effective human needs and functions point to the need for interactive process planning.

e) A Guidance Process for Change in a Period of Local Government Reform

Recognition of the inappropriateness of existing local government unit political-boundaries for describing functional systems and for dealing with community needs is accorded by

the reports of the Wheatley and Haud Commissions reviewing Local Government in Britain, and by the Committee for Economic Development lobby which favors more general acceptance of the Metro idea in the U.S.A. as well as in Canada. The emergence of C.O.G.s (or Councils of Government) in the U.S.A. to achieve necessary regional strategies through voluntary co-operation (cf. S.E.M.C.O.G. for Greater Detroit, and A.B.A.G. for the San Francisco Bay area) is symptomatic of the need for change. The core of the problem is both functional and fiscal.

Metropolitan administrative units in the U.S.A. often may not cover the functional system which links homes, service-locations, workplaces and leisure locations; the inner or central city, with an excess of physical, social and economic problems may, even with large federal subsidies lack adequate income, or political 'clout' to carry out directly or indirectly the necessary changes. Complex and splintered organizational structures - public, semi-public and private may struggle to maintain negative guidance systems to try and overcome aggravated old problems, and prevent new ones from getting out of hand.

If local government decision-making is to be effective in dealing with metropolitan and indeed megalopolitan situations, its methods must jump a few missing stages through to positive and creative strategic policy-planning, and away from hand to

mouth concern with the remedying of an unrelated scatter of past problems. The theory evolved in the experimental Peckham Health Centre (Ref. 12) in the 1930's in London, provides a useful precedent. The Peckham theory was that the problem was not the curing of a series of unconnected physical diseases, but recognition of the taking of a series of positive and linked actions to help achieve the physical and mental well-being of the individual and of the community, in a preventative way. Though perhaps in some ways naive, Peckham helped clarify goals, test alternative programmes for their achievement and through constant observation or monitoring of the Center-users tested the effectiveness against planned objectives.

In the urban policy-planning process, (Figure 5) the development of planning programming budgeting, system-analysis, and cost-effectiveness analysis are together an important ensemble in that such techniques help shift the planning and decision-making effort in the direction of goals and overall policy development, with stress on linked and interactive objectives, with evaluated costs and benefits of alternative solutions. Teitz' A.I.P. paper (Ref. 13) in September 1968 provided a useful summary of development as at that time and indicated that outputs of the process may significantly be tested against the achievement of planned objectives, i.e. and should not be seen in cost minimization terms. These

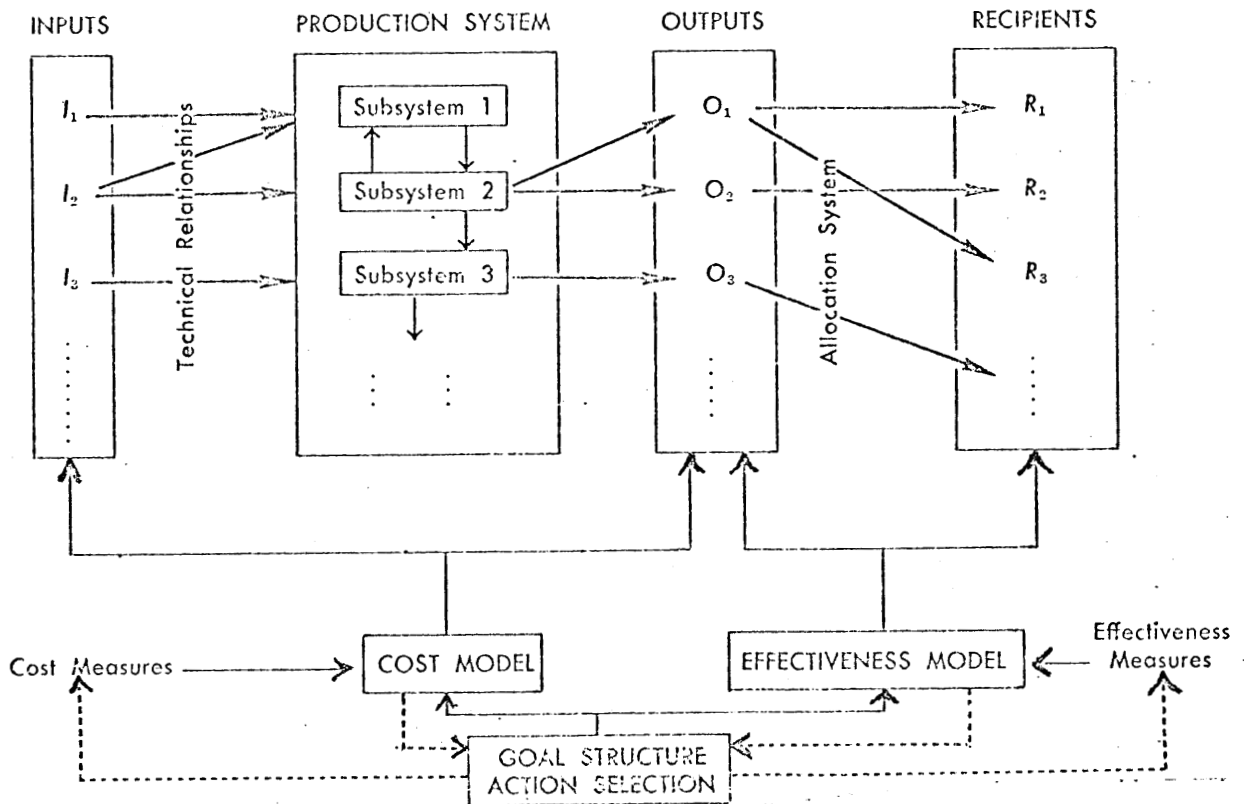


Figure 5

Schematic Model of a Systems Analysis Structure for Urban Public Services

M.B. Teitz

elements form part of a guidance process which may now be extended to integrate subprocesses, such as the models of the physical-planning process, we have already considered. This extends the Peckham health theory upwards into the fields of comprehensive policy-planning. Blick's paper on 'Capital Improvements Programming' (Ref. 14) helps to fill the gap in one stage of the comprehensive policy-planning process (Figure 6) - so that the linking of the work by Teitz, Blick, Kozlowski and myself may now enable us to twin or even integrate two types of process model.

f) Overlapping but Interactive Systems

As recently suggested by the distinguished Dutch planner, Simon Pronk, in his paper on 'Physical Planning, economic growth and the European Communities,' (Ref. 15) there has been an historic escalation in the size of areas of physical planning concern, and this has provided an antecedant for other forms of planning process development from the local scale to the regional, from the regional to the National, and from the national to international, with megalopolitan structures cutting across all! David Boyce (Figure 7) in his studies at the University of Pennsylvania (Ref. 16), similarly uses the development of a 'continuing physical planning process' ranging up through differing spatial scales, as a model method, and (Figure 3) extendable (in a matter of time) to areas such as 'social development

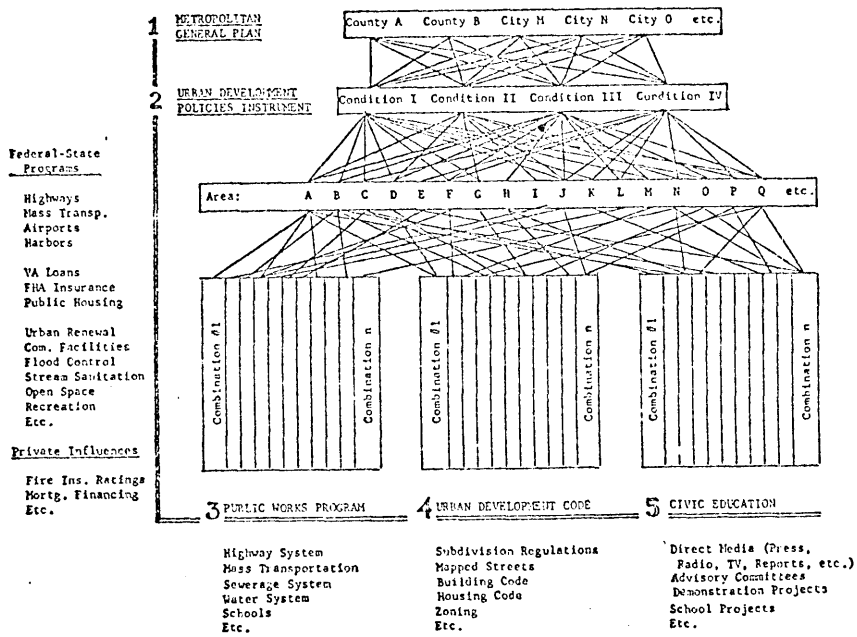
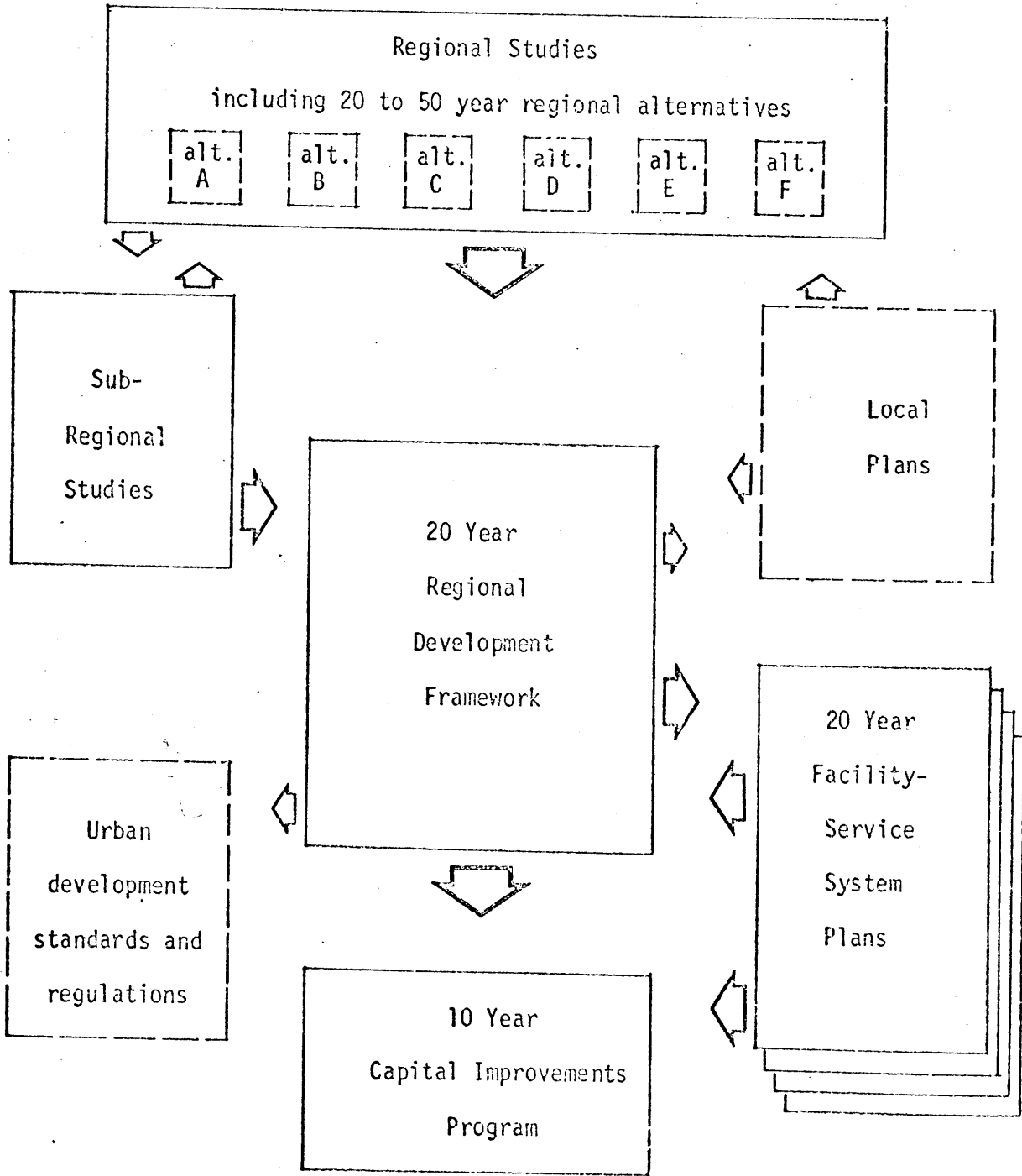


Figure 6

Diagrammatic Representation of the Elements of an Urban Development Guidance System (for an American City)

F. Stuart Chapin Jr.

Figure 7



The Plan Components of a Continuing Physical Planning Process
According to David Boyce

Reference: Metropolitan Plan Evaluation Methodology

	Physical Development							Social Development ¹	Economic Development ¹
	Comprehensive Development			Facility-Service Systems					
	Government & Finance	Urban Design	Development Process	Transportation	Commercial Centers	Open Space	Housing	Public Facilities	
long range objectives and principles									
10 to 20 year development policies									
5 to 10 year action programs									
standard and regulations									

¹The social and economic development columns ultimately would be as detailed as the physical development column, but have not been specifically studied by the authors.

Figure 8

Suggested Scope of Metropolitan Development Guide According to
David Boyce

models,' and 'economic development models'. The proposition is reasonable, but is far more fitted in its type of structure and rationality to a European political system, for instance, than to one in the U.S.A. with its long-held societal suspicions of authoritarianism and bureaucracy, or even to Canada which seems in many ways to be at an intermediate position on value systems and action, between its European and American counterparts.

A hierarchical set of scales for physical planning, and for various other forms of planning, may be feasible, even achievable - in the context of coincidental local, regional, state and national administrative units - for which policy-planning processes are now emerging. However, in the North American situation, in particular, I would make two points: 1) effective functional-interaction is needed between public planning agencies and key private utility planning bodies, and even with industrial corporations - if community needs and private profits are both to be satisfied in a compatible fashion, and 2) the power of megalopolitan economic systems may challenge the critical political role of the State, or of the Province, in the next decade.

The pollution question needs much more rational study and less emotive responses if we are to move away from local remedial actions through towards coherent management of ecological systems.

Here we enter not only state- or province-wide action, but national, international and indeed global questions - e.g., international movements of air occasionally transport chemical pollution from the Ruhr and deposit it as red snow in Norwegian ski resorts; mercury-effluent release in one part of the Manitoba waterways affects the fishing industry in other; industrial effluents in the waterways between Canada and the U.S.A. affect water supply, and recreation opportunities across borders and so on.... such issues challenge our ability to evolve a means of positive design and management of complex biological systems - adding yet another dimension and another process to intermesh with existing public and private-sector decision making.

I have been privileged of late to attend some of the Ecological Colloquia (Figure 9) initiated by the Wayne County Planning Commission in Michigan under its director Mr. Frank Bennett. This remarkable series led by Dr. W. Cooper of the Michigan State University is being done as part of a Federally-funded operation to determine future guidelines for Comprehensive Process planning in ^{an} extensive and populous area.... the role is therefore both educational and ultimately policy-orientated. The Colloquia, drawing upon a key on-going research study on the 'Design and Management of Environmental Systems,' (Ref. 17)

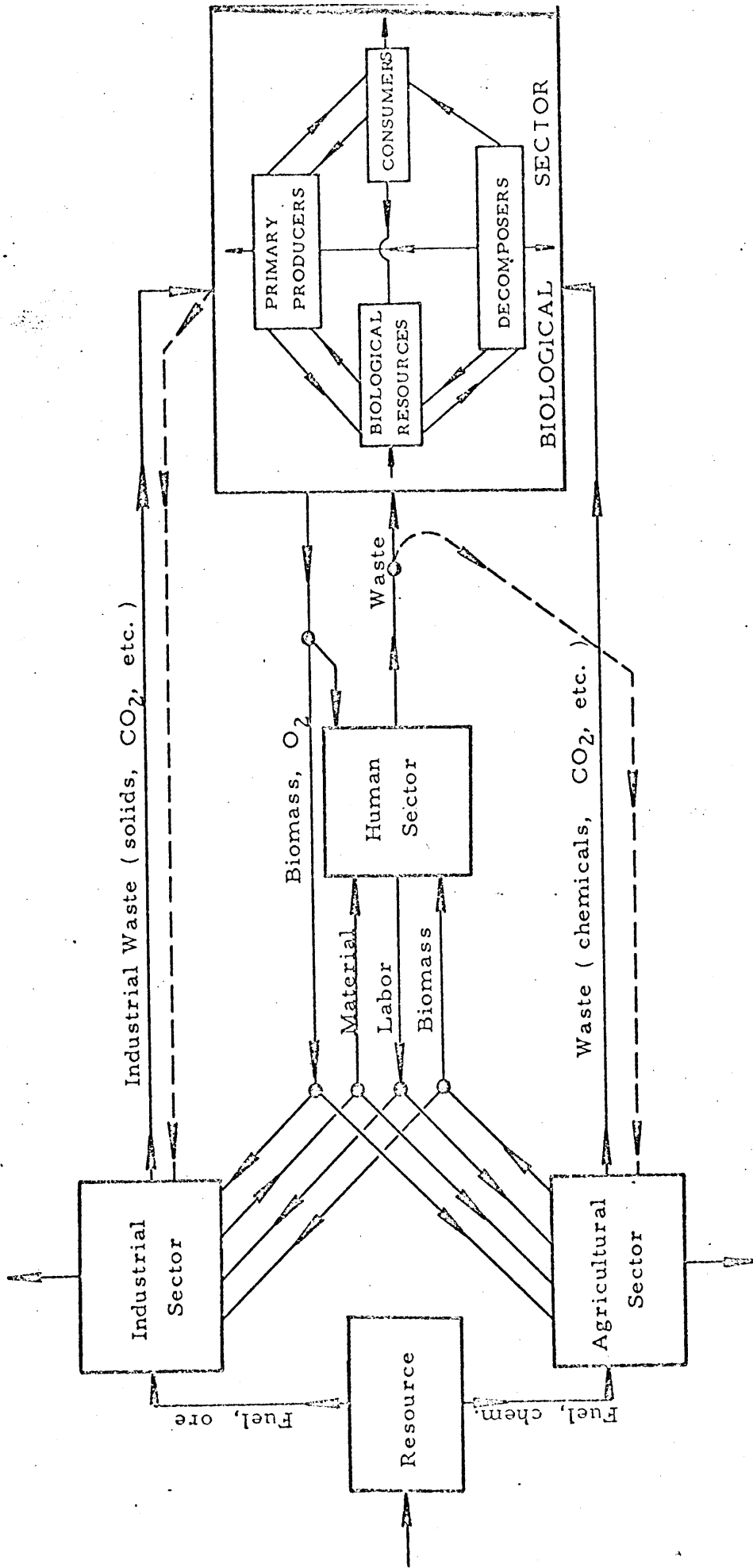


Figure 9. Macro Features of Environmental System as an Energy Transformation and Transmission Process

Reference: 'Design and Management of Environmental Systems'
 Dr. W. Cooper. 1970.

gives an alternative way of viewing comprehensive changes by focusing on the nature of resources, and the characteristics of energy change and transmission. It implies an evaluation of solutions in energy consumption terms rather than in financial consumption terms. It plans positively for the creative recycling of resources, and it views landscape planning as a method of working with Nature to develop minimum effort, self-sustaining natural systems for man's benefit. It is a third view.

In conclusion. I have tried to open three doors.

One door leads to the simultaneous and level development of interacting process cycles entitled physical planning, social planning, economic planning, etc.

The second door leading to comprehensive policy-planning provides a strategic framework within which the various sub-planning processes (behind door 1) may be slotted and co-exist.

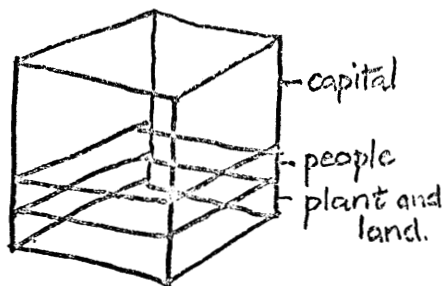
The third door opens up the discussion of the interaction of the management of ecological systems, with other more conventional formulations of the policy questions and processes we are considering.

Perhaps the path through the third door will give us another vital viewpoint of the issues at stake.

I promised a construct, Mr. Chairman, not an answer, and I hope a continuing technical dialogue about this construct will, in the future help to achieve the legitimate aim of sustained human-choice, and responsible environmental management.

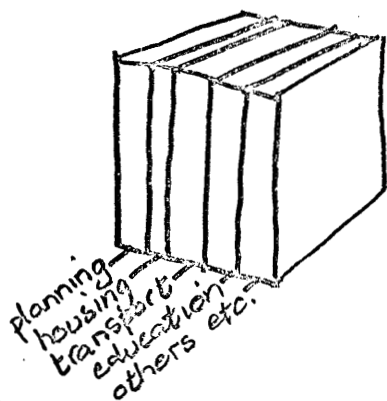
Figure 10. Towards the development of a concept for linking the several sub-processes of planning in a major urban authority into an overall integrative process.

Stage 1:-



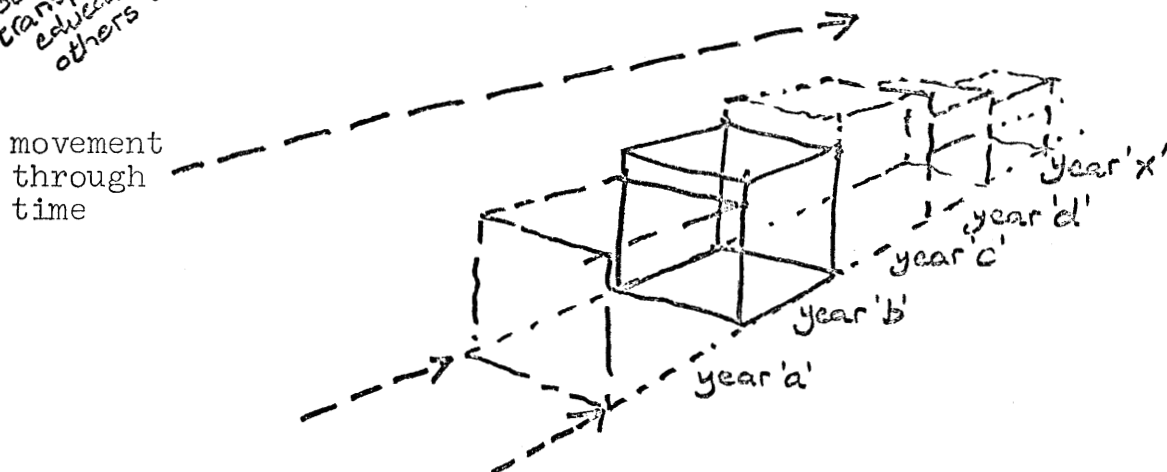
If the resources of an urban authority are viewed as a spatial cube, then that cube may be seen to have 3 parts, horizontally.
 -the variable financial resources available to that body
 -the human resources, or personnel
 -the fixed capital plant

Stage 2:-



The cube may also be split vertically into a number of vertical components, namely the budgetary allocations of that authority to a range of functions, e.g. to planning, public safety, transportation, etc. These allocations are variables.

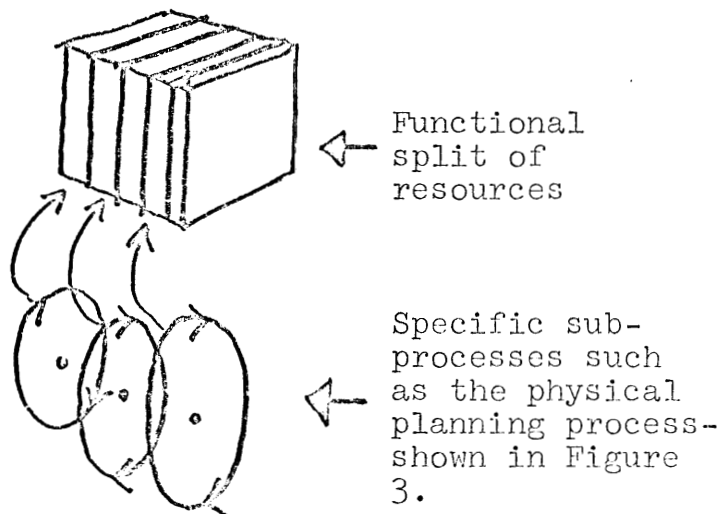
Stage 3:-



The dimension of time must be built into the process, as the resources of the authority will change through time, as will the demands made upon those resources - which will to varying extents be satisfied by the budgetary allocations to the range of functions.

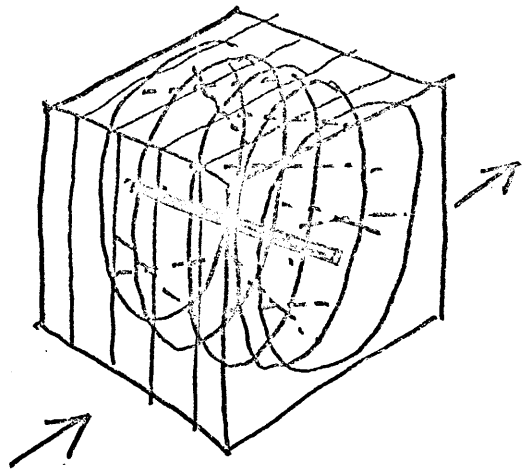
Stage 4:-

Next, there is the need to relate the functions, and resource allocations to them, to the definable ongoing planning processes for each function, noting that interacting between the functions must also be built in to the system.



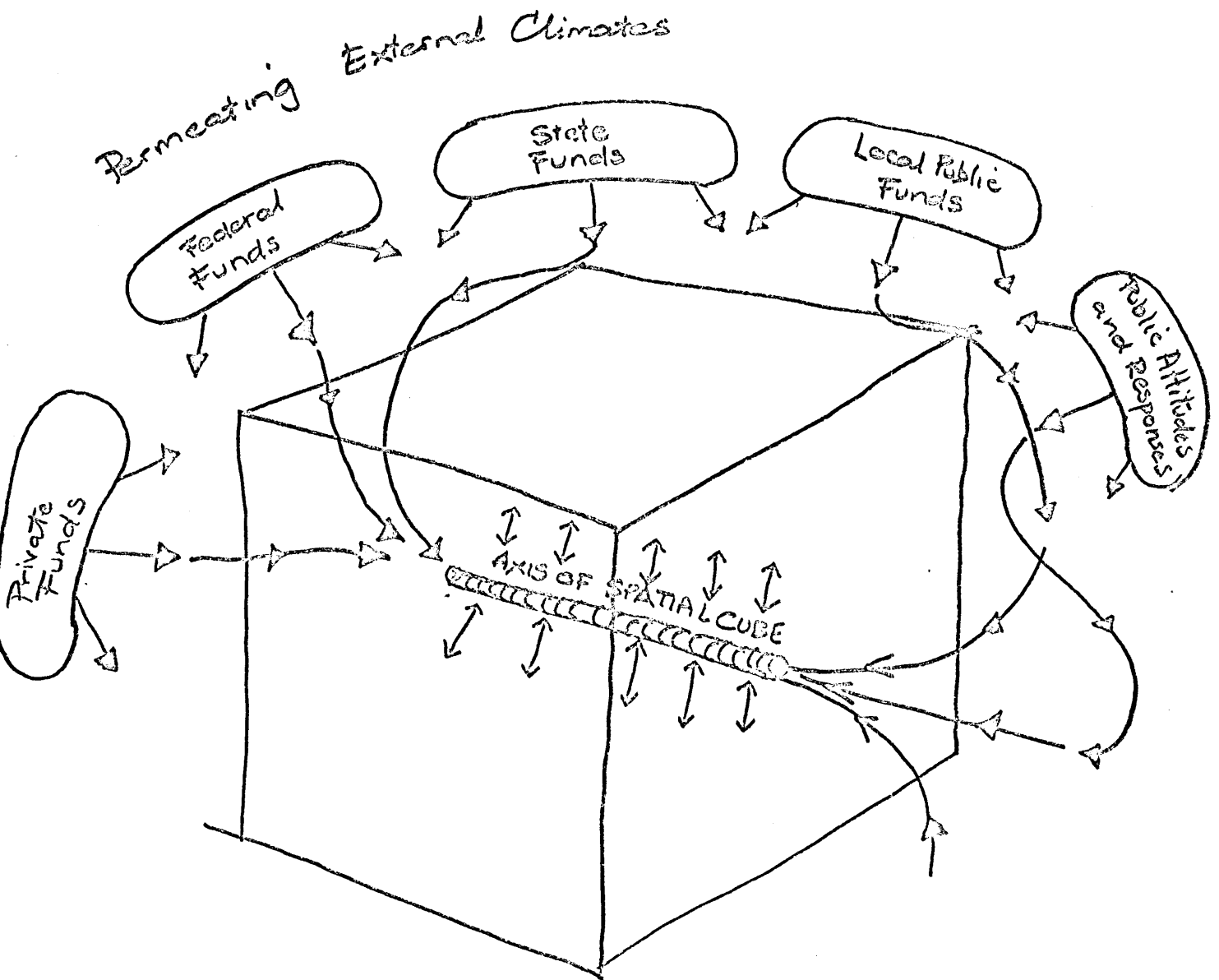
Stage 5:-

When the subprocesses have been slotted into the climates comprised by the cubic slices, or separate functional budgets, then the interactions between functions may be re-examined by an overall P.P.B.S. approach. This may lead to redefinition of functions and programs. Multi-lateral links between points at various stages in the cyclical sub-processes must also be established.



Stage 6:-

The spatial cube is itself not only moving through time, but is affected by the external or controlling climate, within which it exists. This wider climate gives both permeating inputs (Federal, State, Local and Private Funds, legislation, public responses, etc.) and funneling inputs - via the key axis of the spatial cube - an axis which links the hubs of the cyclical subprocesses.



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