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TOWARD A SYSTEM OF SOCIAL PLANNING IN YUGOSLAVIA

Yugoslavia is unique in the world today in attempting through both federal and local legislation to provide an institutional format and direction for social planning.¹ As presently conceived social planning would sharpen and eventually combine economic planning goals of growth and stabilization with corresponding physical land-use objectives. The current recognition of the need for such a social planning approach is intimately connected with the country's political and historical evolution and its multinational composition. Recognition of the need for social planning is, of course, only the first step on the road to an operationally meaningful program and the Yugoslavs, equally with other countries, are still in the early stages of clarifying a working program for this concept. Their scheme provides, nonetheless, an attractive research environment for both economic and physical planners. The opportunities in such an environment have stimulated a number of American scholars to join with their Yugoslav counterparts in the study of the nature of social planning under the auspices of the Cornell University - Yugoslav project.²

This paper is basically expository and draws upon some early efforts

¹Milos Minic, "O kritici sistema planiranja," Nin (Beograd: 13 and 20 March, 1966): Marko Erkovic, "O sistemu drustvenog planiranja," Radna i drustvena zajednica (Beograd: No. 1, 1966), pp. 711-726; "Osnove sistema drustvenog planiranja (teze), Jugoslovenski pregled, informacije i dokumenti (Beograd: br. 5/1966), pp. 175-186.

²Cornell, under contracts with the Ford Foundation and the U.S. Department of State is administratively responsible for carrying out the project with the assistance of scholars from the University of California at Berkeley, the University of Chicago, and the University of Southern California.

to conceptualize useful tasks for the project. The paper has three parts. The first section reviews the evolving idea of social planning in Yugoslavia with an interpretation of the phases of Yugoslav planning experience and of the emergence of social planning tasks.¹ In the second section we offer a possible conceptual framework for organizing research for social planning. And in the third, we review some of the linkage potentials between economic and physical planning, and some of the operational and analytical difficulties of the constructs which have been used to effect these linkages in the past.

I. The Evolving View of Social Planning in Yugoslavia

Today's recognition and pursuit of social planning has grown out of a number of successive regional planning experiences during the last twenty years. In the immediate postwar period (1945-1950) regional planning in Yugoslavia, as in its Soviet counterpart, was implemented mainly at the republic level which received and carried out investment assignments previously decided upon by the central governmental body. At the same time, the central government provided a corresponding administrative framework lending support to the principle of cultural self-determination. In Yugoslavia, due to centuries of foreign domination and differing linguistic, religious, and ethnic characteristics, the country's regionalization along (six) republican lines attempted to cushion traditional regional animosities.²

¹The views of the nature of Yugoslav planning, of the appropriate character of social planning, and of possible research and operational procedures are necessarily our early impressions: they are in no sense official Yugoslav positions.

²Within the Republic of Serbia, increased regionalization occurred with creation of the autonomous provinces of Vojvodina and Kosovo and Metohija which further stimulated the principle of local self-determination.

Another element contributing to Yugoslavia's regional complexity had been the historical economic division between the relatively affluent North and the impoverished South. This issue led the Federal Planning Commission to designate the South underdeveloped and to provide a differential growth policy for this area.¹ In harmony with the then-existing interpretation of Marxist thought, regional inequality between North and South was to be eliminated. Consistent with this policy, institutional mechanisms designed to capture and transfer surplus accumulation from North to South were then employed in a series of southern investment programs in heavy industry.

Thus, social planning in the period 1945-1950 was actually a general form of regional planning which consisted of two major efforts: (1) the creation of Yugoslavia's territorial-administrative system providing regional cultural autonomy which undoubtedly has turned out to be an important contribution to the country's political viability; (2) the regional equalization of heavy industry in accordance with specific normative requirements set forth in the National Economic Plan.

In 1950, a fundamental change in Yugoslavia's planning system originated with the passage of the law for workers' self-management. This law represented what was perhaps a politically unavoidable trend towards economic decentralization commensurate with the established principles of regional cultural autonomy. The key to workers' self-management has been the workers' council² which as of 1950 determined the annual plan of the enterprise

¹Zakon o petogodisnjem planu; Razvitku Narodne privrede Federativne Narodne Republike Jugoslavije 1947-1951 (Beograd: Izdanje Savezne Planske Komisiije), 1947, p. 103.

²Much has been written about the operating functions of workers' councils. See in particular: Benjamin Ward, "Workers' Management in Yugoslavia," Journal of Political Economy, Vol. 65 (1957), pp. 373-86.

(formerly the responsibility of the Federal Planning Commission). This system, which diminished the role of the centrally appointed director while establishing the authority of the workers through their elected workers' council, met with variable success from region to region. The period 1950-1955 witnessed the proliferation and entrenchment of workers' self-management throughout the country.

Economic decentralization, designed to delegate greater authority to the firm through the new decision-making responsibility of the workers' council, required a reevaluation of the heretofore economically unimportant role of local governmental units, i.e., communes and districts. This produced legislation enacted in 1955 requiring that local units be placed in a new coordinative and guidance position directly above the individual enterprises. The general effect of this measure was to provide local administrative authorities with that physical planning jurisdiction previously retained by the central government. Equally important were the new fiscal and economic development functions assumed by local government, e.g., taxation power over enterprises, involvement in the investment decisions of enterprises, and responsibility for the provision of new residential construction. By April 1963, the provision of the Federal Constitution specifying the commune as the basic economic and political force in Yugoslavia was fully in effect.

Toward the end of this period of the ascendancy of the commune a number of "negative" planning aspects began to emerge and hinder nationwide

¹For a detailed discussion of the communal system see Jack C. Fisher, Yugoslavia: A Multinational State-Regional Difference and Administrative Response. (Chandler Publishing Co., San Francisco, California) 1966, pp. 145-154.

economic development.¹ For one thing, investment funds became compartmentalized or "territorialized" in the hands of the communes which reflected a severe lack of intercommunal and, hence, regional cooperation. At the same time, communal taxes were used to increase the amount of new communal physical resources at the expense of reinvestment in the existing local economic enterprises. In addition to problems associated with communal administration a number of other more fundamental dissatisfactions came to the surface. For example, there was increased reluctance on the part of the Northern republics to continue the drain of their capital into the Central Investment Fund. There was also a growing sentiment that investment funds be disbursed on the basis of efficiency rather than any combination of political pressure and vaguely stated regional requirements.

The accumulation of these frictions produced a new period of self-examination introduced by the Economic Reform in 1965. The Reform was, in essence, a further step in the decentralization process which began in 1950. The Reform had two immediate impacts: (1) the disengagement of territorial-administrative units in economic decision-making; (2) the "depoliticalization" of investment, i.e., the decrease of the Communist Party's direct role in economic decision-making. The Economic Reform resulted in 70 percent of total economic investment being placed under the direct control of economic enterprises, banks, and the Federal Fund for the Development of Insufficiently Developed Republics and Areas; 30 percent remained under the disposition of

¹Many of the problems in this period are discussed by Rudolf Bicanic in Economics of Socialism in Yugoslavia - Transition to the Third State: The Reform, draft manuscript.

administrative units.¹ An important consequence of the Reform, therefore, was to eliminate the direct economic involvement of the communes and other territorial units and to greatly magnify the significance of the individual firm. However, it is important to note that the communes did retain control over physical land-use development within their individual territories.

In summary, the Yugoslav planning experience of the post-war period can be viewed as falling into three phases: a five-year experience with centralized administrative planning in which the Federal government directly controlled economic and physical planning; a fifteen-year experiment with decentralized decision-making, typified by worker self-management and communal autonomy in a unique partnership with the Federal government; and, a phase begun in 1965 which granted the enterprise almost complete economic independence with only indirect Federal supervision. A tabular outline of the evolution of these phases including the institutional responsibilities for the major elements of social planning is shown in the following chart:

¹Drustveni Plan rezvoja Jugoslavije od 1966 do 1970 godine (Zagreb: Narodna Novina), 1966, p. 87. "After the Reform working organizations participated over 64% in the National Income compared to 50% before the Reform": Ibid., p. 14.

CHART I
THE STAGES OF YUGOSLAV PLANNING

<u>Period</u>	<u>Description</u>	Institutional Responsibility for:	
		<u>Economic Planning</u>	<u>Spatial Planning</u>
1945-1950	Administrative Centralism	Federal (Direct)	Federal (Direct)
1950-1955	Development of Workers Self-Management	Federal/Enterprise (Direct)	Federal/Republic (Direct)
1955-1965	Development of Communal System	Federal (Indirect)/Commune/Enterprise	Commune
1965-	Economic Reform	Federal (Indirect)/Enterprise	Commune

The chronological transition of responsibilities shown in Chart I helps to suggest the need for social planning in Yugoslavia. The autonomous communal organization adopted in 1955 placed both economic and spatial planning in the hands of the commune, but this unit soon proved too small for the effective organization of either function. The Reform adopted in 1965 exacerbated the difficulties of the small communes by eliminating their economic base, and failed to provide an effective territorial unit for the organization of the spatial planning efforts. This fragmentation effectively forestalled any social planning program which would attempt to integrate both economic and physical-spatial planning.

The concept of social planning as it is now developing in Yugoslavia proposes to heal two serious breaches in the structure of planning--the break of continuity between the macro targets of the Federal plans and the micro

targets of the communes and enterprises, and the gap between decentralized economic plans and specific physical development plans.

As presently developed, the general financial plans of the Central Planning Agency have no explicit spatial or regional dimensions even though they have definite regional consequences. By this we mean to say that the plans, which call for allocation by branches, are "regional" only to the extent that the existing spatial distribution of the branches causes the allocations to be skewed in some regional direction.

Further, the interrelation between Federal plans and Republic plans, and between Republic plans and commune decisions is broadly indicative. There are few direct clearances and little controlled plan implementation. In addition to the common information of shared forecasts and time perspectives, which in Yugoslavia is highly variable from agency to agency, indicative planning needs coordination of decision units and uniform administration, both of which are difficult to achieve in the multinational Yugoslav state.

In this planning context, the integration of local physical development plans with the Federal financial plans is as difficult as in the presumably unplanned western states. The social planning ideal calls for rationalization of infrastructure investment, rationalization of locational decisions, and broad equity through minimum consumption of social goods. In the present-day Yugoslav economy local physical planning has to bear the principal burden of this rationalization, in principle if not in fact. A recent authoritative statement on The System of Social Planning in Yugoslavia¹ declares that

¹Report written by Marko Frkovic, Head of the Sector of Social Economic System in the Federal Institute of Economic Planning, edited by the FIEP, Belgrade, May 28, 1966.

"physical plans have the character of social planning acts: coordinating the development in the given area; in principal, these plans are being prepared and adopted in the same way as the social plans."¹ "Presumably, in the social planning context, these physical plans, using long-term economic and demographic forecasts, would forecast the infrastructure of the territory, create the optimal location of the basic economic capacities, the network of settlements and social services, imparting a direction of urban planning and of urbanization processes entailing a rational economizing with space and shaping humanly the conditions where the people live."² In short, the guidance of decentralized investment decisions in a manner which will secure the Federal economic interest and provide optimal social services for the population becomes the responsibility of regional physical planning.

It is our view that the task of social planning is to systematically relate the physical planning of regional infrastructure to the general financial plans of the Federal government and the respective republics, and also to the investment intentions of the decentralized enterprises. On the other hand, implementation of social planning in Yugoslavia requires: (1) some intermediate regional planning body, with appropriate powers and responsibility, to be interposed between the government planners and the enterprises; (2) a developed system of "comprehensive" social planning. Our following comments will pertain almost exclusively to the second requirement.

¹Ibid., ch. 9.

²Ibid.

II. Development of the Social Planning System: A Proposed Framework¹

The following discussion attempts to summarize most of our brief progress toward the development of a proposed social planning system for regional analysis in Yugoslavia. It has been designed with the intent to provide the Cornell-Yugoslav Project with a first approximation to a two-year program of work in the form of a three-part framework for operational social planning analysis. In its early stage of development, we should emphasize the fact that the content of this framework, of necessity, avoids matters of specific detail and instead concentrates more modestly on a set of central propositions which form the core of our research intentions.

Largely out of our preliminary discussions which took place in Yugoslavia during the summer of 1966, a strong consensus has emerged among the participants--both Americans and Yugoslavs--favoring an interdisciplinary approach to the analysis of Yugoslav regional planning problems. The task of assembling an interdisciplinary working team is a comparatively easy one as opposed to the design and execution of effective interdisciplinary research, i.e., research that contains actual interdisciplinary feedback. It is generally well-known that past "interdisciplinary" research efforts in the social sciences have not achieved substantial amounts of unity or interrelatedness but, on the other hand, have been pursued rather piecemeal. The resulting non-operational character of interdisciplinary efforts may be explained in part by the fact that each academic "discipline" has developed its own screen for sorting events into "data" and as yet there is no general mechanism for converting

¹In this section, appreciation is expressed for the helpful suggestions of V. Frankovic and M. Dolenc of the Institute of Economic Research in Ljubljana.

the findings of one theoretical system into equivalents in another. However, with the rising importance and advancements in the areas of functional analysis and quantitative methods coupled with very promising recent applications in operational modelbuilding and systems analysis, the present authors feel that the Project's expectations for feasible interdisciplinary analysis need not be unduly heroic.

Thus, by extension, we believe that a central aim of our program is not only to attempt to provide a regional planning framework within which interdisciplinary research can be performed but also within which the character of the work becomes increasingly operational. The concept of "operational" is critical and by this we have in mind at least two closely connected ideas; that the proposed research be of a strongly quantitative nature and that it be capable of empirical implementation (at reasonable cost). Furthermore, an operational Planning framework would require some level of specification for the interaction of public or governmental instrument and target (goal) combinations. This condition holds with special force in a consciously directed Yugoslav regional setting.

We, therefore, have indicated not just one but three key dimensions--interdisciplinary, operational, and planning--which we consider basic to any formulation of our 3-part framework presented below, which should lead to the development of a social planning system. Although we shall develop the conceptual notion of a social planning system in somewhat greater detail at a later date, note here that our choice of such a tack is an obvious one at least on purely associative grounds where social corresponds to interdisciplinary, planning with targets and instruments, and system with operational.

The general framework then, consists of the following broad divisions, the first two of which are actually conceived as a set of sub-models:

- A. Economic and Demographic Analysis
- B. Physical-Spatial Analysis
- C. Synthesis, or: Development of a Social Planning System

The economic and demographic analysis has been combined under division A. inasmuch as the work to be performed is more closely related, both on theoretical grounds and on the basis of recent empirical findings. The content of this work although relatively more conventional does require some specific comments.

Utilizing a components or building block approach we propose to construct a quantitative economic policy model which will be applied first to the 15-commune Ljubljana region. This model will consist of two principal parts:

- 1. a specification of the mechanism of the regional economy in aggregate economic and demographic terms, and
- 2. an elaboration of the public finance sector at each governmental level.

Our approach to the first part will make use of the many merits associated with econometric models of aggregate demand. We shall recall that this particular choice of model has not been used extensively in regional economic analysis despite the fact that they (national models) have been the subject of continuous development for some time. The following discussion attempts to review some of the more persistent obstacles that have confronted this kind of research and to assess the relevance of these obstacles within a Yugoslav regional research environment.

Subsequent to the initial work of the Cowles Commission at the University

of Chicago and especially since 1954, there have been an increasing number of investigations into the properties of national econometric models in both the U.S. and other countries as analytical systems of income determination not only for closed but for open economies as well. The circular pattern of interactions that forms the core of these economywide models proceeds from "the impact of changes in production upon income payments, changes in income payments upon Expenditures, and changes in Expenditures upon Production . . ."¹ With few exceptions, the empirical implementation of these (Keynesian) models has been strongly reliant upon the definitional relationships and statistical data framed by national income and product accounts. In contrast, the first major difficulty encountered in the attempt to implement regional aggregate demand models, at least in the U.S., is the "unit of measurement" problem.² This problem, which arises for the simple reason that historical statistics for regional production and expenditures are not available, is usually handled directly by the investigator's construction of extremely coarse estimates or indirectly by use of surrogate variables (e.g., employment or components of personal income) which are normally available.³ The necessity of resorting to such quantitative measurements as "export or investment employment" or

¹K.A. Fox and E. Thorbecke, "Specification of Structures and Data Requirements in Policy Models," in Quantitative Planning of Economic Policy, (Brookings, 1965), p. 84.

²This difficulty affects the construction of all aggregate regional models whether they are of the cross-sectional variety (economic base or regional and interregional input-output) or those presently under discussion whose relationships are conventionally subject to dynamic specification and estimation.

³For a demonstration of the use of surrogate variables in a regional econometric model, see: Richard Burton and John Dyckman, "The Role of Defense Expenditures in California Development Plan Forecasts," Western Economic Journal, (March, 1965).

"consumption wage and salary payments," etc., greatly hamper the evaluation of structural coefficients a priori and, hence, the assessment of the mechanics of the regional economy. On the other hand, an adherence to the mechanics of the circular pattern of relationships referred to above becomes a distinct possibility in the construction of Yugoslav regional equation systems where structural specifications need not be severely weakened by the paucity of existing performance data.

The attempt to take factor movements into account on a structural basis represents another set of conditions which may eventually prove to be as immediately germane to regional analysis as those above which are limited exclusively to principles governing the exchange of goods and services.¹ The interregional mobility of labor and entrepreneurship, for example, goes largely unrestricted as compared with the many frictions imposed upon their movement by national boundaries. As such, their role as determinants of sudden and sustained changes in the levels of regional income and expenditures, as well as employment and population, seem comparatively crucial both on a priori grounds and upon examination of the empirical record--notably that of Yugoslavia. Therefore, another important aspect of the proposed system is that it intends to integrate demographic analysis with special emphasis given to labor force migration. Taking advantage of the excellent Yugoslav interregional migration statistics, the success of this effort will depend on the ultimate flexibility of the major components within Division A. of the system.

¹ Haavelmo, in his A Study in the Theory of Economic Evolution, (North-Holland, 1964), p. 111, was concerned some time ago with the impact of interregional migration on regional growth. More recently, Charles M. Tiebout and David B. Houston have been exploring its relevance to the urban consumption function.

The introduction of quantitative relationships for public finance, the second principal part of the proposed system, is vital to the analysis and simulation of alternative policies formulated at all tiers of Yugoslav government as these policies effect the Ljubljana urban region. The logic underlying policy simulation methods resides in the ability to relate target variables, which are not completely susceptible to single-authority control, with instrument variables which, presumably, are controllable by the public planning authorities.¹ In passing from the analytic to the policy problem where emphasis is now on the choice of available instruments (and what values they are to be assigned consistent with obtaining selected target levels), we expect to shed additional light on the need for economic and social planning at the local regional level which does not currently exist in Yugoslavia.

In our view, the isolation of physical-spatial analysis, division B. of the proposed framework, is conceptually unfortunate but nevertheless has been unavoidable. It is evident that in the field of planning the research gap separating microanalytic physical-spatial studies and macro-economic-demographic analysis has been and continues to be a very sizable one. In fact, we consider this breach to be the principal focal point in the development of a social planning system under division C. of this framework. The intended purpose of the social planning system then, will be to translate the (more abstract)

¹The target variables of conventional econometric planning models are employment, income, prices, the balance of payments, etc., while the instrument variables by which the target levels are to be attained consist of government expenditures, subsidies, monetary policy, taxes and transfers, and so on. Tinbergen has demonstrated how a series of controlled variables (instruments) might be used to achieve desired levels of non-controlled variables (targets) within the framework of a linear econometric model. Others, notably Theil, have suggested modifications of this pioneering work which would explicitly introduce planners' (symmetrical quadratic) preference functions.

output generated by macroeconomic systems analysis into an operation decision-making or decision-supporting tool for the location and level of public infrastructure. The actual design of such a system would be a continuous process and concerted effort on behalf of the Project director and members of the joint Yugoslav-American working team to explore various possibilities of integrating work between individual areas of inquiry. We believe that this process would probably be best achieved via bimonthly or even weekly research conferences which would hopefully tend to produce a kind of familiarity with one another's in-progress research that would otherwise be difficult to achieve and that the separateness of the system's sub-models would gradually diminish with advanced understanding of social processes and with skillful disaggregation of macro-variables. There is considerable evidence to support the feasibility of the research-by-committee method, especially in the case of the recent large scale Brookings-SSRC studies.

In conclusion, we believe that our 3-part framework, intended to serve only as a broad research guideline for the Cornell-Yugoslav project, suggests a number of advantages. First, we are fairly certain that it represents a useful and needed unifying device and overall goal for the Project's future course of work.¹ Secondly, we are convinced that an orderly, well-considered attempt or succession of attempts to construct a (generalized) social planning system would be both timely and professionally desirable. Third, the opera-

¹We were somewhat concerned that the Project could much more easily adopt the well-worn "shopping list" approach in which loosely coordinated, random studies of the region were commissioned ad hoc. Our building block proposal does encourage individual studies, especially in the first stages of the work program, but insists upon their elasticity and relevance at some point to our central purpose.

tional character of the framework ensures maximum practical usefulness and is in line with the most contemporary research in the field of planning. Finally, our notion of a social planning system lends itself well to both the institutional conditions existent in Yugoslavia and to the relative abundance of locally available regional performance data.

III. Planning Linkages

In the preceding discussion we have considered a possible framework for social planning studies. Let us next consider some of the research questions raised by attempting to integrate physical planning with economic planning in a regional scheme.

The strands linking economic and physical planning have been analytically weak in both planned and unplanned economies. The "requirements" of physical planning method are an amalgam of average past practice, social aspiration, and currently fashionable technical solutions.

The two major decision areas for urban and regional physical planners are land use and capital investment in infrastructure. Land use decisions involve amount, location and other elements of demand by type of use. The prescriptions of the land use planners are based upon projections of demand (to meet the test of reasonableness) and upon norms which are independently validated (the standards of the profession). Capital budget decisions of the physical planners are concerned chiefly with priorities, since the levels of the budgets are matters of economic determination. Priorities are set in accord with judgments of need (based on obsolescence of existing facilities or deficiencies in meeting "standard" conditions). Physical planners, however, have contributed little to the development of criteria of choice among competing projects, leaving

this issue to welfare economists or public administration experts.

The information requirements of the physical planners usually begin with the need for economic and demographic projections extended over the expected life of the physical plan. These forecasts constitute both the constraints upon physical planning and the estimates of probable demand (when multiplied by standards, or by trends of usage). Along with land use data which is for the most part descriptive, economic and demographic studies comprise the historic information trilogy of physical planning.

Physical planning is not informed by a general theory of "best" strategy of infrastructure investment, "best" locational pattern, and "best" environment for living. In practice, it is the resultant of two vectors--the social planning determination of "needs" and the economic planning determination of available means. Social planning sets the minimum consumption level of social services acceptable to the community. These minimum standards form the "requirements" of physical planning, though because of the social aspiration level embedded in them, they should not be confused with engineering requirements. Nevertheless, the socially determined requirements serve as elements in the production functions of physical planning right along with engineering possibilities.

In conventional planning practice, it is customary to accept the "requirements" approach as "demand." In modelling the economy, one can treat the physical planning model as a sub-model generating demands for construction activity, floor space, etc., almost independently of the main economic dynamics. On close examination, the demands turn out to be quite arbitrary determinations which provide little feedback information to the economic model. At worst they have little force and are soon modified by circumstances, while at best

they are unexplained constraints on the operation of the economic system.

The economic counterpart of these requirements can be thought of as the set of average coefficients of, e.g., the ordinary input-output table, which provide a summary statement of recent past practice without the evaluative elements. If the input-output table is sufficiently disaggregated by sector, and is further disaggregated in space, it may provide useful inputs to the physical planner. But location decisions are enterprise decisions, and disaggregation of even finer grain than that conducted by economics to date may be necessary in order to make manageable theory of the seemingly capricious behavior of these economic units in isolation. Leontief has recently¹ urged such disaggregation, and Orcutt has for several years been testing techniques for handling highly disaggregated systems. Disaggregation should be further supplemented by actual flow data--another longtime dream of empirical economists. This latter is especially important to physical planners who need measures of the physical flows as well as economic flows.

Even a highly disaggregated system of physical flow data would fall short of integrating the conceptions of economic and physical planning.² Nor does industrial complex and cost-benefit analysis leave little to be desired as effective planning linkages. Locational analysis badly needs a time dimension. Almost all existing studies are cross-sectional, and the theory lacks time dynamics. Is a presently "best" location best in the long run? In Yugoslavia, as elsewhere, "Physical plans are, by their very nature, long-term periods. Renovation and continuous prolongation of these plans is carried out in connec-

¹W. Leontief, address to Economic Development Administration summer seminar, Williams College, Williamstown, Mass., August, 1966.

²Frkovic, op. cit.

tion with the preparation of medium-term plans."¹ But we have done little in any country to analyze changing land use patterns in terms of underlying locational strategies, and to prepare usable time series of land and locational change.

Finally, the integration of economic planning and physical planning in a social planning system requires a broader conception of economic rationality than has usually been adopted by economists.²

Yugoslavia appears to have swung from a Soviet-style industrial fundamentalism, in which heavy industry was deemed essential for the economic and political development of each region to a market version of efficiency in which investment funds are to be freed, so far as possible, to seek their own opportunities for profitability. Many physical planning objectives, such as conservation of amenities, ecological "balance" and minimizing of undesirable "neighborhood effects" of development are endangered by this emphasis, and the

¹Devising the ways and means of disaggregating economic systems is by no means unheard of practice within planning circles. What is surprising, however, is that so little effort has gone into shaping the theory and construction of aggregate spatial models.

²The intervention of planning is a political act which implies some ruling public purposes. As Tinbergen says, ". . . planning will be defined as the preparation for political action, that is, action by public authorities. Economic planning then refers to the economic activities implied . . ." (J. Tinbergen, "International Economic Planning," Daedalus, Spring, 1966, p. 530.) It is not necessary to give up the goal of rationality to include some "non-economic" objectives, but it may be necessary to expand traditional notions of economic rationality to include some additional system ends. As the Yugoslavs move to a condition of greater economic affluence, these values may be expected to increasingly enter into the social planning system. The French progression in emphasis from the First Plan to the Fourth Plan illustrates this extension of aims. "The emphasis placed on providing social equipment, improving the living standard of less-favored groups and developing a better balance between the different regions is one of the principal features of the Fourth Plan." (France and Economic Planning, Ambassade de France, Service de Presse et d'Information, April, 1963, p. 25.) Is it "rational" to attempt to anticipate this drift and to make the ultimate realization of more complex objectives easier?

declared objectives of the social planning system, which includes certain redistributive goals, may be slighted. A kind of "suboptimization" may result in the longer run in the course of achieving high-priority short-run economic targets.

In a relatively affluent economy, the investment in "social equipment" can be defended on purely redistributive grounds, without regard to considerations of economic efficiency. In Yugoslavia, which is struggling to overcome a poor material base, it is customary to advance social planning considerations on grounds of long-run economic efficiency. The measurement of the contribution of infrastructure projects to national economic growth is conceptually manageable, though operationally very difficult. Over any long-run future, it is not possible to forecast it. But Yugoslav social planning will need to make some judgments of a long-run vs. short-run nature.¹

The Yugoslav case is an excellent opportunity for such exploration because (a) it is attempting to move simultaneously toward planned objectives and toward greater reliance on the "automatic" mechanisms of the economy, (b) the bridge between planned national targets and decentralized economic decision is regional planning, which strongly emphasized physical development planning, including

¹Proponents of programs for development of the southern regions, for example, feel that development of the infrastructure of those regions was inadequate to allow them to contribute effectively to national and international economies, even during the period of the General Investment Fund. Thus one writer asserts that "During the period (1953-1960) the construction of infrastructure projects in the underdeveloped territories was of insufficient proportions, which hindered their linking up with the rest of the country, just as it did the linking up with the economic centres inside the territories themselves. Along with other adverse factors this meant that investment results were below those attainable in conditions of optimum infrastructure." (V. Pejovski, Yugoslav Investment Policy, Medjunarodna Politika, Beograd, 1965, no. 3, p. 34,) This is a proposition, however, which could be tested only over a long period, if at all.

urban physical planning. In our view, it will be necessary to construct a conceptual model of the social planning system in which the roles of the economic-demographic studies and the physical-spatial studies are clearly demarcated. The constraints operating upon each, and the preferences with which each operates, must be identified. Then the policy instruments suitable to these preferences can be introduced into the models of the economic and spatial mechanisms, subject to the constraints imposed by these mechanisms. Finally, the exchange between the economic-demographic models and the physical-spatial models will constitute the cement of the social planning system and, of course, will be most difficult to specify.

We cannot expect, in two years time, to develop a fully operational system for social planning in the ambitious sense in which it is described above, but we may be able to clean up some of the conceptual and practical obstacles to such a system, and we hope to prepare a contextual setting rich enough in data and in insight to permit fruitful subsequent work.