

fitnih stopa kapitalizam se ne ponaša racionalno sa opšteg društvenog stanovišta, jer zahteva izbor tehnike sa nižim neto proizvodom po radniku (tehnika sa starom mašinom).

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FIXED CAPITAL, NEGATIVE LABOUR VALUES AND CHOICE OF TECHNIQUE

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Summary

An analysis is given here of Steedman's criticism of Marx's treatment of fixed capital and attention is drawn to the connection between choice of technique and type of normal price. The same model of production in which fixed capital is treated as a joint product is used, except that the prices of production are measured by "labour commanded" and not by units of corn. In the first section, the author explains the occurrence of negative labour values of old machines using the same production technique, which give its positive prices of production. In the second section, there is an exposition of the procedure for optimal choice of production technique, which eliminates negative labour values and was hidden in Steedman's analysis. This is why the so-called paradox revealed by Steedman of a production technique that simultaneously gives negative labour values for old machines and positive prices of production holds no significance for the discussion on the transformation problem in the model with fixed capital. In the third section, the author supports the stand, contrary to Steedman, that labour values are not only a border case of prices of production (when the rate of profit is equal to zero) but also are a special type of normal prices which have their separate rules for choice of technique, independent of the maximization of profit on which rests the choice of technique in prices of production. This rule, i.e., the maximization of net product per employed person, is more rational from the standpoint of savings in overall social labour.

AUTOGESTION AND PLANNING* Dilemmas and Possibilities

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The paper develops a concept of 'intermediate planning' suitable for a system of autogestion. We concentrate on the structure, organization and process aspects of the interest-reconciliation dimension of planning. The perspective chosen is designed to overcome the traditional dichotomy between bottom-up and top-down planning. We believe that important features of a system of autogestion are in contradiction with each other. Planning is one of these features. It is important to identify and confront the dilemmas thus existing and to explore strategies enabling one to deal with them.

Autogestion entails a distribution of power and control which enables human actors to exercise decision-making control over their activities and over the environment constraining these activities. The exercise of this control will bring individuals and groups into conflict with each other. In part this is the result of the production of externalities and unintended consequences of action in a complex interdependent system where units possess some decision-making autonomy.

Planning is an institutional design to prevent the non-optimal outcomes of such collective-action problems and to resolve the resultant conflicts. But central planning is inconsistent with important elements of autogestion because its hierarchical structure and authoritarian decision-making patterns inhibit the effective development of democratic relations and processes among those engaged in production. Its concentration of power and meta-power tends to contradict the power

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distribution of a system of autogestion. Corporate and indicative planning in a market system allow dominant units of production to impose their solutions to problems and realize their interests, thus simply increasing already existing inequalities. Smaller units increasingly lose control over their environment and ultimately over their own activities. Autogestion then turns into a formal but empty right for many. Nor will collective interests be protected in the long run.

Intermediate planning is an attempt to realize the benefits of planning without undermining the exercise of control by the units of production. It attempts to avoid the emergence of a specialized planning agency by spreading planning tasks to a large number of individual units. It is based on the symmetrical exchange of information among units both on the same as well as on different levels. Units of production, discovering in the course of their activities and such information exchange processes that they are influencing each other, will create a planning organization to engage in negotiation and harmonization processes. These processes include traditional bargaining behavior resulting in compromises within the situation. However, they also permit strategies to restructure the situation in order to create new possibilities and solutions. These processes result in renegotiable agreements and compacts.

The planning structure and organization emerging from these processes is based on the 'nesting principle'. A 'nest' refers to the collective of units of production which have come together to deal through planning with the externalities created through their own activities. For certain tasks and problems, a number of primary nests would cooperate to deal with yet another set of externalities and uncertainties. This would lead to planning hierarchies of 'nests within nests'. A unit of production, or a nest, would presumably participate in a number of nests. This participation may reflect not only functional but also distributional concerns of production and planning processes.

This structure of 'nests' should be non-cumulative, i.e. cross-cutting. That is, a unit would find that for one purpose it participates in a nest where it occupies a relatively low level without exercising important coordinating and planning functions. For other purposes, this unit would participate in other nests where it could be charged with the execution of the planning functions for one or more nests. In this way, most units would find themselves both in inferior and superior positions with respect to planning and the power derived from it. Power could be further equalized if within a nest different units would be in charge of organizing the information process, of managing the negotiation and harmonization processes, and of executing control and collective action functions.

The use of such a planning structure to achieve a balance between anarchy and authority is in itself not free from problems. Three problem areas merit further investigation. (1) Planning decreases the autonomy of some units, but by increasing the autonomy of the collective, it provides additional opportunities for other units. Planning therefore redistributes autonomy. Actors in a system of autogestion have to remain vigilant concerning the distributional consequences of

planning with respect to autonomy. It is for this reason that tendencies towards the uniform hierarchization of planning functions, the division of labor between planning and production, and the domination of planning processes by large and powerful units have to be looked upon with distrust and should be counteracted in the early stages of their development.

(2) Intermediate planning in a system of autogestion has to be supported by a strong and extensive system of mediation and arbitration in order to facilitate the resolution of conflicts and to prevent the emergence of deadlocks. Here, too, it is preferable to introduce elements of autogestion instead of relying on the institution of a 'court of last resort' with its right to determine and interpret the meta-rules of the system.

(3) Not everything can be planned. But the dividing line between what is planned and what is left unplanned will change over time. Non-planning is preferable in areas of interpersonal relations where spontaneity and openness are crucial determinants. Planning should take place where uncertainty and high personal and social risks are involved. But it is important above all for planning to concentrate on the planning process, preparing the structures, resources, knowledge and conditions necessary to enable actors to engage in information, negotiation and harmonization processes when the need to do so emerges.

We conclude with the outline of a few norms and guidelines which define the ultimate characteristics of such a system of autogestion:

- Maximal opportunities to learn and experiment.
- Make conflicts explicit and provide maximal opportunities for interested actors to deal with them collectively.
- Ensure an equal distribution of meta-power including the right of outsiders to challenge planning premises and results.
- Planning, too, is subject to autogestion and this precludes planning from becoming a specialized function.

I. INTRODUCTION

Autogestion¹ has difficulty emerging and surviving in a capitalist system except, possibly, as an isolated experiment. Capitalist power structures and market processes, which are mutually supportive, are inimical to autogestion. Yet, it is far from obvious that autogestion is fully compatible with widely accepted features of a socialist system: democratic centralism and central planning, for example. The development of appropriate forms of political organization in the sphere of

¹ We prefer the French term 'autogestion' to the English one of 'self-management'. The first term evokes the concept of control over a unit's environment. This control is an essential aspect of self-determination and, especially, of the reproduction of self-determination.

production is of utmost importance for the success of socialist revolutions.² As Rapaport (1977: 339) expresses it:

There is nothing automatic about this success. The problem of socialist authority relations cannot be reduced to a facet of the problem of socialist revolution in industrially underdeveloped nations. A socialist revolution in a 'mature' industrial society may well fail to solve the authority problem, especially if authority was not recognized as a problem.

Planning relations are an important subset of socialist authority relations. The solution to the questions of who plans how, what, and at which level is therefore crucial to the realization and reproduction of a system of autogestion.³ This paper deals only with one aspect of the planning problematic. It focuses on the problem of interest reconciliation and the type of planning structure, organization and process which makes it compatible with autogestion. But this does not of course mean that the technico-economic dimensions of planning are unimportant in this respect.⁴ Nor does it mean that the appropriate solutions to the two planning dimensions are mutually independent.

The discussion of planning and autogestion presented here is based on three principles of social system analysis:

(i) Properties of a real (or anticipated) social system often contradict or are incompatible with each other. That is, social processes may work at any one moment in opposition to one another. Reproduction of desired and important structures and institutions is therefore not guaranteed.

(ii) These contradictory properties and processes have to be identified and the dilemmas they present should be explicitly confronted and examined.

(iii) On the basis of the insights thus gained, one should explore strategies which enable one to deal with the dilemmas and which therefore help in reproducing and developing desired societal features.⁵

² See the introduction and the chapter on Yugoslavia in Burns et al (1979).

³ The discussion on autogestion and planning in such a system by Rosanvallon (1976) has been a great stimulus to our thinking. Like Rosanvallon, we address ourselves mainly to the problem of system reproduction, less to the problems of the emergence of a system of autogestion.

⁴ See Horvat et al (1975), especially their section on 'National Economy' (Vol. II, pp. 272-328), for material on and references to the various aspects and dimensions of the planning problematic in the context of self-management.

⁵ We have in the meantime concretized and applied this perspective to the problems of Yugoslav self-management. Baumgartner et al (1979b) analyze the dynamics of Yugoslav post-war institutional development. Baumgartner and Burns (1979) discuss the dilemmas which underlie the theoretically 'best' bank-financing of accumulation in self-managed enterprises.

With this general frame in mind, we first present our conceptualization of the basic features of a system of autogestion focusing in particular on the control aspects of such a system. Then we discuss the sources of conflict between and among individuals and groups in such a system and define *planning* as a strategy dealing with conflicts, and collective action problems generally. We consider central planning in a socialist system and corporate and/or indicative planning in a capitalist one as two planning archetypes which are, however, incompatible with characteristic features of control under autogestion.

This leads us to the elaboration of a concept of 'intermediate planning' based on symmetrical exchanges of information and decisions and on extensive negotiation and harmonization processes. We elaborate an emergent planning organization, associating all social units in an equilibrated manner through a structure of 'nesting' and 'cross-cutting'. That is, we do not address ourselves directly to the problems and opportunities contained in top-down and bottom-up planning.⁶ Each of these two planning approaches has properties which contradict essential features of a system of autogestion. We try to overcome this planning dichotomy and propose a different perspective, which we call 'intermediate planning', which attempts to realize the benefits from planning while overcoming the negative aspects of the two traditional approaches: the hierarchization and authoritarianism of top-down planning with its stress on technocratic values and economic efficiency, and the negative collective-action outcomes, parochialism and uneven development associated with bottom-up planning.

The conclusion points to limitations and problems raised by our approach to and conceptualization of planning. True to our systemic perspective, we do not believe that even a system of 'intermediate planning' will be free of problems and negative developments. But there exist outlines of normative guidelines which can help minimize them by specifying the rules governing the definition of the rights of social actors with respect to planning in a system of autogestion.

II. AUTOGESTION AND PLANNING: DILEMMAS AND POSSIBILITIES

1. Definition of Autogestion

Autogestion entails the distribution of power and control which enables human actors (both individuals and groups) to exercise decision-making control over their activities and the environments which constrain these activities. This concept of autogestion includes several inter-related features:

(i) The capacity of the actors to structure and restructure the production relations and the production processes in which they are

⁶ See again Horvat et al (1975) for more material on this aspect of planning theory.

involved. Production is here broadly conceived to cover all the different spheres of human activity, i.e., economic, political, and socio-cultural.

(ii) The control by the direct producers over the products of their production processes. The products include spin-offs and spill-overs in spheres other than the one in which the production process is located.⁷

(iii) The control over the behavior of the social units of production⁸ which are the basic cells of the social system. This implies in particular control over their future development.

(iv) The capacity to participate in control over the economic, political and socio-cultural environments which constrain the activities of the social units of production.

This conceptualization implies that autogestion as a system cannot remain limited to the economic sphere alone. It has to go hand in hand with autogestion in the other spheres of social activity, in particular the political and socio-cultural spheres. Similarly, autogestion cannot only be directed at the production processes or organizations within a given environment. Autogestion has to include some control over the environment. This extensive conceptualization of autogestion corresponds to the complex nature of the social system which is both a multi-dimensional and a multi-level construct.⁹

We do not provide a blueprint for a social system which allows for the full development of autogestion. In the first place, our knowledge about the workings of social systems does not allow such a specification. The Yugoslav experience suggests that a new system of social organization is best realized through the dynamic working out of new institutions based on experimentation, failure and learning. Secondly, our refusal to specify a blueprint is based on the belief that the concrete definition of autogestion's structures, and even of the content of autogestion, should be reserved in part to those who will belong to autogestion units or who struggle with and for their realization and development. Autogestion, like self-reliance, includes self-reliance in the task of defining the content and extent of self-reliance or autogestion. Autogestion includes autogestion of the struggle for and development of autogestion.¹⁰

⁷ Spin-off and spill-over products include those products which impinge on the activities of other production units, especially those in the other spheres of social action. In the case of an economic production unit this could be transfer payments to communes; managerial capabilities acquired in the process of managing the enterprise which can be used to manage political units; legitimation and status derived from being involved in certain tasks or occupying certain positions; etc.

⁸ The term 'social units of production' includes enterprises as the units of production in the economic sphere as well as political groupings and the many formal and informal groups which are the units of production in the political and the socio-cultural spheres respectively.

⁹ That is, autogestion applies both to power and meta-power (Baumgartner et al, 1979a).

¹⁰ This is implied by point (iv) above where we characterize autogestion as including the capacity of actors to participate in the control over their political and socio-cultural environments.

Another consequence of the characteristics of autogestion given above is that we should not expect a system of autogestion to be free of conflict. Self-control over as many aspects of the social system as possible will inevitably bring individuals and groups into conflict with one another. This is especially true for a social system pervaded by interdependencies. Any modern system is and will remain characterized by a structure of dense, multi-dimensional and multi-level interdependencies. It is for this reason that autogestion and a socialist society (with planning) need not be compatible. Hence, there may be substantial problems of reproducing the autogestion features of such a socialist system. In the next paragraph, we expand on interdependencies and conflict generation in a system of autogestion.

2. Interdependence and Conflict

The autogestion control by the members of a social unit over the unit's system of production, its products, and, in part, the environment of the unit have implications for other social units engaged in activities in the same or some other sphere.¹¹ It is only natural that the affected units attempt to control these unwanted implications.¹² This means that they will take counter-measures which then impinge on even other units. Or they attempt to interfere with the activities of the unit responsible for the generation of the externalities. In any case, such conditions of interdependency and the mutual production of externalities will lead frequently to conflicts between and among the social units. These negative interdependencies and the conflicts among social units which insist on their autonomy despite their interdependency will in general lead to non-optimal outcomes and unintended interaction and aggregation effects.¹³

¹¹ An interdependent system is characterized in part by the existence of the mutual production of externalities (which are understood here in a very general sense).

¹² This is one possibility. They may be too weak to attempt corrective action. This is the fate reserved for some in a capitalistic, individualistic system. A socialistic system either would not suffer from such power differentials or would have units which would intervene for and together with the less powerful. This then leads us back to the original situation.

¹³ These can be generally defined as collective action problems (Burns and Buckley, 1974). The common pattern underlying the social situations, where independent decision-making and action leave all worse off than they would have been through collaboration and coordination in pursuit of their interests includes: (1) *Collective action problems* as characterized by Olson (1968), i.e., the failure of the members of large interest groups (consumers, workers) to cooperate in the provision of mutually desired goods; (2) the *commons problem* entailing the unregulated exploitation of common resources (air, water, ocean resources, mineral resources) accessible to all (Hardin, 1972); (3) *competitive panics*, e.g., a crowd in a burning theater, or speculation in commodities and (4) the *prisoners' dilemma game*. Indeed, a rich variety of social, economic and political settings in which non-optimal or negative outcomes are likely to occur in the absence of social controls can be represented in terms of collective action problems or the n-actor prisoners' dilemma: contribution of resources such as time, energy or money to a common cause, regional and international collaboration, price wars, and arms races.

This conflict potential in an interdependent system creates a social structural contradiction between the right to autogestion and the demand for 'efficiency',¹⁴ and socialist compassion for others. A system of autogestion will have to come to grips with this contradiction by finding structures and processes which are compatible (or coherent) with the fundamental characteristics of an autogestion society. The issue is thus not so much how some integrative mechanism or decision-making process — imposed from the outside on autogestion units — might limit their degree of autonomy and consequently limit the extent of the exercise of their 'autogestionnaire' practice. The issue is to imagine and analyze processes by which 'autogestionnaire' units *themselves* might develop conflict resolution capabilities, regulations and other harmonization processes.¹⁵

Among these processes, planning is one of the institutional designs to prevent the occurrence of non-optimal outcomes and aggregation effects through harmonization of the activities of the 'autogestionnaire' units. The next paragraph turns therefore to a consideration of planning.

3. *The Resolution of Contradiction and Conflicts: A Strategy of Planning*

Human groups have discovered a variety of strategies and techniques to deal with the conflicts and collective action problems of the sort referred to above: private property rights which concentrate decision-making; norms which specify optimal solutions; decision-making by an authority (priests, political leaders, courts) which impose and enforce a solution; collective decision-making (as in voting). The institution of planning is also such a strategy and technique and we look upon it in the context of this paper as a means of coordination and of interest-conflict resolution:

- (i) to solve collective action problems in the case of social units practicing autogestion, i.e., to deal with and, hopefully, control unintended consequences due to interaction effects;
- (ii) to regulate and settle conflicts between different actors practicing autogestion;
- (iii) to regulate, control and determine the development processes and paths of aggregates of social units practicing autogestion.

Planning is a process of social activity consisting of:

- (i) Anticipation of future system states based on information about planned activities of the actors of a social system, predictions about the inter-action results of these activities, and expectations about the developments of uncontrollable variables and actors as well as about desired system states.

¹⁴ Understood as Kosta (1978) understands it: an essential and indispensable tool to create the material base for all existing (and in a foreseeable future, conceivable) goals structuring the process of emancipation, such as the satisfaction of material, cultural and social needs, the prevention of damage to the environment and of other negative effects of technological progress, etc.

¹⁵ The institution of social compacts in Yugoslavia is an illustration of the development we have in mind.

(ii) Mobilization and commitments (on the part of social groups) of physical and human resources for the purposes of controlling and regulating the future activities of the social groups, other social processes, and, hence, the future system developments and states.

(iii) Control and regulatory activity oriented towards the realization of goals or the solution of socially defined 'problems' (which are of course linked with certain interests).

Dimensions (ii) and (iii) impose limits and constraints on the action space of social units. Hence, they limit the content of autogestion for the constrained units. It is therefore important to explore the possibility of developing planning organizations and processes and related coordinating activities which are consistent with a system of autogestion. Indeed, the organizations charged with planning tasks and the planning processes should be governed themselves by 'autogestionnaire' principles.

It is in this context that many assume that socialist planning will solve the conflicts and contradictions of the type referred to earlier and to do this without subverting the idea and content, and hence the reproduction, of autogestion. It is clear from the above that the 'natural' harmony between socialist planning and autogestion cannot be taken for granted. Or put differently, all depends on the content given to the concept of socialist planning. This point will be developed in the following two sections.

4. *Central and Decentralized Planning*

There exist at least two well-established forms of planning: central planning in socialist systems and corporate, private as well as indicative planning in capitalist systems.

(a) *Central Planning*

Central planning is based on the notion of a centralized administration of planning and management of society. Central state authorities establish plan targets, determine the actions necessary for plan realization and implement control over plan execution.

Such centralized control seems, by definition, to be inconsistent with autogestion both because the process of planning itself is not subject to the 'autogestionnaire' control principle and because it limits severely the control of the social units over their environment. It furthermore creates a locus of power and meta-power which undermines, or at least threatens to undermine, self-control by the other social units. The central determination and transmission from the top down of obligations to produce and distribute inhibits the effective development of democratic relations and processes among those engaged in production. For democracy must both be learned and practiced if it is to be reproduced and developed. Moreover, the hierarchical and authoritarian patterns instituted by central planning fail to realize and utilize for the collective good the potential interest of producers in their activities and in the operation of their units of social production. This is an interest which autogestion is supposed to liberate.

The patterns of external control also discourage the development and maintenance of conscientious, responsible attitudes toward productive activity and collective ownership. Central planning implies unidirectional control and flows of authority. It exacerbates therefore problems of status differentiation and hierarchization, and facilitates the emergence and entrenchment of experts and technocrats. These are all developments which go against the principle of autogestion.

(b) Corporate and Indicative Planning

Here, social units plan their own actions based on their own possibilities, goals and evaluations. Dominant social units — e. g., large enterprises, enterprises in strategic sectors, more economically developed communes and regions — are able to a large extent to impose their decisions on the social system as a whole. They are thus the cause of many, and often important, externalities and negative aggregation effects.

Attempts to correct some of these deficiencies have led to more global planning, i. e., planning concerned with aggregates, which is best known under the name of 'indicative planning'. However, it is not planning in the sense of our definition. Indicative planning is mostly concerned with the development of a forecast based on a consensus of the more important social actors in the system.

The lack of resources devoted to control purposes, and hence the lack of goal realization, combined with the factual dominance of the large, powerful social units in the planning process generate a number of problems. The Yugoslav experience during the period 1965-71 could serve as an exemplary illustration (Baumgartner et al, 1979b):

— Growing manifestations of narrow local interests.

— Plans on the aggregate or collective level turn into forecasts reflecting, and possibly legitimizing, the individual planning results of dominant socio-economic units.

— Since plans reflect the goals of the dominant actors, tendencies towards uneven development between enterprises, communes and regions emerge or are re-enforced.

It is clear that under this type of social dynamics autogestion will not be maintained and cannot develop over the long run. As inequalities become more pronounced, the disadvantaged, smaller units of production lose further control over their environment and their development paths. This in turn tends to weaken the other dimension of autogestion.

Therefore, the question arises if there exists a third form of planning which would be more compatible with autogestion. For the moment we will use the not completely satisfactory term 'intermediate planning' to suggest such a planning institution compatible with autogestion. This term indicates that planning is *non-centralized* but not simply *de-centralized*. The next section elaborates on this concept.

5. Autogestion and Intermediate Planning

Figure 1 provides a visual definition of the different planning concepts we are discussing here. The middle figure indicates that

intermediate planning in an 'autogestionnaire' system is to be an activity of and by all the social units, whatever their level. This means, for example, that a given unit is not solely involved in providing initial information about its planned activities, which are then to be revised in light of information provided by a central planning agency, as is the

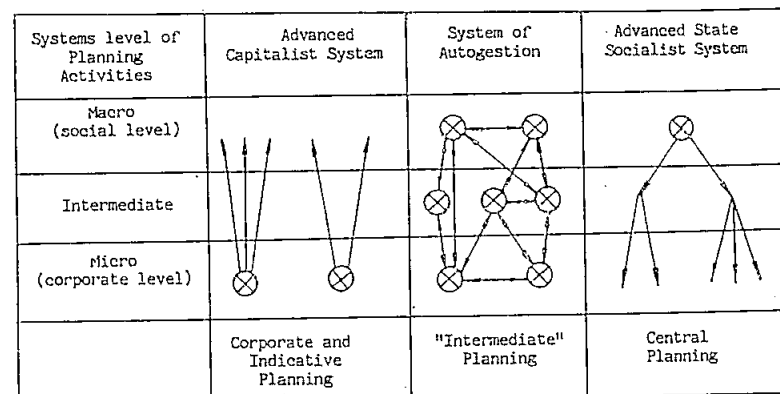


Figure 1 Alternative Structures of Planning Systems¹⁶

case in bottom-up planning systems. In intermediate planning, a unit is not simply a node in a structure of uniform and unidirectional information flows and of an opposite flow of decisions and controls. Hence, it is impossible to define the level at which the final and important coordinating and constraining decisions are taken. Nor is it possible to define the level where plan execution is administered and controlled.¹⁷

We cannot, at this stage, present a blueprint for such an intermediate planning concept. This would involve, among other things, the determination of what has to be planned and what should be left unplanned. It would also mean to provide some specification of the organizational structures best utilized for the identification and resolution of planning conflicts. It is probably undesirable to do so in any case (as we try to suggest in the conclusion). Rather, critical review of planning results, respecification of planning content and planning procedures, and continuous experimentation with planning organization, content and process is the important characteristic of such an intermediate planning concept.

¹⁶ X indicates the locus of planning activity in the sense of reconciling activities planned individually by a group of interacting units. The arrows indicate the direction of decision and control flows. There are parallel information flows — not shown here — going in the opposite direction.

¹⁷ Intermediate planning is therefore also 'multi-level' planning meaning here that planning takes place simultaneously at different levels involving units from different levels. This concept is therefore different from the use of multi-level planning, for example, in the global modelling of Mesarovic and Pestel. There it simply describes an aggregation/decomposition process of planning data.

Planning is a social process. It is also a meta-process because it constrains the action space of the individual social units of production. It is particularly important for the reproduction of a system of autogestion that the meta-processes are also subject to autogestion. That is, planning has to emerge through and has to be acted out as a process of self-design in which eventual users of and contributors to planning play an active role in the evolution and operation of the planning system. In short, planning too has to be subject to 'autogestionnaire' norms and principles.

Given our definition of autogestion and of planning we can identify certain aspects of planning which are crucial for maintaining and reproducing a system of autogestion:

(a) *Symmetrical Exchange of Information*: Information exchange processes should go on between social units in different spheres and on different levels. These processes should be symmetrical, that is, information of equal quality should pass in both directions. (This is indicated in Fig. 1 by connecting lines with double arrows). This contrasts with traditional patterns where information about the state of the situation flows to the planning actor, and decisions and parameters of planned actions flow from it. (See the unidirectional links in both centralized and decentralized systems in Fig. 1.) That is, the macro-level dominates the micro-level in the first case, and (certain) micro-level actors dominate the macro-level in the second one.¹⁸

(b) *Negotiation and Harmonization Processes*: These take place on the basis of information exchanges when two or more units discover or perceive the production or constraint of externalities. They create a planning unit designed to internalize the potential externalities and find a common, acceptable solution based on negotiation and harmonization-of-interest processes.¹⁹ In other words, social units do not impose outcomes on one another by attempting to realize their 'solutions' on their own, i.e., independently from each other. It is clear that the success of such coordination and planning in a manner compatible with autogestion depends on effective negotiation and harmonization processes. These entail, among other things, the following:

¹⁸ The Nora Report in France on the problems and possibilities of the coming computer and communication revolution stresses very much the link between 'socialized' information and the realization of an aspiration for autogestion (Nora and Minc, 1978).

See also on this topic Rosnay (1975: 191-200) who discusses the role of information as a social feed-back link.

¹⁹ Such negotiation processes have tended to replace market mechanisms in most industrialized capitalist systems. The formation of conglomerate and multinational corporations is one attempt to internalize at least certain types of externalities. But power and meta-power are unequally distributed within such enterprises and within the capitalist systems.

The negotiation and harmonization processes we have in mind here are processes which are made explicit and which entail the equal participation of those affected by planning decisions.

Intermediate planning is an institutional alternative, substitute and complement to market processes. It enables social units to 'trade' externalities which are not marketable in the traditional sense.

(i) Negotiation strategies and tactics of the traditional type, i.e., communication and bargaining to find compromises, mutually agreeable outcomes and trade-offs.²⁰

(ii) Restructuring strategies decided upon and carried out collectively. These are particularly called for on those occasions when a common action and outcome set cannot be found based on existing orientations, goals, preferences, action possibilities and 'rules of the game'. Restructuring activities in these instances are oriented towards:

- changes in goals and perceptions of situations;
- changes in outcomes (or payoffs);
- changes in expected and considered options;
- changes in rules with respect to decision-making, evaluation and participation. (In the most general sense, changes in the institutional set-up.)

(iii) Agreements and compacts among the actors involved which specify the rights and obligations, and the conditions under which renegotiations are to take place.²¹

Planning processes based on autogestion principles are not planning from the top down with a planning agency in command. Nor is it planning dominated by one or a few social units which happen to be the largest units controlling the most resources, or units in spheres perceived or defined as strategic, or units claiming to occupy higher-level strata in the social system. Rather it is *simultaneous planning* in different sectors and at different levels on the basis of negotiation and harmonization processes designed to resolve conflicts and contradictions between social units in mutually acceptable ways.

(c) *Planning based on the Nesting Principle*: Planning of this type is contractual planning. Participating units identify themselves spontaneously through social interaction processes. These units try to solve common problems on the basis of equality and mutually acceptable performance contracts. The planning structure and organization emerging through such a process is based on the *nesting principle* as depicted in Figure 2. A 'nest' refers to the collective of social units which have

²⁰ The externalities which are generated by traditional trade-offs and compromises at the expense of yet other units absent from the negotiations will, in the proposed system, lead to the generation of additional planning 'nests' with new participants. Hence, compromises at the expense of third parties would be less likely.

²¹ Possibilities to renegotiate contracts are necessary to deal with changing circumstances during the term of the contracts. Changes are inevitable in a complex, interdependent and dynamic system. Privatization of these change risks could lead to conservative attitudes among the negotiating units. Non-optimal contract specifications would be likely in this collective-acting situation. Renegotiation possibilities imply the socialization of these risks. This is certainly one key aspect of a socialist system and it is the counterpart to the socialization of gains.

The Japanese system is based very much on renegotiable contracts.

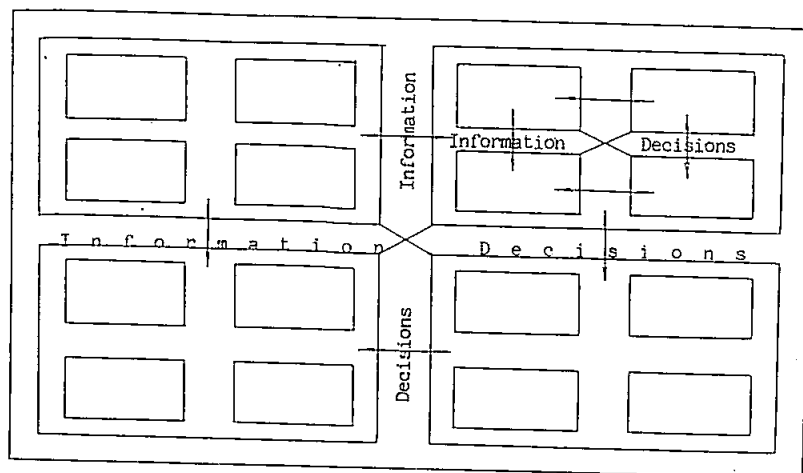


Figure 2 Planning System based on Nesting Principle²²

come together to deal through planning with the externalities created through their own activities. For certain tasks and problems, a number of primary nests would cooperate to deal with yet another set of externalities and uncertainties.²³ But as in the case of the units forming a primary nest, the formation of a higher-level nest depends on the decisions of the primary nests. They decide who to plan together with and what to plan.²⁴

Planning based on the nesting principle would lead in a certain sense to a hierarchical planning structure of nests within nests. This is however attenuated and counteracted by the specific form the structure of nests takes on and by the principles governing the participation of units in nests. For one, social units (including spontaneously forming or emergent units) would have the right to participate in multiple nests and nesting hierarchies. Moreover, a social unit, or a nest formed by several units, would be motivated to participate in different nests and nesting hierarchies because this procedure facilitates the solution of its own problems and reduces the negative impact from externalities generated by other units.

Participation of this type may reflect not only functional considerations but a normative concern with the distributional effects of planning and coordination processes, particularly as these relate to the reproduction and development of a system of autogestion.

²² This conceptualization has benefited from discussions in Ljubljana with V. Bošnjak, S. Saksida and D. Sekulić.

²³ This is indicated in Fig. 2 by the 'box within a box' structure. The actual structure is in general less symmetrical than suggested here.

²⁴ See the Conclusion for suggestions dealing with the possible cases of conflict which might arise here.

A social structure where hierarchical elements, which will necessarily continue to be found in any complex system of autogestion, tend to be *non-cumulative* may best be characterized by the term 'cross-cutting'. A social unit would find that for one purpose it participates in an organizational hierarchy (a 'nest') where it occupies a relatively low level. The organization of collective decision-making and action (and control) would be located in another unit. This unit would be considered a higher-level unit relative to this nest; thus it would possess superior power and meta-power constraining the environment of the first social unit. Of course, the exercise of this power and meta-power would not be absolute but controlled and checked by democratic decision and control procedures within each nest. For other purposes of planning, the first social unit would find itself in other organizational hierarchies where it may be in a position of power and meta-power assuming higher-level functions and tasks.²⁵

An additional principle would help attenuate hierarchical power accumulations. For one, care should be taken that in planning nests different units belonging to this nest assure planning functions: the collection, processing and distribution of information, the management of negotiation and harmonization processes, and the organisation of collective action and control processes for a given problem area. There would no longer be a fixed division of labor among units between production and planning but units would always perform some planning functions or assume planning tasks for one nest but not another.

There would exist a basic equality between and among all the different social units in terms of higher-level functions and powers. But not because meta-power positions, controls and imposed action constraints would not exist, but because each unit would find itself simultaneously in positions of meta-power and control as well as positions of subordination and limited autonomy. Of course, there may arise or develop biased patterns which would undermine or threaten to undermine such a system of autogestion. Hence, our stress in the conclusion on continuous vigilance concerning the distributional consequences of planning and coordination arrangements, on the development of mediation and arbitration facilities to achieve conflict resolution, and on the need for normative guidelines incorporating this vision of autogestion.

III. Conclusion

A system of autogestion will always have an ambivalent relationship to authority. Planning and planning institutions incorporate this ambi-

²⁵ The coincidence of levels in terms of meta-power and meta-activities would not occur. Organizational and activity levels would refer to specific problem areas only, never to global ones.

Thus, we disagree with Henderson (1978:48) who suggests that rank ordering — with the same social unit always deciding and initiating, while the others always accept and cooperate — is a socio-biological principle, a response to environmental hostility. A socialist system is supposedly limiting this hostility, at least in its social dimension, and this should reduce the pressure for the ranking of units.

valence most directly. The planning structure proposed in this paper addresses itself to this problem of balancing 'anarchy and authority', a problem which is crucial to the successful development of socialism and which has remained unresolved in Marx's writings (Rapaport, 1977). The solution cannot, of course, be given abstractly in the form of universally applicable principles of organization. The framework proposed here has therefore remained rather tentative and does in no way claim to represent the solution. But we hope to have contributed to the search for minimal enabling conditions which would provide some chance of survival to a system of autogestion. The three points which follow suggest topics which in our view merit further investigation.

1. Planning and Autonomy

The problem may be formulated in the following way: Does planning limit or increase autonomy? The question is not an empty one as we conceive of autogestion as a system which optimizes autonomy. Of course, the answer is not a simple one.

Planning may decrease the autonomy of certain actors at the individual or micro-level. This is necessarily so as planning in our scheme is the result of an attempt to control the occurrence of externalities which would have occurred if dominant actors had proceeded without restraint. But planning can increase autonomy at the aggregate or macro level. The resolution of collective action problems and the control of agglomeration and externality effects expands the action capabilities of the actors and allows them an improved control of the system and, hence, of their own situation. This is what we mean by an increase in autonomy at the systemic level.

Planning in the context of any specific social organization (social structure) creates differential opportunities and constraints as suggested above. Decrease of autonomy (or increased constraints) for some means the creation of additional opportunities, 'free space', for other social units. Autonomy is therefore in a sense redistributed through planning. Hence, it is important for the production and reproduction of a system of autogestion that actors be vigilant about the *distributional consequences* (in the widest sense) of planning and coordination mechanisms. It is for this reason that vigilance towards the maintenance of democratic institutions has to be maintained. This includes the distrust of all tendencies towards uniform hierarchization of planning functions, division of labor between planning and production, and the domination of planning processes by large and powerful social units.

2. Problems of Conflict Resolution Processes

A system of autogestion will probably sooner or later face conflicts of interest which appear unresolvable in spite of restructuring and other harmonization processes. Refusal to participate in planning despite the generation of externalities may well be one source for such conflicts. Yugoslavia provides other examples: redistribution problems among regions, nationality problems, insufficient development of federal infrastructures and other types of collective action problems.

Conflicts and apparent deadlocks, even after initial restructuring and other harmonization processes, will certainly occur in the initial phases of an 'autogestionnaire' system. Although our proposals have addressed themselves mainly to a fully developed system of autogestion, the same institutional safeguard could be provided for such 'unresolvable' conflicts.

The traditional solution in these instances has been to appeal to a 'court of last resort' to apply a societal rule or principle to resolve the conflict. This 'court', e.g., the executive bodies of the party or of a dominant social movement, interpretes the meta-rules existing in the system and imposes a decision on the conflicting parties.

Of course, such an institution could represent an alien element in a system of autogestion under most conditions. Even if such an institution exhibits initial openness, flexibility and a high capability to learn, increasing authoritarianism and increasing distance from lower level social units could easily emerge. Such a court of last resort would also have a tendency to cumulate hierarchical positions and thus would be the exception to the cross-cutting structure proposed above as one solution to the prevention of differential power and meta-power accumulations. Such a development would not facilitate a gradual phasing out of the 'court of last resort'. The hope that such an institution would finally wither away as the social units learn to resolve their conflicts on their own could well remain an empty one.

What is needed is not an ultimate arbiter but an institution of arbitration which brings the conflicting units together and induces them to solve their conflict through further restructuring activities. Here, too, the introduction of elements of autogestion is preferable to institutions which are not inspired by this principle.

3. Limits of the Planning Strategy

It is clear that a system of autogestion, like any other system, will have to decide what to plan and what to leave unplanned, or only partially planned. The nesting principle suggests that the dividing line should not be something decided for all times but should respond to the needs and demands of the social unit affected by externalities and uncertainties.

We would think that non-planning is preferable in areas such as interpersonal relations where spontaneity is a crucial factor and actors should be given individually or collectively free space and openness to act and react.

It is in areas of high social and personal risks where planning activity is necessary to avoid non-optimal outcomes. But planning here has to provide built-in slack. High uncertainty or limited knowledge associated with high risk areas implies a high probability that plans cannot be realized due to changing circumstances. Plans will therefore have to be reformulated before or in the course of their implementation. This implies renegotiation of the contracts based on these plans. Planning in these circumstances should therefore preferably be planning of planning processes, preparing the structures, resources, knowledge and conditions

necessary to enable actors to engage in exchange of information, negotiation and harmonization processes in order to produce collectively agreeable outcomes.

4. Normative Guidelines

The idea that autogestion implies the self-definition of the content of autogestion is limited by the level problem: the system will have to have some basic norms and guidelines which define the ultimate characteristics of the system. Our discussion suggests that the guidelines for a planning institution in a system of autogestion should incorporate the following rights and principles:

- Maximum opportunities for learning and experimentation.
- Making conflicts explicit and providing maximum opportunities for interested actors to deal with them collectively through negotiation and other conflict resolution processes.
- Equal distribution of meta-power. This implies the lack of dominance of one level, sphere or sector of planning over another. It includes the right of outsiders to challenge planning premises and planning results especially as they relate to distributional aspects.
- The planning process should be subject to the same principles of 'autogestionnaire' operation as any other social unit of production. This suggests that planning itself cannot become a specialized function reintroducing the division of labor. In a word, planning should be democratic.

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SAMOUPRAVLJANJE I PLANIRANJE (DILEME I MOGUĆNOSTI)

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U ovom članku obrađuje se koncept »intermedijarnog planiranja« koje je pogodno za samoupravni sistem. Autori se usredsređuju na analizu strukture, organizacije i procesnih aspekata onog dela sistema planiranja koji se tiče usklađivanja interesa. Ovakav pristup bi trebalo da omogući da se prevaziđe tradicionalna dihotomija između planiranja koje ide od vrha ka dnu i planiranja koje ide od dna ka vrhu. Autori smatraju da su važni delovi samoupravnog sistema postavljeni tako da se nalaze u kontradikciji jedan sa drugim. Planiranje je jedan od takvih elemenata. Važno je, otuda, suočili se sa dilemama koje postoje, i razraditi strategije koje bi omogućile da se dileme reše.

Samoupravljanje se odlikuje takvom raspodelom vlasti i kontrole koja dozvoljava subjektima da odlučuju o sopstvenim aktivnostima i da imaju kontrolu nad društvenom sredinom u kojoj se te aktivnosti odigravaju. Vršenje ove kontrole dovodi pojedince i grupe u međusobni konflikt. Ovo je, delimično, i posledica postojanja eksternaliteta i nena-meranih posledica delovanja u kompleksnom i međusobnom zavisnom sistemu u kome subjekti poseduju autonomiju pri donošenju odluka.

Planiranje predstavlja institucionalni oblik kojim se teži da se spreče neoptimalna rešenja problema vezanih za kolektivnu akciju i da se reše konflikti koji se pojavljuju. Centralističko planiranje je nekonzistentno sa osnovnim elementima samoupravljanja zbog svoje hijerarhijske strukture i autoritarnog oblika odlučivanja koji onemogućuju stvarni razvoj demokratskih odnosa između proizvođača. Centralističko planiranje sa svojom koncentracijom vlasti u suprotnosti je sa decentralizacijom vlasti u samoupravnom sistemu. Planiranje na nivou preduzeća, kao i indikativno planiranje u tržišnom sistemu dozvoljavaju dominantnim proizvodnim jedinicama da nametnu svoja rešenja problema i ostvare svoje interese, i na taj način dovode do porasta već postojećih nejednakosti. Manje jedinice sve više gube kontrolu nad društvenim okruženjem i konačno nad sopstvenim delovanjem. Samoupravljanje se tako pretvara u formalno, ali prazno, pravo za mnoge. Opšti interes takode ne biva zaštićen na dugi rok.

Intermedijarno planiranje predstavlja pokušaj kojim bi se ostvarili svi povoljni efekti planiranja bez smanjenja oblasti nad kojom proizvodne jedinice imaju pravo odlučivanja. Takvo planiranje treba da izbegne formiranje specijalizovanog organa planiranja i to na taj način što bi se zadaci iz oblasti planiranja rasporedili na veliki broj pojedinačnih jedinica. Došlo bi do simetrične razmene informacija između jedinica, kako onih na istom, tako i onih na različitim nivoima. Proizvodne jedinice, otkrivajući u toku svoje aktivnosti i preko razmene informacija, da njihove odluke utiču na ostale jedinice, težiće da osnuju organizacije za planiranje čiji bi cilj bio da rade na procesima dogovaranja i usklađivanja interesa. Ovi procesi uključuju tradicionalno pregovaračko ponašanje koje dovodi do kompromisa unutar date situacije. Ali, oni isto tako, omogućavaju i strategije kojima se restrukturise situacija kako bi se otvorile nove mogućnosti i rešenja. Ovakvi procesi dovode do ponovnog sporazumevanja i novih dogovora.

Struktura sistema planiranja, kao i organizacija koja se primenom ovog principa ostvaruje bazira se na »principu gnezda«. Naziv »gnezdo« odnosi se na skup proizvodnih jedinica koje se zajedno suočavaju, preko planiranja, sa spoljnim efektima do kojih dovodi njihova aktivnost. Kod izvesnog broja zadataka i problema, primarna (osnovna) »gnezda« sarađivala bi u cilju bolje kontrole nad spoljnim efektima i boljeg ovladavanja nad neizvesnošću. To bi dovelo do stvaranja hijerarhije planiranja sastavljene od »gnezda unutar gnezda«. Proizvodna jedinica, ili »gnezdo«, učestvovalo bi takođe u radu većeg broja drugih »gnezda«. Učešće bi tako odlikavalo ne samo funkcionalne, već i distributivne, zahteve proizvodnje i procesa planiranja.

Struktura »gnezda« bila bi nekumulativna. Drugim rečima, proizvodna jedinica bi mogla da smatra da u pogledu jedne vrste problema treba da učestvuje u »gnezdu« u kome ima relativno nizak položaj i ne vrši značajne funkcije koordiniranja i planiranja. Za druge probleme, pak, ista jedinica učestvovala bi u radu drugih »gnezda« gde bi mogla da vrši funkciju planiranja za jedno ili više »gnezda«. Na taj način, većina jedinica našla bi se u isto vreme i na nižim, i na višim, pozicijama u pogledu planiranja i moći koja se na taj način stiče. Moć bi mogla biti još više ujednačena tako što bi, unutar datog »gnezda«, različite jedinice imale za zadatak da organizuju proces informisanja, da vode pregovore ili se posvete procesu usklađivanja interesa, i da vrše funkcije kontrole i kolektivne akcije.

Upotreba ovakve planske strukture čiji je cilj da se postigne ravnoteža između anarhije i autoritarne kontrole nije bez problema. Tri osnovne oblasti, u kojima se problemi mogu javiti, zaslužuju našu pažnju. Prvo, planiranje smanjuje autonomiju nekih jedinica, ali povećavajući autonomiju kolektiva (skupa jedinica) otvara nove mogućnosti za ostale jedinice. Planiranje, na taj način, prouzrokuje redistribuciju autonomije. Subjekti u samoupravnom sistemu moraju da budu svesni ovih posledica po autonomiju preduzeća. Zbog toga je potrebno da tendencije ka potpunoj hijerarhizaciji funkcije planiranja, ka oštroj podeli na planiranje i samoupravljanje, i ka dominaciji nad procesom planiranja od strane velikih i moćnih proizvodnih jedinica budu pažljivo osmatrane i onemogućene već na prvom koraku.

Drugo, intermedijarno planiranje u samoupravnom sistemu mora biti podržano od strane snažnog i širokog sistema posredovanja i arbitraže kako bi došlo do lakšeg rešavanja konflikata i kako bi se odstranila mogućnost da proces dogovaranja zapadne u ćorsokak. I ovde je bolje uvesti elemente samoupravljanja nego se uzdati u institucije »poslednje instance« sa punim pravima da odlučuju i tumače pravila sistema.

Treće, sve ne može biti planirano. Ipak, razmede između onog što se može planirati i onoga što je bolje ostaviti neplaniranim menja se tokom vremena. Ne treba planirati oblasti međusobnih odnosa između ljudi gde su spontanost i otvorenost od osnovne važnosti. Planiranje treba da bude ograničeno na oblasti gde postoji visoka neizvesnost i gde se javlja pojedinačni i društveni rizik. Pored toga, važno je da se osnovni akcenat stavi na sam proces planiranja, na pripremu struktura izvora, znanja i uslova koji su neophodni da bi se subjekti zaista uključili u procese informisanja, pregovaranja i usklađivanja interesa kada se za tim javi potreba.

Autori završavaju članak nacrtom izvesnog broja normi i smernica kojima se definišu konačne karakteristike samoupravnom sistema:

- maksimalna mogućnost da se nauči i eksperimentiše;
- potreba da se konflikti eksplicitno definišu i da se za sve zainteresovane subjekte stvore najbolji mogući uslovi da se problemi zajednički reše;
- obezbeđenje jednakosti u raspodeli moći, uključujući i pravo svih da stave pod znak pitanja premise i rezultate procesa planiranja;
- planiranje, takođe, mora biti podvrgnuto samoupravnom procesu da bi se na taj način onemogućilo da planiranje postane specijalizovana funkcija van samoupravne kontrole.