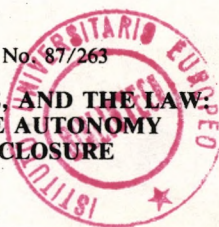


EUROPEAN UNIVERSITY INSTITUTE, FLORENCE
DEPARTMENT OF LAW

EUI WORKING PAPER No. 87/263

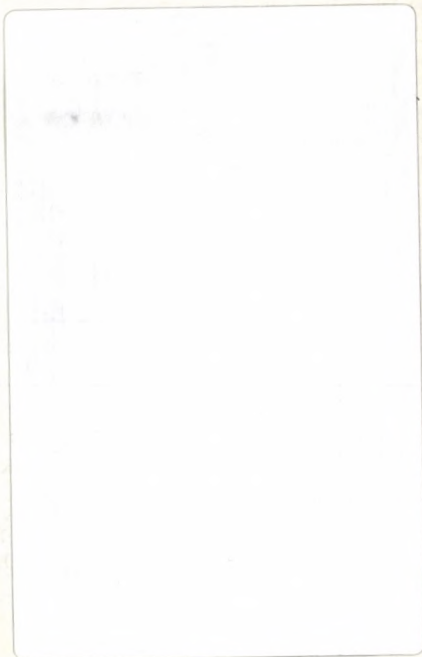
**THE ECONOMY, THE STATE, AND THE LAW:
THEORIES OF RELATIVE AUTONOMY
AND AUTOPOIETIC CLOSURE**

by
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Printed in Italy in January 1987
European University Institute
Badia Fiesolana

I-50015 San Domenico (FI)

THE ECONOMY, THE STATE, AND THE LAW:

THEORIES OF RELATIVE AUTONOMY AND AUTOPOIETIC CLOSURE

Bob Jessop

This paper explores two different approaches to the relations within and among the economic, legal, and political systems¹. It begins by reviewing Marxist analyses of the relative autonomy of the state and law in capitalist societies. It then considers some theories of autopoietic systems and their application to societies and societal subsystems. The motives behind this exercise are threefold. Firstly, despite their very different theoretical and political starting points, there are interesting convergences between these approaches. Secondly, by considering their mutual implications, we can achieve a more rounded critical perspective on each. And, thirdly, by drawing on both approaches, one can better understand certain problems of state intervention and legal regulation. The paper concludes with some more general observations on methodological problems in studying relative

1. This paper was written whilst I was a Jean Monnet Research Fellow during the academic year 1985-86 at the European University Institute, Florence. It has benefitted from discussions with Alex Demirovic, Josef Esser, Ib Jarvad, Niklas Luhmann, Andrea Maihofer, Philip Schlesinger, and, above all, Gunther Teubner. Any remaining errors of interpretation and argument are my own, of course, and further comments would be most welcome.

autonomy.

Introduction

For some time there has been a strong reaction among Marxist theorists against economic reductionism. Such reductionism posits a necessary correspondence between the forms and functions of non-economic systems and the forms and functional prerequisites of the economic system. It also treats the economic system as the causally determining force or mechanism which produces this correspondence. In this sense it denies that non-economic systems can have any significant autonomous institutional logic and any significant independent effects in relation to the economy. Most non-Marxist social scientists, of course, reject such a reductionist position. But our concern here is how, if at all, this rejection can be coupled with a continued commitment to Marxist political economy. For the latter cannot simply posit a necessary non-correspondence among the forms and functions of wholly autonomous institutional systems. This would leave the expanded reproduction of capitalist societies (as opposed to a purportedly autonomous economic system) unexplained. Thus the problem for non-reductionist Marxists is to understand how a non-necessary correspondence can be established among different institutional systems and functions such that the various preconditions of capital accumulation are secured in practice.

This has involved various attempts to theorise the autonomy or

independence of institutions and practices located outside the sphere of production and to examine their mutual relations and feed-back effects on the economy. Many of these attempts borrow from non-Marxist analyses. For, once one moves away from the institutional logic of capital accumulation and its material embodiment in the dominance of the value form, the Marxist classics provide only limited guidance to the organisational principles involved in different social areas. However, whilst borrowing from other disciplines can help to specify the form and institutional logic of non-economic systems, it is less clear how the different systems come to be articulated in a contingent, non-necessary manner which sustains capital accumulation. These issues occur for all non-economic institutional sites and functional systems (e.g., education, science, the family, health care, the mass media, or religion) but the following remarks will concentrate on the problems this poses in the political and legal domains.

Hitherto Marxists have adopted three main approaches to these issues. One approach considers how different institutional systems function to represent the demands or interests of the economy. Essentially this rests on an input-output model in which a trivial machine or a more complex black box somehow translates economic imperatives or interests into corresponding legal or political functions or outputs. The emphasis in such an approach is on the correspondence rather than the mechanisms through which it is produced. A second approach derives the institutional form of different systems from the (dominant) mode of production and then

examines how the resulting institutional logics correspond (if at all) to the functional needs of the economic system. This approach involves an internal-external dialectic in which primary emphasis is given to form (the 'black box') rather than to function. A third approach rests on the argument that different systems are rendered mutually coherent through contingent articulatory practices. Among such practices there have been included hegemonic leadership, global strategies, and master discourses. This approach is neither functionalist nor form-oriented but is conjunctural in its focus on specific articulatory practices.

These three approaches seem to involve quite different theoretical assumptions and even to contradict each other in some respects. But, whatever their purely logical commensurability or incommensurability, they are often combined in different ways in specific theoretical and empirical analyses. Later I discuss each approach in its own terms and also consider some of the issues involved in combining them.

One approach not so far adopted is an autopoietic model which treats systems as radically closed and open at the same time. Autopoietic theories could offer a fresh insight into the problem of non-necessary correspondence in capitalist societies in so far as the concept of autopoiesis permits a distinct approach to societal sub-systems. These are considered in structural and semantic terms as closed, self-referential systems which nonetheless serve functions for the wider society and/or are indirectly open to environmental determinations. One of my aims in this paper is to consider how far such an approach can resolve the key problems involved in Marxist

analyses to capitalist societies.

PART I. ECONOMY, LAW, AND STATE IN MARXIST THEORY

A. Mode of Production

How the three different approaches operate in Marxist analysis can best be understood by briefly considering the key organising concept in Marxist political economy: that of mode of production. In general terms a mode of production can be defined as a specific combination of forces and relations of production so organized that it can sustain a distinctive mode of appropriation of surplus labour. Forces of production include not only the means and objects of labour but also labour-power itself. They are never purely technical in character but are always shaped by the prevailing social relations of production. The latter can be divided analytically into relations in production and relations of production (cf. Burawoy, 1985). Relations in production comprise the working relations between classes within a productive entity, e.g., between capital and labour in the factory; relations of production are grounded in the capacities to allocate resources to diverse productive activities and to appropriate surplus-labour in determinate forms. It is the combination of these forces and relations which defines the basic pattern of class relations and determines the overall pattern of production, distribution, and consumption in its

articulation with the appropriation of surplus.

For reasons I have discussed elsewhere (Jessop, 1985a, 1985b) it is best to consider relations of production as having economic, political, and ideological moments without claiming that they thereby exhaust all social relations. Thus one could study the labour process as involving (a) a socio-technical process in which nature is transformed, (b) patterns of coordination, surveillance, and control over workers², and (c) a particular division between mental and manual labour.

This definition poses a basic problem for Marxist analyses. Not only does the so-called economic base have crucial extra-economic conditions of existence (e.g., in law and the state) but the economic base itself has essential political and ideological as well as technical-economic aspects. Thus the so-called economic base does not have that absolute autonomy which would enable it to serve as the unique cause of allegedly superstructural phenomena which would in turn be understood as wholly heteronomous or at least heteronomous in their essentials (forms and functions) and only autonomous within this limit. If the economic base is neither exclusively economic nor absolutely autonomous, the meaning of base and superstructure becomes deeply problematic. So, too, for that matter, does the privileging of economic classes as the agent of historical change (cf. Laclau and Mouffe, 1985: 76 and passim). In the next section we deal with the

2. These patterns will be articulated to property and other legal relations but are certainly not exhausted by legal relations.

implications of this analysis for economic determination within the economic system itself. Then we consider its implications for the relative autonomy of law and the state in capitalist societies.

B. Rethinking Economic Determination

Marxist analyses typically display systematic ambiguities about the nature and level of economic determination. It is not always clear to what economic determination refers. Does it involve the internal dynamic of the mode of production, the contingent relation between institutionally separate economic and non-economic institutions and/or processes, or the necessary coherence between the parts of a unitary social formation whose identity and dynamic are determined by the production process? Only the first two possibilities concern us here (since I reject the holistic assumptions involved in the third) and they must be carefully distinguished. Accordingly I deal first with economic determination within economies (both in general and for capitalism) and then consider the problem of the relative autonomy of other systems in capitalist societies.

We begin with the internal dynamic of the economic process in general. This involves the appropriation and/or transformation of nature through the expenditure of labour-power. At this general level economic determination means little more than the trite observation that wealth must first be produced before it can be distributed. That it does mean a little more stems from the fact that production, distribution, and consumption are typically connected (cf. Marx, 1857).

Thus the production process itself does not occur in isolation: production does not come 'before', distribution and consumption do not come 'after'. Hence economic determination in this context means that more causal weight must generally be attributed to how production is organised than to the organisation of distribution or final (i.e., 'unproductive') consumption. Even this more refined observation remains trite and it acquires concrete meaning only in relation to specific modes of production.

In the capitalist mode of production, for example, it translates into the following non-trivial observation. The overall course of capital accumulation is primarily determined by the circuit of productive capital rather than by the circuits of money or commodity capital. More precisely this means that the course of capital accumulation is primarily determined by the organisation of the capitalist economy under the dominance of the value form and its dynamic intermediation through the law of value in its capitalist form³. Moreover, if we consider only capital in general and neglect competition among particular capitals, this means that the continued accumulation (or valorisation) of capital depends on its capacities to exploit wage-labour in the production process. All this clearly places the labour process (hence the capital-labour relation) at the heart of the process of economic determination within the capitalist economy

3. For present purposes this can be loosely defined as the tendency for capital to be allocated to different activities according to profit-and-loss criteria.

itself.

The economic determination of the capitalist economy is internal to the circuit of capital. It depends on the development of self-closure within the capitalist economy. Indeed capitalism is often held to be the first mode of production in which there is a clear institutional separation between the economic and the extra-economic. This is secured by the generalisation of the commodity form to all moments of the economic process. The crucial steps in this process occur with the generalisation of the commodity form to labour-power and its effective subordination to capitalist control in the labour process. For with these steps all the factors of production as well as their products are enclosed within the circuit of commodity exchange or payments system and the organisation of the enterprise can be systematically oriented towards the realisation of monetary profits. In turn this means that extra-economic coercion is not required in order to appropriate surplus-labour because it is, in fact, appropriated through a formally free and equal exchange between capital and labour. The latter sells its labour-power in exchange for a wage (with which it reproduces its labour-power) and in return capital buys the right to deploy that labour-power in the labour process and to control the products thereby produced (including any surplus-labour they might embody).

This permits the autonomisation or self-closure of the economic sphere. But it also secures one of the conditions necessary for the legal system and the state to become autonomous - each with their own

distinctive forms and modes of self-reference, self-organisation, and self-reproduction. For the exclusion of extra-economic coercion from the organisation of the capitalist market economy means that the state can become the site for the exercise of a constitutionalised monopoly of violence. And the private legal order can emerge as a system with its own institutions and personnel and its own juridical codes and norms which apply to all legal subjects regardless of their position in the relations of production. It should be emphasised that I am not arguing that the autonomisation of the capitalist market economy causes the autonomisation of the state or law. I am merely noting that each of these autonomies secures crucial preconditions for the others.

This mutual autonomisation of the economic, political, and legal realms involves the concomitant development of distinctive organisational principles and laws of motion. In turn this engenders a paradox. For what becomes of economic determination in the last instance? Alternatively in what sense can one talk about the relative autonomy of the economic and political spheres?

To argue for economic determination in the last instance at the level of society as a whole is doubly misleading. Firstly, although it is true but trite that no society could survive for long unless it made arrangements for its economic reproduction, it does not follow that the requirements of particular forms of economic production and reproduction must (or can) be satisfied and that these requirements somehow take priority over other activities. One could equally well argue that no society could survive for long unless it made adequate

arrangements for its military defense, for internal law and order, for intergenerational reproduction, or ideological cohesion. One could certainly reply that each of these additional requirements (by no means exhaustive) is itself conditioned by economic production and reproduction. But one could equally well reply that economic (re)production itself depends on military defense, internal law and order, intergenerational reproduction, and ideological cohesion.

This brings us to the more fundamental reason why the claim that the economic is determinant in the last instance is misleading. For it ignores the extent to which the economic realm does not have the degree of autarky which would enable it to play such a determining role. This holds as much for capitalist societies as it does for pre-capitalist societies. Let us grant that the capitalist economy is organised under the dominance of the commodity form and that this permits the self-closure of the circuit of capital. Even so it can only reproduce itself when other social subsystems exist and perform specific functions for and on behalf of the economy. This need not mean that these other subsystems provide direct inputs into the economy. For the outputs of other systems must be made relevant to the capitalist system. Thus, although labour-power is produced in the family and education systems, it is only when it is employed as wage-labour that it enters the circuit of capital. From one viewpoint it is the wage-relation which secures the reproduction of capital; from another viewpoint the operation of subsystems located beyond the circuit of capital is crucial. These two moments are associated with two

fallacies: the beliefs that a market economy is self-sufficient and/or that other systems are simply functional adjuncts to the capitalist economy. One can only avoid these twin errors by focusing on the interrelations among these subsystems and how their different organisational principles are mediated.

In so far as non-economic factors are essential to the reproduction of the economic realm, it lacks the autonomy and self-sufficiency to be economically determinant of other systems in the first, last, or any intermediate instance. In turn this implies that other systems must have some degree of autonomy and, perhaps, an extensive autonomy vis-a-vis the economic system. It is to this question that we now turn. We begin with the relative autonomy of the state because it is here that the issue has been most thoroughly explored.

C. The Relative Autonomy of the State

Many different Marxist approaches allow for the theoretical possibility or necessity of some degree of state autonomy. This means that there are many different ways to conceptualise its relative autonomy. Indeed a brief consideration of some of the variables involved in Marxist political theorising soon reveals the complexities of the problem. There are three general ways to classify arguments about relative autonomy: (a) according to the theoretical approach adopted towards the state (capital logic, class theoretical, or

state-centred); (b) according to how state autonomy is analysed - in terms of input-output or representational models, an 'internal-external' dialectic of form, or as a datum whose significance for capital accumulation depends on contingent articulatory practices; and (c) whether such autonomy (if and to the extent that it exists) is considered functional, dysfunctional, or contingent in its impact on capital accumulation and class domination. An even more complex schema could be produced by considering further issues in the field of autonomy, such as the temporal limits to state autonomy, the level on which it can occur (e.g., at the level of the type of state, the state form, or the regime form), its symmetry or asymmetry in regard to class relations, and so forth. Here I only consider some aspects of the first three variables and do so in a highly abstract manner. In order to give some idea of the range of positions which can be adopted, however, three tables are also included which illustrate some possible types of argument about relative autonomy. Neither the theoretical discussion nor the tables should be considered exhaustive (for more detailed discussion of the capital-theoretical and class-theoretical approaches, see Jessop, 1982).

1. The Capital Theoretical Approach

We can distinguish two main forms of this approach. Capital-logic studies first attempt to derive the necessary functions of the state from an analysis of capitalism considered as a mode of production with

its own laws of motion: they then try to derive the state's form from the functions it must perform. If these studies did not allow for the 'mediating' role of state form (e.g., as an 'ideal collective capitalist'), they would deny the autonomy of the state. As it is, they still adhere to an economic determination in the last instance. Within this approach some studies consider capitalism purely as an economic system, others as a complex of economic and political relations, and yet others as a complex of economic, political, and ideological relations (contrast Altvater, 1971; O'Connor, 1972; Althusser et al., 1967). In contrast to capital-logic we have form analyses. These first derive the form of the state from that of the capitalist mode of production; and then consider whether and how far this form enables the state to function in accordance with capitalist reproduction requirements. They do not claim that the state's functions must correspond in the first instance to the institutional logic of capitalism. Instead they operate with an 'internal-external' dialectic which allows for a greater or lesser degree of non-necessary correspondence between state and economy.

table 1 about here

2. The Class-Theoretical Approach

We can distinguish two main forms of this approach to relative autonomy: one involves an instrumentalist logic of class forces, the other assesses the implications of various state forms for the balance of class forces. Class logic studies attempt to derive the role of the state directly from the changing balance of class forces (usually considered in isolation from the structure and laws of capitalist production and/or taken for granted as classes for themselves). In this sense they operate with an input-output model in which class demands and interests are translated into corresponding political outputs. These interests are sometimes understood in a direct, one- or two-dimensional sense (cf. Lukes, 1972). But they can also be understood in an indirect, second-order sense. This would refer to how class forces struggle for a particular form of state which better represents their interests rather than for a specific set of (one- or two-dimensional) interests within a given state form. Within this class logic framework a crude instrumentalism would deny any autonomy to the state and would reduce it to a mere transmission belt for the interests of the dominant class (or class fraction).

But such a crude instrumental reductionism can be qualified in at least two ways. For greater attention can be paid to the range of forces involved in class struggle and/or the various sites or levels on which such struggle can occur. Thus state outputs would reflect a complex parallelogram of (economic, political, and ideological) forces rather than the immediate economic interests of the dominant class or fraction. And, secondly, it is sometimes argued that specific

conjunctures (with a given range of class forces on a given terrain) enable the state apparatus to attain an abnormal or exceptional measure of independence. These situations are usually understood in terms of an equilibrium of forces: orthodox Marxist analyses of the absolutist state, Bonapartism, and Bismarckism are replete with such arguments. Less often these situations are analysed in terms of the overall weakness of class forces (whether or not they are in equilibrium). Two different examples, emphasising economic and political weaknesses respectively, are found in Trotsky's account of Tsarist Russia before the 1905 and 1917 revolutions (Trotsky, 1973; 1969) and Mason's analysis of the primacy of politics in Nazi Germany (Mason, 1968). In such circumstances the state can stand outside and above the class struggle in the sense that it no longer performs class functions for a greater or lesser period of time.

table 2 about here

A second class-theoretical approach adopts an 'internal-external' dialectic. These first derive the state's form from the need to perform a creative role in shaping the balance of class forces. Class forces are not treated as already given before the state intervenes to transform inputs into outputs. Instead the state is said to perform a necessary or contingent role in shaping class forces and/or in

modifying the balance among them so that some classes and their interests are favoured and others disfavoured. Thus the emphasis here is on the state's form or activities in relation to the class struggle. In addition the state's role in constituting this balance of class forces is generally considered to be functional for capital accumulation and bourgeois domination. Again this role can be considered necessary either because of economic divisions within the dominant class (e.g., Altvater, 1971) or because of its political divisions (e.g., Poulantzas, 1973). Some historical studies also try to relate the state's forms and functions to changes in the balance of class forces at the level of the social formation and to recognise that class forces are influenced in turn by the structure and actions of the state.

3. State-Theoretical

State-centred analyses start out from the state as an institutional ensemble and/or from the managers of the state system (politicians, bureaucrats, the military, etc.). These starting points are parallel to the two main Marxist positions: studies which focus on the institutional logic of the state system correspond to 'capital-theoretical' studies and those which focus on the role of 'state managers' correspond to 'class-theoretical' analyses. These two approaches can also be combined. This is evident from Mann's distinction between two dimensions of state autonomy: 'infrastructural'

and 'despotic'. Whereas infrastructural power refers to the state's capacities to penetrate the rest of society, despotism refers to the independent power exercised by state managers (Mann, 1984).

Whatever the specific approach adopted, however, all questions concerning capitalism, its laws of motion, and class struggles are considered secondary. They can play a more or less important role in such studies. Thus, whereas capital- and class-theoretical analyses are necessarily concerned with the state's forms and functions in securing capital accumulation and class domination, state-centred analyses are only contingently concerned with such issues. They could just as well be concerned with its role in reproducing other types of social relation (e.g., patriarchy, ethnic dominance, or the mafia) or, indeed, in reproducing the state itself as a form of political domination. Thus such studies typically focus on the institutional forms of the state in initial abstraction from the analysis of capitalism as a mode of production and from the nature of class relations. They might then consider the effectivity of state forms and/or activities for capital accumulation and class domination. But equally they may emphasise non-class dimensions of the state as a matter of theoretical principle or as an issue of empirical significance.

Table 3 about here

Some argue that the state's institutional logic involves a distinct set of interests which must be co-ordinated with those of capital. For example, many theorists emphasise that the state's need for tax revenues to finance its activities leads to state action in support of capital accumulation as the source of such revenues (e.g., Skocpol, 1985; Offe, 1984). Others argue that the state managers have distinct interests which are contrary or contradictory to those of both capital and labour. Thus Miliband has argued that the nature and degree of relative autonomy will depend on the forms of alliance between state managers and the dominant economic class; and Block has analysed the circumstances (notably economic crises and wars) in which state managers can pursue their own interests relatively free of restrictions from the dominant economic class (Miliband, 1983; Block, 1980). Yet other studies argue that the state is parasitic or antagonistic - either in principle (as in anarchist positions) or to the interests of capital accumulation and class domination (as in many liberal positions). For the moment we are only concerned with mapping the different positions which can be taken towards the relative autonomy of the state. Since similar objections can be raised towards positions on the relative autonomy of the law, we will now consider approaches to legal autonomy. We will then discuss the alternative approach of autopoiesis and then relate all the different positions.

D. The Autonomisation of the Legal System

We can now consider how Marxists have analysed the autonomy of law. There are as many complexities here as with the state. We do not intend to repeat that discussion but merely want to note that a similar scheme can be adopted. Thus we ignore theories which deny the law any autonomy and also ignore simple input-output or representation models. Instead we want to focus here on two particular approaches within the 'internal-external dialectic' as a preparation for an analysis of autopoiesis. This dialectic involves a two-step analysis. It first derives the form of the law from the capitalist mode of production and then examines how this form conditions law's functions for capitalism.

1. The 'Internal-External' Dialectic

One such approach was developed by Poulantzas in his early analyses of legal systems. He argued that the form of the modern legal system is characterised by four principal features: abstraction, generality, formalism, and 'reglementation' (i.e., codification and reversibility through a system of rules providing for the legitimate transformation of the law and prohibiting illegitimate change). He stressed that these four properties must be understood as internal attributes of modern law which thereby produced a certain kind of autonomous institutional logic in the legal system. But he also argued that the general form and the general development of the modern legal system must be explained as an externally determined effect of the economic base. Only through locating them in terms of this

'internal-external' dialectic could one avoid both a purely internalist Normlogik and a simple economic reductionism. For Poulantzas the internalist approach was exemplified par excellence in Kelsen's pure theory of law as a deductive science of legal norms derivable from a basic Grundnorm. But he was also critical of attempts to derive any given legal rule or juridical principle directly from a given infrastructural need. Even in cases where a prima facie case for such a connection could be made, it was still necessary to integrate that law or principle into the legal system as a whole and to 'conform' it to the specific formal characteristics of the modern legal system. But these formal characteristics are themselves ultimately grounded in the economic imperatives confronting capitalist society (Poulantzas, 1964; idem, 1965).

In this approach we already find some elements of the arguments developed below. But Poulantzas did not distinguish between the development of the modern legal form (legal rights attached to subjects) and the development of the modern legal system (which secures the conditions for the self-reproduction of this form). Nor did he provide an adequate account of the mechanisms of internal-external dialectic. Instead this dialectic remained merely a heuristic device. In identifying a specific legal discourse and arguing that it is in the first instance a closed system, Poulantzas problematized its external determinations. For what mechanisms could ensure the translation of economic needs into legal language, norms, and institutions? Poulantzas himself offered two interrelated solutions - the mediating

role of a class-determined world-outlook (reflecting the external influence) and general legal principles (reflecting the internal influence). But these merely complicate the problem. Unless it could be shown how world-outlooks emerge in a contingent, historical process (and Poulantzas himself did not do so), the first solution would be reductionist and essentialist. The second solution is question-begging. For Poulantzas did not establish that the modern legal form necessarily performed specific economic functions. That there might be a correspondence between legal norm and economic need does not imply that this correspondence is necessary. Yet Poulantzas did not establish how this correspondence might occur contingently.

2. The Approach of Tuschling

A more sophisticated approach along similar lines has been developed by Burckhart Tuschling. He provides the sort of two-step analysis of the institutional separation of the bourgeois form of law which enables us to locate the question of autonomisation. He argued that law as a specific system of relations between individuals emerges only with the development of capitalism. Hitherto law had been limited to certain categories of individuals and their relations in particular spheres but capitalism results in the legalisation of all social relations, the birth of the legal subject, the growth of a specialised legal apparatus, and the consolidation of law as an organisational principle of the total social order. The critical factor in the rise of such a legal system is not the growth of the commodity form as such but its generalisation to the exchange of labour-power with capital. Tuschling insisted that the commodification of labour-power had a dual significance. It enabled the rule of law to be established among formally free and equal citizens; and it also required such a legal order to justify, systematize, and regulate the exchange of labour with capital. In short it is through the capitalist organisation of the labour market and labour process that law must be understood and, in this context, it must be related to the overall articulation of production, distribution, and exchange.

Tuschling then considered how capitalism determines the form and function of law. He argued that law plays a crucial role in mediating

the contradiction between the formal equality of the individual owners of various commodities (including labour-power) and the substantive inequality of class exploitation within capitalist production. It is therefore essential for law to abstract from the substantive differences between commodity owners in mediating and guaranteeing the sphere of exchange relations. In this way the law offers a formal guarantee for the acquisition and disposition of property rights in mutual exchange among free and equal commodity owners. But thereby it also underwrites the appropriation of surplus-labour in the capitalist labour process without the payment of an equivalent and provides the legal framework within which capital can be concentrated and centralised. It is the latter function that explains why law cannot be the private concern of capitalists - for law must be enforced not only against the proletariat but also against the petty producers and inefficient capitals swallowed up during accumulation.

Thus the administration of law must be handled by an apparatus that is distinct from the various economic agents and this task falls to the Rechtsstaat as an autonomous legal subject endowed with a formal monopoly of force and empowered to implement the law in all spheres. Indeed Tuschling argues that the capitalist state is essentially rechtsstaatlich in form and that this affects how the state intervenes in all areas and not just in its role as guarantor of a legal order. For the contradictions between different moments of the total circuit of capital and between different economic agents and classes are reproduced within the legal system and the various preconditions of

capital accumulation must be expressed and mediated through legal forms rather than impressing themselves directly on the the attention of the state. This implies a certain indeterminacy in its interventions relative to economic imperatives and opens up a space for political struggle within the bourgeois form of law.

Thus there can be no absolute guarantee that the Rechtsstaat will secure the reproduction of capital. Instead how its actions affect accumulation will depend in turn on how the laws of motion of capital are reflected in the balance of political forces. The state is an 'ideal collective capitalist' only to the extent that its pursuit of currently dominant particular interests coincides with the imputed needs of 'capital in general' (there is no real collective capitalist). In turn this depends on a complex system of mediations among the economic process, political class struggle, and the legal-political and/or economic activities of the state. Nonetheless Tuschling implies that the distinctive forms of law and the state in capitalist society do favour the accumulation of capital and he continues to maintain the fundamental and essential correspondence between capitalism and the dominance of the legal order (Tuschling, 1976: 30-38, 47-51, 97-113, and passim).

Tuschling's approach is superior to that of Poulantzas in so far as he emphasises the contingency of the intermediation between economic needs and legal and political outputs. But this merely shifts the problem. There is only a broad, formal correspondence between economic, legal, and political forms; any substantive correspondence

depends on factors which lie beyond Tuschling's explanatory schema and are thus contingent. The contingency of system outputs relative to an observer's expectations based on knowledge of inputs is one way to define the autonomy of a system (Hejl, 1984: 64). But such a solution would involve a radical break with the theoretical assumptions underpinning Tuschling's work and would still leave unexplained the nature of this autonomy.

3. The Approach of Hirst

Yet another step away from economic reductionism has been taken by Paul Hirst. Hirst is well known for his epistemological and methodological critique of orthodox Marxism and this critique also informs his approach to law. Thus, in opposition to those who seek to endow the law with a single essence-content rooted in the exigencies of the self-reproduction of a mode of production, Hirst emphasises that laws have no necessary unity of content, form, or function outside their enactment and enforcement in the legislative process with its associated legal apparatuses (1979: 96-7, 101, 111-14, 137). This means that the starting point for an analysis of law should not be sought in factors outside and beyond the juridical region. Thus law should not be derived from, for example, the circulation of capital or the contradiction between use- and exchange value. Instead one must begin with the preconditions, nature, and effectivity of the legislative process and define law in terms of the specific nature of legal

discourse (1979: 111-13).

Hirst illustrates his views with an account of the origins of the modern legal form of corporate property, chosen because of its irreducibility to the individual subject and because of its role in securing one of the conditions of existence of the joint-stock company (1979: 136-47). However, although this illustration is interesting and provides prima facie support for his approach, Hirst does not provide any clear definitions of legal discourse, legal subject, or legislative apparatus. Nor does he show that he has avoided a purely nominalist approach to the legal system. In short Hirst does not really establish what distinguishes law from other forms of social relations. Nor does he establish how it is possible for an autonomous legal order, however heterogeneous, to emerge and operate as the precondition of an effective legal discourse. Thus, although Hirst moved from a reductionist Marxist position and seemed to enter the terrain of autopoietic analysis of the self-constitution of law, he remained this side of autopoiesis.

E. A Critique of Marxist Approaches

We can now present a critique of Marxist approaches to the autonomy of law and the state. Depending on the type of approach adopted, different lines of criticism are appropriate. Here we are not concerned to criticise the basic difficulties involved in either the capital-theoretical or class-theoretical approach (for a more detailed

discussion, see Jessop, 1985a). Instead we focus on the problems involved in the three main approaches to autonomy: input-output or representational models, the 'internal-external' dialectic, and articulatory practices. In developing this critique we will refer to the concept of autopoiesis as a means of amplifying our arguments. Then, and only then, can we move on to consider autopoietic systems as such.

1. Input-Output

The basic problem with this approach is the emptiness of the black box which transforms inputs into outputs. If there were an automatic translation of economic inputs into legal or political outputs which correspond to the needs of capital, then the law or the state would have no autonomy. They would simply consist in 'trivial machines' which always translate a given input into a given output and have no power to vary the relation between inputs and outputs. This invariable relationship means that their performance would be predictable and independent of their history (cf. von Foerster, 1984: 9). If the relationship between inputs and outputs is variable and depends on internal states of the legal or political system (states which are indeterminate relative to any given input), then the law or state have some autonomy. In such cases one could not establish an immediate correspondence between input and output. This does not mean that a determinate relationship cannot exist between the sequence of inputs,

the changing internal states of the system, their implications for the handling of inputs, and the resulting outputs. But in such cases one must adopt an 'external-internal' dialectic. Moreover the relevant 'non-trivial machines' could well be so complex that even in principle it would be impossible to infer their structure and operational codes from a finite number of input-output observations. This makes them analytically indeterminable and unpredictable in input-output terms (von Foerster, 1984: 12). Instead a genealogical approach is required and both their internal organisation and history must be studied to explain how they work.

In turn this raises the more general problem of representation. The latter involves three elements: what is represented, the means of representation, and the representation itself. If one argues that there is a one-to-one correspondence between what is represented and the representation, then the means of representation have no effectivity and constitute a 'trivial machine'. If the means of representation have varying effects (so that no one-to-one correspondence exists), a different problem arises. This would imply that the means of representation have some independent effect or autonomy⁴. In such cases one cannot judge whether what is represented and its representation actually correspond. Nor can this problem be solved by introducing alternative means of representation and using one

4. Hejl has actually defined 'autonomy' as the input-independence of living systems, i.e., the indeterminacy of performances seen from the viewpoint of what, for an observer, are identical inputs (1984: 64).

as the 'standard' against which to assess the accuracy of other representations. For this would be to impose arbitrary standards. It follows from such arguments that input-output or representation models must either (a) deny the autonomy of the means and processes whereby inputs are transformed into outputs; or (b) accept that the means and processes have some autonomy and therefore move to an 'internal-external' dialectic, specific articulatory practices, or some other model to establish how the contingently necessary correspondence between input and output is achieved.

2. 'Internal-External' Dialectic

Theories based on internal-external dialectics 'whiten' the black box posited in input-output models. By emphasising the form taken by the legal or state systems, they establish their specific institutional logic. But they do not thereby resolve the problem of representation. Instead they bring it to light. For, if the specific institutional logics of the law or the state have real effects, one must ask what guarantees that their effects coincide with the needs of capital accumulation and class domination. Thus an internal-external dialectics can only be a staging-post en route to analyses of contingent, articulatory practices (for more detailed discussions of this problem in relation to Offe, Poulantzas, and Foucault, see: Jessop, 1982; Jessop, 1985a; and Jessop, 1986b). Or, as Luhmann has expressed the point in another context, an internal-external model does

not represent a 'middle way' which avoids the problems of positing heteronomy or autonomy; instead it combines the disadvantages of both (Luhmann, 1985b: 9).

3. Articulation

This is the most promising approach of the three principal Marxist analyses of relative autonomy. For it incorporates the anti-reductionist thrust of internal-external models whilst avoiding their problems. It is concerned to establish correspondences among the economic, legal, and political domains but it also attributes some autonomy to the legal and political spheres. In doing so it recognises that there can be no institutional guarantees that the legal and political spheres will, through their sui generis operation, produce outputs which correspond to the needs of the economic system. At best one can treat the law and state as structurally or strategically selective. But the precise outputs also depend on specific actions, decisions, forces, strategies, etc.. The method of articulation focuses on the hegemonic practices, global strategies, or articulating discourses which meld the different institutional systems together. In this sense they are placed outside each system and serve to co-ordinate them. But this is problematic because it suggests that the articulating practices themselves are not anchored in specific structures or are rooted in a particular institutional site which then becomes the central point of unity in a social formation. If this is

not the economy (as in economically reductionist Marxism), it is typically the state (politicism, as in Poulantzas) and/or a master hegemonic discourse (ideologism, as in Laclau and Mouffe).

4. Rethinking the Problem

It is in re-thinking the problem of relative autonomy that the contributions of autopoietic theory are most valuable to Marxist analysis. For it suggests that the problem of autonomy has been badly posed. It is not enough that a process of institutional differentiation has occurred for different institutional systems to become autonomous one from another. This is recognised in so far as Marxist theorists have considered the relations between such distinct systems in such varied terms as unilateral command or unilinear causation (heteronomy), representation or transmission (as in input-output models), dialectical interaction (internal-external models), or a contingent articulation. Each of these approaches involves fundamental theoretical problems. Theorists of autopoiesis would add that a fourth approach to autonomy is possible: that of autopoietic closure and openness. Only autopoiesis can generate autonomous (as opposed to differentiated) systems. For only autopoiesis involves the self-referential, self-reproductive constitution of systems and thus entails the radical closure of the autonomous system. But only autopoiesis also offers the opportunity to explore the openness of a closed, autonomous system through its

specific forms of articulation with its environment. This offers a new way to think the problem of relative autonomy.

In this context a Marxist approach to the relative autonomy of the law or the state in capitalist societies would not only need to demonstrate that the capitalist mode of production permits the institutional separation and functional specialisation of law and the state. It must also establish that these systems are autopoietic and thus radically autonomous. Only then can one pose the question of how these autonomous (and not merely institutionally separate) systems could contribute to the reproduction of capital accumulation and class domination. In fact this argument is not difficult to make within the framework of Marxist political economy. Indeed, as I hope to show below, one of the most surprising aspects of autopoietic theory is the extent to which it converges with Marxist theory in this respect. Thus, in the following comments, I seek to establish the conditions not only for the institutional separation of law and the state as separate systems in capitalist societies but also the conditions for their autopoietic take-off into radical autonomy. The parallels between Marxist analyses of the value form and autopoietic analyses of law and the state are particularly striking here. This suggests that many analyses of autopoiesis have not sufficiently grasped the limits to autopoiesis and that Marxist analyses of the value form and commodification can prove enlightening in turn for autopoietic theories.

PART II: THE ECONOMY, THE STATE, AND THE LAW IN AUTOPOIETIC THEORY

Marxist political economy involves more than theoretical reflections on the relative autonomy of the economy, the state, and law. It covers many more issues. Thus it approaches relative autonomy through a rich and complex theoretical system. Our interest in autopoiesis must also be related to other theoretical concerns. For there are several competing approaches towards autopoiesis within its original home domain - that of biological and chemical systems. Moreover, Luhmann, who has pioneered the autopoietic approach towards social systems, has done so in a self-consciously pluralistic manner (Luhmann, 1975/1982: 270). Such social science applications also link autopoiesis with other concepts and arguments. Thus Luhmann relates it to recent work in communications theory, systems theory, and evolutionary theory. Teubner (seriatim) has also drawn on several different theoretical schemata in developing his account of reflexive law. Hence, in assessing how theories of autopoiesis could contribute to economic, political, and legal analysis, one must be careful to distinguish between approaches to autopoiesis as such and the broader and more diverse theoretical frameworks with which they are coupled. In turn this suggests that it would be helpful to discuss autopoiesis in general before considering how particular theorists have applied it in the social sciences.

A. Theories of Autopoiesis and Autonomy

The word 'autopoiesis' was first introduced in the natural sciences. But it has also been argued that analogous concepts had previously been developed in the social sciences. Thus Boulding cites Adam Smith's analysis of the role played by the 'invisible hand' of the market in producing order out of random events; and Zeleny refers to Hayek's work on 'spontaneous social orders' (Boulding, 1981: xii; Zeleny, 1980: 37-8). For the moment, however, we will concentrate on accounts of autopoiesis and consider their epistemological and theoretical implications.

1. Approaches to Systems

Analyses of autopoiesis in the natural sciences typically adopt a constructivist approach to epistemology, i.e., one in which the observer has a key role in constructing the properties of scientific objects. In this context autopoietic theorists have distinguished two types of observer-dependent 'unity': simple and complex⁵. A simple unity is an unspecified whole which exists in a space delimited by the

5. The words used in this context vary from author to author: 'unity' has been adopted here because 'system' is generally restricted to complex unities. In many cases 'system' denotes the specific combination of the fundamental organisation and the current structure of a complex 'unity'.

properties through which the observer separates it from its background. A complex unity is defined as a system of components which exists in the space delimited by the relations among its components.

The same phenomenon can be analysed in different ways, depending on the viewpoint and scientific interests of the observer. It can be analysed as a simple or a complex unity (Maturana, 1981: 24), as non-autonomous or autonomous (Zeleny, 1981: 5), as autopoietic or allopoietic (Varela, 1979: 15-16, 32), and even as autopoietic or merely autonomous (Varela, 1984: 25-6). One important choice concerns treating complex unities as input-output systems or as operationally closed (whether genuinely autopoietic or simply autonomous). Operationally closed systems are described in terms of the specific forms of internal coherence which emerge from the relations among their components. Input-output systems are described in terms of how they interact with changes in their environment. Thus, whereas an input-output orientation treats environmental changes as inputs to be transformed in specific ways by the system, for an operational-closure approach they are simply seen as sources of noise or perturbation to which the system will react in such a way as to maintain its own fundamental organisation (Varela, 1984: 25-6). But, however they are actually analysed, all unities exist (at least for the observer) only in so far as such systems can be distinguished from their environment. These arguments are reinforced, as we shall see below, in the case of social systems. For these engage in self-observation and also construct models of their environments to which they respond.

2. Autopoiesis

Autopoiesis is always and necessarily a property of complex unities. For an autopoietic system is a complex unity 'realized through a closed organisation of production processes such that (a) the same organization of processes is generated through the interaction of their own products (components) and (b) a topological boundary emerges as a result of the same constitutive processes' (Zeleny, 1981: 6; cf. Varela, 1979: 13). Together these two properties mean that such unities have a basic, self-producing and self-maintaining organisation. The latter consists in the invariant complex of relationships among components and component-producing processes which must remain the same for the system to survive. But this organisation can assume different structural forms. These comprise the particular spatio-temporal arrangements of particular components through which the underlying organisation is realised in a given space and at a given time. Thus a distinction is drawn between the basic organisation of an autopoietic system and its contingent structure. The exact nature of the components involved and their spatio-temporal relations are always secondary (since they are effects of the primary causal mechanism of autopoiesis) and they must be analysed historically in relation to the ontogenetic reproduction of the basic organisation. This does not mean that an autopoietic system will always reproduce itself. Instead the distinction between organisation and structure enables the observer to

define the limits within which the organisation can vary without disintegrating (Zeleny, 1981: 5; cf. Maturana, 1981: 24; Varela, 1979: 9-11).

The organisation of a composite unity is crucial in two respects. It determines what structural changes can occur without the system disintegrating (losing its basic organisational identity-unity); and it determines which interactions with its environment will trigger structural changes and which will have enough destructive force to trigger its disintegration⁶. But this structure must be related to the environment or medium in which it exists. For the events which may be perturbing or destructive for that structure originate in and are determined by its environment. In turn this requires analyses of the ontogeny (individual history) of autopoietic systems. For, since the perturbing or destructive character of environmental events may vary as the system's structure changes (whether in response to earlier environmental perturbations and/or due to its internal dynamics), the actual sequence of perturbation and structural changes which a given system actually experiences are always a combined effect of its own structure and that of its environment. This sequence results in the structural coupling of the system to its environment. This coupling appears as a behavioural complementarity: the system tends to react to environmental changes in such a way that its autopoiesis is

6. Varela notes that the compensating operations of the autopoietic system can themselves become deformations which generate further compensatory changes (Varela, 1979: 32).

maintained. If a destructive interaction occurs, however, this process is interrupted and the system disintegrates. Thus those changes which occur within an autopoietic system short of its destruction are always a product of its structural coupling to its environment (Maturana, 1981: 26-27; cf. Varela, 1979: 33, 47-8; and Hejl, 1984: 68).

The environment of an autopoietic system can include simple and complex (including other autopoietic) systems. Two simple unities interact through the simple interplay of their global properties. But the interaction of two composite unities is structurally-determined through the interplay of the properties of their components (Maturana, 1981: 25). Autopoietic systems can be coupled together structurally without losing their respective identities. This can happen as long as their autopoietic responses serve as reciprocal sources of compensable perturbation. Thus a composite system could emerge in which a number of autopoietic systems are linked together. The individual autopoiesis of each system would be subordinated to an environment determined through the autopoiesis of the other systems. The overall behaviour of such a composite system need not as such be autopoietic. But it could acquire autopoietic properties itself even where the recursive reproduction of its own components (as distinct from the components of the various autopoietic systems which make up its organisational milieu) does not coincide with that of the autopoietic subsystems and their components (Varela, 1979: 50-51).

3. Aspects and Correlates of Autopoiesis

Among the correlates of autopoiesis are included the autonomy, unity, and identity of the autopoietic system. Indeed for Maturana, Varela, and Zeleny, these properties are implicit in the very fact of autopoiesis. In turn this implies that these terms refer to different features in autopoietic as opposed to allopoietic systems and/or can only be applied to the former.

As regards autonomy, for example, all changes in autopoietic systems are subordinated to the maintenance of their own organisation. In this sense it does not matter how far their structural properties or performance change in other respects. Possible changes in allopoietic systems (such as input-output or functional systems) are restricted, however, in so far as they are subject to external control or must continue to perform a specific function.

Likewise autopoietic systems derive their unity and identity from the self-production of their own boundaries. Their unity and identity are contingent, emergent properties. They result from the neighborhood relations and local interactions of the various components of the autopoietic system. Indeed there are said to be no operations in the autopoietic network which are oriented as such to maintaining its unity (Maturana, 1981: 23).

Moreover, as autopoietic or autonomous systems, they do not have inputs which govern their operation. Instead they experience perturbations which merely serve as reasons to re-establish identity

(Varela, 1979: 15-6, 32). They do not adapt optimally to their environment or pursue a predetermined function (as is the case with input-output systems) but they merely respond to environmental perturbations and maintain their own organisation. Whereas an input-output system adapts to its environment in line with pre-determined instructions, an autopoietic system adapts in whatever ways will enable it to maintain its basic structure. The structural coupling of a system to its environment involves an uninterrupted sequence of operations (eigenbehaviours) which are specified by the system itself under broad constraints imposed by the environment. Since many different paths are possible and none is uniquely pre-given, it has been suggested that 'natural drift' is the most suitable concept for analysing the history of structural coupling (Varela, 1984: 25-6).

4. Autopoiesis vs. Autonomy

Varela has criticised the transfer of autopoiesis from the domain of cells and animals to social systems. He argues that this reduces the approach to a metaphor: autopoiesis and the recursive production of components should be distinguished from the more general phenomena of organisational closure and the production of coherence through internal operations of a system (Varela, 1979: 54-5; 1981a: 15-16; 1981b: 38). Accordingly Varela suggests a distinction between autopoietic systems and autonomous systems. The former are merely a particularly clear-cut, paradigmatic case of the latter. Autonomous systems in

general are defined by the unity and closure of their organisation. More specifically they consist in a network of interactions among components which "(i) through their interactions recursively regenerate the network of interactions that produced them, and (ii) realise the network as a unity in the space in which the components exist by constituting and specifying the unity's boundaries as a cleavage from the background" (1981a: 15; cf. 1979: 55). Once the circularity of a network emerges, the processes constitute a self-computing organisation, which attains coherence through its own operation, and not through the intervention of contingencies from the environment. Thus the system's boundaries, in whatever space the processes exist, are indissolubly linked to its operation. If the organisational closure is disrupted, the unity of the system disappears (1981a: 16).

5. Preliminary Conclusions

Theories of autopoiesis focus on a specific type of system and endow it with specific properties. An autopoietic system is organisationally closed and self-reproducing. This does not mean that it exists in isolation from its environment. For autopoietic systems can certainly draw energy or raw materials from their environment and can also change that environment in other ways. But their interaction with the environment takes a specific, autopoietic form. Thus an autopoietic system does not operate as a trivial input-output machine, it is not required to perform a particular function, nor is it

integrated into a broader control structure which determines its response to environmental changes. For it relates to its environment as a source of perturbing and/or potentially destructive changes to which it reacts through sui generis, internally determined processes which may lead to internal structural changes but nonetheless maintain the basic organisation of the system. Thus its relation to its environment involves nothing more than an ontogenetic, structural coupling of its autopoiesis to changes in that environment.

There are serious problems with the constructivist epistemology which underpins the Chilean school's approach to autopoiesis and analogous American studies of cybernetic systems (for a critique, see Zolo, 1986). Here we are less concerned with these problems, however, than with the question of autonomy. For central to our purposes is whether the concept of autopoiesis can help us to resolve the problems identified above in Marxist analyses of the relative autonomy of economy, law, and the state.

Autopoietic approaches obviously reject an input-output model of the relation between system and environment. They need not be inconsistent, however, with an 'internal-external' dialectic. For the idea that the external environment of an autopoietic system (which can include other autopoietic systems) is a source of perturbations to which the system responds in terms of its own internal dynamics is not dissimilar from the Poulantzasian idea that the economic base generates changes which must be incorporated in specific, sui generis ways within the legal system. However, whereas the Poulantzasian approach retains

a residual commitment to the dominance or primacy of the 'external' moment of the dialectic, the autopoietic approach is clearly committed to the primacy of the 'internal' moment and rejects the holistic assumptions which continue to plague Marxist analyses. An autopoietic approach rejects the assumption that autopoietic systems function to guarantee the reproduction of an encompassing macro-system. The idea of structural coupling among two or more systems offers an alternative approach which avoids essentialism and is both historical and conjunctural. Thus some basic concepts of autopoietic theory can be related to the 'internal-external' dialectic at the same time as they point beyond it. In particular they provide new ways of thinking about the autonomy of specific social sub-systems and their sui generis modes of operation. Moreover, in so far as autopoietic theories deal with structural coupling, they also establish a point of contact with Marxist theories of articulation. Any more detailed discussion of these points, however, must await a brief presentation of how theories of autopoiesis have actually been applied in the social sciences.

In this context there is some debate whether theories of autopoiesis merely serve as a heuristic device in the social sciences (e.g. Teubner, 1984a, 1986), as a more or less useful metaphor (Rottleuthner, 1985; Zolo, 1986), or a genuine theory of social systems and/or some of their subsystems (Lempert, 1985). In the third sense one could say that a social system or one of its sub-systems is autopoietic if, and only if, it is self-constituting, self-reproducing, and self-referential. It is Luhmann who has most consistently developed

this third approach. Accordingly we shall now consider his work.

B. The Work of Luhmann

Luhmann defines autopoiesis in terms similar to those of Maturana and Varela. Thus the key features of an autopoietic system are that (a) it establishes its own identity and the unity among its elements; (b) it constitutes and reproduces these elements themselves; and (c) it does so in and through the very interaction of these elements. It does not derive its identity or unity from the external environment nor from a pre-given principle or essence (Luhmann, 1984a: 310-11). Thus autopoietic social systems operate with a constructivist epistemology which not only serves as a means of observation but also enters into their very constitution as systems. For an autopoietic system begins merely with a difference or distinction between system and environment and it then constructs its own principles of unity and autonomy in and through its autopoietic development (1985e: 9; 1986a: 2). Everything which functions in a system as unity, is produced as a self-performance of the system. In this sense it is a closed system of (self-)reproducing elements.

Although these parallels with the work of Maturana and Varela are interesting, Luhmann's work on autopoiesis cannot be understood in isolation from his more general approach to social systems. These are treated as systems of communication which undergo processes of structural-functional differentiation. In turn this suggests that we can consider Luhmann's analysis of autopoietic subsystems in terms of

three key issues. How are they related to: (a) society as a whole in terms of their various institutionalised functions; (b) their relation to neighbouring subsystems in terms of mutual performances (received as input or produced as output) and/or of their structural coupling; and (c) their relation to themselves as self-reflection⁷ (e.g., 1975/1982: 264-5; 1977/1982: 238). The following sections deal with each issue in turn, focusing on autopoiesis and introducing other elements from Luhmann's analysis as necessary.

1. Autopoiesis and Society

Society is a system based on the autopoietic reproduction of communications. Its functional sub-systems are also, a fortiori based on communication. Thus, when Luhmann talks of self-constitution, self-reproduction, and self-closure, he refers only to the role of communications in such systems. These operate in different ways for different types of system. A formal organisation, for example, needs clear rules for membership and internal organisation. Likewise a functional subsystem can only become fully differentiated and unified when it has a clear code around whose application it can constitute itself and for which no equivalent exists elsewhere in its societal environment (1984a: 311; 1985c: 10-11).

7. In this context self-reflection refers to the self-reflection of the system about itself and not to the autopoietic or allopoietic character of the subsystem as such: even allopoietic systems can engage in self-reflection - and self-deception.

Although every autopoietic subsystem has its own code, each of them participates in the general communication of society. This has two key implications. It means that no subsystem can overstep the boundaries of communication (its communications must be understood). And it means that each subsystem can draw on that general communication both to construct the 'real world' in which it exists and on which it operates and also to establish its own specific communicative codes (1986a: 6).

Autopoietic subsystems derive their unity and identity from their unifying code rather than from a unitary organisation. Indeed, since each autopoietic subsystem comprises all social communications expressed in its specific code, none of them can be reduced to the compact unity of an organisation. Thus the political system can not be exclusively identified with the apparatus of government nor the economy with the organisations of production (1976/1982: 123).

In defining autopoiesis in this way, Luhmann accepts that not all subsystems of society are autopoietic. Indeed, "there are sub-systems of society, which certainly establish their own identity and define their own system limits and orient themselves to these facts but which attain no exclusivity and no recursive closure in their elementary operations" (1984a: 311; cf. 1985c: 8). Their failure to achieve exclusivity and self-closure means, however, that these systems have less weight in societal dynamics or development than do autopoietic systems. For, according to Luhmann, self-closure gives autopoietic systems much greater influence over their societal environment (1984a:

311; cf. 1976/1982: 129). In turn this brings us to the second focus in Luhmann's work: the relations among different subsystems.

2. Relations Among Autopoietic Systems

Here again Luhmann follows the work of Maturana and Varela. He argues that the autopoietic closure of differentiated societal subsystems means that they are not involved in exchange or input-output relations at the level of their autopoietic operations (1985a: 1-3; 1986a: 2). For self-referentially closed systems interact only with their own elements. Thus law cannot import legal norms from its social environment (there is no 'natural law') nor can it transmit norms to it (legal norms cannot be valid as law outside law) (1984f: 28-30; 1986a: 11; 1986b: 7). Thus extra-legal norms must first be transformed within the legal system before they can assume legal validity; and, in so far as legal norms enter into the calculation of extra-legal systems, they do so because they are deemed relevant according to extra-legal criteria (such as the moral implications, economic costs, or electoral repercussions of compliance). Nor can self-referentially closed systems be integrated into an effective hierarchy of command or a single network of coordination (1985e: 17). This means that modern societies are de-centred - they comprise a plurality of different subsystems each of which performs crucial functions for the total system and none of which can claim unchallenged supremacy over the others or can successfully coordinate them (Luhmann, 1985e: 16; cf.

1982: passim; and 1984f: 27, 60).

Autopoietic subsystems are not, however, autarkic. They do have relations of interdependence with other subsystems. Thus Luhmann recognises that other subsystems depend on the economy for satisfying material needs and/or on the law for offering binding resolution of conflicting expectations. Such dependencies are seen as a means of reducing redundancy in the relations among systems and are explained in terms of a general thrust towards eliminating multifunctionality in societies (1985e: 16). But even strong dependence on the environment can be combined with autonomy in specific internal operations (selection processes, elaborating information, etc.) and with the more general recursive reproduction of the operations of the system through its own operations (1975: 69; 1977/1982: 239; 1986a: 12). Such interdependencies need not diminish the autonomy of functionally differentiated subsystems as long as the distinctive resources, internal complexity, and sui generis dynamics of each render them relatively impermeable to direct control or influence by other, equally specialised systems (1981a/1983: 114; 1981b: 165; 1984f: 60).

3. Autopoiesis and Self-Reflection

A third focus in Luhmann's work is the autopoietic subsystem's relation to itself as self-reflection. In establishing its unity an autopoietic system must block or conceal the paradoxes which would emerge if it applied its operational code to itself. The legal system

would find it difficult, for example, to ask whether the distinction lawful/unlawful was introduced lawfully or unlawfully (1985b: 6). Posing such questions can bring out the arbitrary nature of the boundaries of an autopoietic system and attempting to answer them can threaten the unity and/or autonomy of an autopoietic system. Thus it is better to block the paradox by operating according to the autopoietic code without applying it to the system itself (1985b: 6).

Thus an account of autopoiesis must not only consider how systems constitute themselves but also how they establish their self-identity and engage in self-observation. Moreover, in so far as these processes introduce paradoxes of self-reference into the communicative circuit of such systems, the student of autopoiesis must also consider how they are handled. Luhmann himself mentions the following techniques of coping with paradox. A system can aim to de-paradoxify its self-reference by appealing to outside systems (such as God or democratic politics as a source of law); by engaging in self-deception (e.g., through misperception during self-observation), by abstaining from action when presented with cases which might challenge its unity and/or autonomy (declaring the system code irrelevant in particular cases and 'passing the buck' to another system), or by keeping ambiguities at a minimum (e.g., 1984f: 56; 1985b; 1986b). In this context an external observer can see more than the system itself can - since the observer can see how the system attempts to resolve paradoxes whose existence it cannot admit (1984f: 24).

Nonetheless the autopoietic unity of any system is always

paradoxical, ambivalent, and contingent. Thus Luhmann notes that, if one observes how a system orders its self-reference, deparadoxifies its paradoxicality, asymmetrises its recursive symmetry by privileging one aspect of its circular operation, then every solution of this problem appears contingent. However, in so far as a functional analysis of autopoietic subsystems is adopted, each solution must be considered as one among a number of functionally equivalent possibilities (1986b: 15).

More generally Luhmann argues that, because social systems are communicative systems, social development must be studied in terms of the semantic as well as structural differentiation of society (1984d: 108, 115). In analysing how the legal and political systems developed, for example, he shows that, as these systems become more differentiated, they also become causes (or co-causes) of their own problems. He considers this to be a paradox. And, if this paradox is to be resolved, the system must further develop its self-understanding or self-reflection. This is seen in the way in which more complex self-reflexive theories supersede the rather generalised and abstract models of law and politics which emerged as their respective systems first became distinct (1984d: 107; cf. on law, 1985b).

C. Autopoiesis in the Economic System

Luhmann has discussed autopoiesis in three different systems: economy, state, and law. We begin with his views on the economy. He

argues that this becomes autopoietic to the extent that it is organised as a system of payments. For payments occur only within the economy; the economy can neither draw money from the environment nor pass it outside the economy; payments are temporary, time-bounded events (like actions) which soon end; payments are only possible because other payments are made; they are constituted within the economy through the money and credit systems and the operations of banks; and they are only made so that other payments can be made. In this sense payments are the crucial elements of the autopoietic organisation of the economy (1983a: 155; 1984a: 313; 1985a: 1, 3). Everything else (such as production, exchange, distribution, capital, labour) is a secondary effect of this fundamental principle (1984a: 313, 318). The role of labour as a scarce factor of production, for example, cannot be considered apart from its inclusion within the money economy (1983a: 154). More generally, the need to renew their capacities to pay leads households to offer work, states to raise taxes, capitalists to make investments (1985a: 4).

Luhmann argues that the real autopoietic takeoff of the economy occurred with the development of an integrated money economy (1975/1982: 200; 1983a: 154; 1984a: 308, 316). For the commodification of land (plus all other natural resources) and labour meant that the economy was finally differentiated from its environment in relation to everything needed for its reproduction (1984a: 316). In addition the circulation of money in the form of payments permits a material, temporal, and social generalisation of exchange possibilities. It

thereby widens the scope for exchange operations and expands the options open to economic actors (1983a: 154; 1984a: 310).

This enhances the functional capacities of the economic system for society. Its societal function is not to satisfy needs as such (these are created within the economy itself) but to ensure that the current distribution of scarce goods does not interfere with the satisfaction of future needs (1984a: 317; 1985a: 2; cf. 1975/1982: 194). This function is secured through the price mechanism and the payments system. For it is price fluctuations which mediate the actual scarcity of goods and services and the artificial scarcity of money (1984a: 317). Indeed it is precisely these fluctuations which make prices eminently suitable for the self-observation and self-steering of the economy - they are unstable elements of an unstable system (1985a: 164). Likewise the need to undertake economic activities in order to make payments ensures that economic agents must always be active and oriented to the future (1984a: 317).

Although the economy is closed as a system of payments, it is also open in so far as these payments are oriented towards needs. The latter are rooted in the environment but are represented through an information system inside the economy (1984a: 315; 1985a: p 3). Luhmann distinguishes elementary needs, luxury needs, and production needs, which are successively more closely tied to the making of payments (1984a: 316).

The category of profit has a key role within the price mechanism. The abstract calculation of profit is a means of self-closure and

economic self-steering which also mediates the recursivity of the payments system (1984a: 314, 318). Economic activity has no fixed objective (otherwise it would sooner or later come to a halt): instead motives only organise specific episodes which end with the recreation of payment capacities. Autopoiesis transcends every economic goal and makes them all meaningful: thus the economy is able to reproduce itself on a continuing basis (1984a: 315, 320).

An unstable system can react back on its instabilities. Thus, within certain limits, speculation and risk minimisation can help to re-stabilise the system (1983a: 162). More generally market forces can result in the selective elimination or advancement of different firms. Thus entrepreneurs with superior business strategies and/or better internal models of the complex and uncertain economic environment will survive. But this depends on sufficient stability in the economic environment to enable entrepreneurs to learn from experience and on their ability to affect the economic environment being small enough to avoid circular processes of positive feedback. If these conditions are not met, price instability as such cannot guarantee economic reproduction (1983a: 163).

Indeed the price system can magnify instabilities and could even destroy economic reproduction. These instabilities used to be limited through the doctrine of the just price. Now they can be solved through using other instabilities to stabilise the system. Two main techniques are available: market and political. These provide functionally equivalent ways to solve the problem of economic insecurity and price

instability. In so far as two such control mechanisms exist and are consistent, the burden on each is reduced (1983a: 160-1, 163).

Firstly, variations in the cost of money can be used to provide information and to limit variations in other prices. Thus credit uptake, investment rates, etc., at a given price of money inform actors about the state of the economy; likewise changes in the price of money can be used to influence economic activity (1983a: 163). The banking system has a crucial role here - with commercial banks mediating between the scarcity and surplus of money (seen respectively in the inability and ability to make payments) through credit creation and with the central bank regulating this process and preventing insolvency by acting as lender of last resort (1985a: 5). Overall this market solution introduces a higher degree of self-reflexivity within the economy but it is limited by the need to maintain trust in money.

Secondly, since the instabilities (sic) of the political system enable changes in the law to be made, political measures can be used to influence economic activity. The demand for political measures itself provides evidence about economic conditions and new collectively binding decisions can be introduced to counter economic instabilities. Examples include unemployment insurance compensation, subsidies for large firms threatened with bankruptcy, revitalisation programmes for declining sectors, and macro-economic policy in general (1975/1982: 213). This solution is also limited. For it involves the danger of repoliticising the economy and destroying its autopoiesis (1983a: 163).

The need to maintain trust in money is particularly associated

with the need to keep it in scarce supply so that it reflects the scarcity of goods. This is especially important as money is merely a communication medium and as such is not itself scarce. Thus interest rate and monetary policy must be subordinated to maintaining scarce money (1984a: 319). The repoliticisation of the economy can also be avoided as long as structures exist which limit the state's power. Among these structures are decentralised property, a rechtsstaatlich and democratic constitution, and an independent central bank (1983a: 164; cf. 1984d: 112).

Luhmann argues that these market and political mechanisms also help to sustain the autopoiesis of the economy by promoting its de-paradoxification. The hierarchy in the banking system (central bank, normal banks, bank customers) de-paradoxifies the system by asymmetrising the foundations of the payments system. Creating credit reduces the risk that a paradox (one actor's capacity to pay rests on another's inability to pay) will block the economic system (1985a: 9). Likewise Luhmann notes that the appeal to politics need not threaten the autopoiesis of the economy. For the state underwrites the mediating role of the banking system (ibid.). And its role in making collectively binding decisions on other issues can also serve to guarantee rather than transcend economic autopoiesis (1984a: 316).

Although the state can help to maintain economic autopoiesis, the economy nonetheless creates structural problems for the political system. Moreover its autopoietic takeoff means that no-one is responsible for how the economy operates. Capitalists do not represent

the interests or authority of society - they are only concerned for their own and others' capacities to make payments - and the political system is excluded from the economy through the closure of the payments system (1984a: 316). One crucial problem is how far economic instabilities can be combined with a system based on institutionalised political opposition and peaceful change in power (1983a: 166). Another is that, although motives and resources can be represented within the economy in purely economic (price) terms, the operation of the economy modifies them in non-price terms (human alienation, environmental destruction) with potentially negative effects on its own self-reproduction (1983a: 167). Thus an autopoietic economy involves internal instabilities, faces problems in relation to its neighbouring political and legal subsystems, and threatens the destruction of its natural and social environment.

D. The Autopoiesis of the Law

Luhmann's work on law is so extensive that it cannot be readily summarised in a short paper. Here I want to focus on just three key issues: the unity of the legal system, its autonomy, and its autopoietic closure. For Luhmann all three issues are closely connected and can, indeed, be subsumed under the single rubric of autopoiesis. Many of the key elements in Luhmann's sociology of law were set out, however, before he discovered the Chilean school and autopoiesis. But even these elements are generally transformed through

their integration into an autopoietic approach. Thus, whilst noting those elements which pre-date the analytics of autopoiesis, we will focus on Luhmann's most recent work.

Initially Luhmann approached the functions of law in terms of a complex analysis of the human situation. He rejected Kelsen's Normlogik in which higher norms found lower norms and sought the source of law in the reflexive process of expectations about expectations and the character of disappointment-proof normative expectations (1983b: 53). Essentially he argued that the social situation confronting individual actors is both complex and contingent. It is complex because there are more possibilities of action than can be realised and it is contingent because not all the consequences of action can be anticipated (1983b: 31). Complexity forces choice and contingency threatens disappointment and implies a need to secure against risk. This need is met over time through the development of expectation structures and meanings which facilitate choice. But since choice in social situations is doubly contingent, expectations about expectations are needed (1983b: 33). Thus social systems stabilise valid expectations to which one can orient oneself (1983b: 38). Two types of expectation are cognitive and normative and they are differentiated in social systems (1983b: 42-4). Thus, whereas cognitive expectations are changed when they appear to be false, normative expectations are maintained even when disappointed and attempts to realise them continue (1983: 42-3). Some normative deviations are handled through situational normalisation. But others are so important that they must be institutionalised rather than left

to chance enforcement through private sanctions or norming mechanisms (1983b: 45-9, 52, 65). It is in this context that the legal system develops as a specific functional subsystem of society. Its role is to generalise normative expectations materially, socially, and temporally and to ensure their enforcement (1983b: passim).

In subsequent work Luhmann retains this functional analysis of the legal system (e.g. 1984f: 29-31, 35-6, 60-1). But it is no longer presented in terms of a speculative anthropology or a sociology of action⁸. Instead Luhmann distinguishes between the general societal function of law and its specific performances for particular subsystems and organisations. Its function is redefined as keeping open for society the possibility of legal articulation in society, i.e., its capacity to generalise and enforce expectations (1984f: 28, 32). Thus law has a unique, relatively precise role which can be invoked to support other functional subsystems, organisations, etc.. Thus property law is a key precondition for capital accumulation, universally obligatory public schooling for a secular public school system, constitutional law for establishing a modus vivendi between religious and moral claims, civil law for the political arbitration of conflicts of interests, etc.. But this global function is not always invoked nor is it always effective when it is invoked (1976/1982:

8. Teubner correctly notes that this account of law remains allopoietic as long as the expectations which law stabilises are produced outside of law. Autopoiesis occurs only with 'autogenesis', what elsewhere I have called 'autopoietic takeoff', when legal communications produce legal norms and vice versa. Cf. Teubner, 1985a, pp 10-11.

128-9; 1984f: 58-60).

In his recent work Luhmann also ties this function firmly to an account of the autopoiesis of law and argues that law can best perform this function where it is an autopoietic system (e.g., 1985c: 17; 1986b: 6-7). In defining the autopoiesis of law Luhmann follows the general definition outlined above. Thus more emphasis is given to the supposedly self-closed, self-reproducing, and self-referential character of the legal system. In particular law is reproduced through the recursive construction of generalised normative expectations about behaviour through the use of two legal mechanisms - conditional programming (if a, then b) and a binary schematism (legal/illegal) (1985c, pp 13-14). In turn this means that legal decisions and normative rules relate only to each other; decisions are made by referring to other legal facts rather than to external factors such as politics or religion (cf. Teubner, 1984a).

Viewed as an operational, autopoietic system, therefore, law is normatively closed. Legal norms are created only through legal norms. But the legal system is also open. For Luhmann this means that it must be cognitively open, i.e., able to learn from its interaction with its environment. It is through the learning capacities implied in this cognitive openness that the law can change and coordinate its actions with the environment (1985c, pp 11-12). This simultaneous closure and openness need not prove contradictory: for closure refers to the recursive reproduction of norms and not to the negation of openness (1984f: 31; 1985c: 10-11). The problematic relationship between the

disappointment-proof nature of norms and the law's cognitive capacity for learning is resolved in at least two ways. On the one hand, the law can turn to the political system to push through collectively binding decisions and to back them up where necessary with physical force so that its normative expectations are not disappointed. Both legislation and its enforcement must, however, accord with the constitution. On the other hand, the legal system can take account of altered circumstances and, using its decision-making programmes (based on the binary code of legal/illegal), it can redefine its legal expectations. This solution is reflected in recent theoretical concerns with legal decisions and arguments shaped by Interessenjurisprudenz and Folgenorientierung and with how such approaches could enhance the learning capacities of a positive legal system (1984f: 36-43, 61-2; 1986b: 8).

Luhmann argues that, within certain broad limits of normative consistency and effective implementation, the unity of the legal system is grounded in its recursive reproduction. Likewise its autonomy is guaranteed in so far as it provides a specialised function which no other societal subsystem performs and it is able to apply its programmes and codes without external interference. At the same time law must be cognitively open if it is to perform its unique function adequately and thereby maintain its unity and autonomy. This engenders a paradox in so far as legal norms can no longer be located in a supreme natural law that exists objectively and through its objective truth is permanently binding. The stability and validity of the law no

longer rest upon a higher and more stable order, but instead upon a principle of variation: it is the very alterability of law that is the foundation for its stability and its validity (1967/1982: 94; 1984f). But this means that the stability of law depends in part on political processes, i.e., law-making and enforcement, which must also be stabilised (ibid.). Indeed the articulation of the legal and political systems through the Rechtsstaat has a key role to play in stabilising both these systems (1984f: 61-2). But the sui generis concerns of these two systems also render this coordination problematic. For law expects that the political system will enforce the law when it does not secure voluntary compliance; politics approaches the distinction between free will and compulsion as a question of expediency - balancing consensus and compulsion in the interests of political stability (1985e: 46-7; cf. 1986b: 8). Such problems of self-referential closure and juridico-political coordination require us to consider Luhmann's work on the state.

E. The Autopoiesis of the Political System

Compared to his extensive writings on legal autopoiesis, Luhmann has written much less on the autopoiesis of the political system. Moreover, whereas his legal analyses are densely populated with concepts drawn from autopoietic theory, he uses a more limited range of concepts in discussing politics and the state. It is not immediately clear whether this reflects Luhmann's specific interests and/or the

limited development of autopoiesis in the modern political system. Accordingly we must examine Luhmann's various arguments about the autonomy and/or autopoiesis of the state and politics.

1. The Political System

Luhmann argues that the political system comprises power and its use. It serves the twin societal functions of making collectively binding (or authoritative) decisions and of mobilising political support (1967/1982: 104-5). Of these two functions, Luhmann puts most emphasis on collectively binding decisions. Whilst making and enforcing these decisions is the decisive and generic societal function of the political system, their specific content must be analysed at the level of particular subsystems or organisations which need binding decisions. Two examples are the political guarantee of private law for the legal system and the provision of Ordnungspolitik and macro-economic policy for the economy. In turn the political system depends on the performances of other functional subsystems (1981a/1983: 113, 120-1, 124, 166). But, as previously noted, such interdependencies need not contradict the operational autonomy of the different systems. Indeed, in a 'pre-autopoietic' article which is nonetheless consistent with his later writings, Luhmann argues that the political system can be autonomous as long as it has the time to engage in its own operations, is faced with competing demands so that it can choose among them, and is accorded a general legitimacy to sustain political support for its activities (1968/1982: 143-4).

The political system operates with its own binary code: that of power. At first this was coded hierarchically (superordinate/

subordinate) but, since the eighteenth century, the distinction 'public/private' has become primary (1985e: 43). The latter code has been refined through two further distinctions. On the one hand, there is a distinction between 'government' and 'opposition'. This leads governments to conduct their business in the light of its impact on the chances of an opposition becoming the government. Opposition parties are also concerned with securing a better departure point for the next elections (1985e: 45). And, on the other hand, there is the distinction between the 'legal' and 'illegal' use of power. This expands the scope for using political power for private purposes as long as these remain within the law (1985e: 15, 44-5; 1984e: 40-1; 1984f: 61-2). The binary distinction between 'progressive' and 'conservative' provides yet another political code: its function is to simplify political decision-making and to build alliances (1974/1982; 1981a/1983: 100-102).

Luhmann argues that autopoietic takeoff occurs with the transition to a democratic political system: for politics is then non-hierarchical, symmetrical, capable of self-observation, and recursive (1984d: 108-9; 1981a/1983: 155; 1981b: 163; cf. 1975: 160). The surprising thesis that power is symmetrical derives from Luhmann's distinction between formal and informal power: the formal circuit flows from citizens to parliament to government to bureaucracy to subjects, the informal circuit represents flows of power in the opposite direction (1981b: 164). The greater the internal complexity of the political system, the more important become these informal circuits of

power. This can be seen in the expansion of the welfare state. For welfare politics is strongly rooted in this reverse circuit and represents a self-contained dialogue of escalating demands from the public coupled with offers from the administration (government and bureaucracy) to meet these demands. Moreover, since welfare is defined by the interested parties within the same self-referential and closed discourse, there are no limits to welfare demands (1981: 36-7; 1981a/1983: 77-9).

2. The Welfare State

It is in discussing the welfare state that Luhmann comes closest to an account of autopoiesis in the political system. He argues that the discourse of the welfare state is self-referential. Thus welfare needs are defined within the welfare state and welfare becomes the undefined tautological principle of its organisation. Indeed the idea of welfare defines both the recursive closure and the thematic openness of politics in the welfare state (1981a/1983: 69-70). In turn this means that the welfare state becomes the cause of its own problems and of the needs to which it must respond - not just semantically but also in terms of its structural consequences (1981a/1983: 44, 70).

Luhmann also identifies other dysfunctional consequences of the self-referential character of modern politics. These include the tautological self-closure of the distinction between government and opposition - such that what is good for the one is bad for the other.

This short-circuits genuine political debate, encourages mere political point-scoring, and promotes political back-scratching. Another example is the resort to non-decisions and/or negative coordination as means of avoiding political and/or administrative action (1981a/1983: 70). If such involution is to be avoided, the political system must find ways of relating itself to its own history (especially during the transition to modernity) and (particularly in already developed societies) to other systems in its environment and their problems (1981a/1983: 72-7). A third example is the emphasis in political discourse on persons or groups of persons as reference points for political action: the unemployed, single parents, small businessmen, ethnic minorities, bankrupts, etc.. Such a discourse seems realistic and appears to address real problems but in practice it fails to focus on the interdependencies among systems and oversimplifies the issues (1981a/1983: 117).

These problems are rooted in the self-referential character of political action. In a differentiated polity this is oriented to internal political environments and politically-defined criteria. Thus extra-political factors are considered only in so far as they are also believed to be politically relevant by at least one of the internal political subsystems of public, government, and bureaucracy. There are three key reference points for assessing political relevance in a modern political system: public opinion (especially as defined by the mass media and manipulated by parties, pressure groups, and governments); persons as links between government and bureaucracy; and

law as the link between the administration and the people as subjects. These reference points are individually inter-related and can also be articulated with the more global political codes of 'government/opposition' and 'conservative-progressive'. Information which cannot be linked to any of these highly flexible reference points cannot be politically processed (1981a/1983: 94-6, 101, 177-8; cf. 1982: 231; 1981b: 164-5).

Although the primary societal function of the political system is the production of collectively binding decisions, its specific outputs are generally mediated through law and money (1981a/1983: 178). All other means of influencing conduct (such as anti-smoking campaigns or covert action) are tied to these resources at one or more removes. Luhmann claims that both measures are being used too much (because the scope of government action is growing and there are no real alternatives to these measures) and are also being applied to issues for which they are inappropriate (e.g., people processing) (ibid.). Highly detailed legal regulation engenders problems, for example, because it provokes resistance from those who benefitted from previous legal situation (1984f: 58). In addition the political system sees law from the viewpoint of legislator and does not always anticipate the problems involved in implementing law (1984f: 58-60). More generally Luhmann notes that no subsystem can adequately control the interdependencies in its environment; at best it can transfer, transform, or postpone the effects engendered by such interdependencies and by the dynamic interaction among different systems (1981a/1983:

89-91).

3. The State as Self-Description

Luhmann treats the state as the self-description of the political system. It represents the re-introduction of the political system into the political system as a means of orienting political action. For the political system itself is so complex that it needs a formula to reduce its complexities (1984c: 3; 1984d: 110). In this sense the discourse of the state serves to focus, unify, and aggregate political action. Thus, despite the changing material content of such action, it can always be defined in terms of its orientation to the state (1984d: 103, 104). In turn this seems to imply that, once the concept of the state is introduced, it becomes real through its role in orienting action. Indeed Luhmann argues that no-one could convince the political system that the state does not exist (1984d: 116, 120). This argument is easier to understand if one recalls the ambiguity of the concept of state. Sometimes it refers to the state apparatus, sometimes to the encompassing social system subject to the control of that apparatus. For Luhmann this ambiguity would derive from the role of the 'state' as a self-description of the political system and its responsibilities for authoritative decisions covering the whole society. One consequence of this orienting role of the state is that autopoietic 'political systems always react primarily to themselves and only in so doing do they also react to their social environment' (1976/1982, p 132; cf. 1984d: 104).

Moreover, once the state emerges as self-reference, a progressively more complex analysis of the state is needed to resolve the resulting paradoxes of self-referentiality. These attempts at de-paradoxification lead to the development of a constitutional state based on the rule of law. A constitution involves a new stage of complexity: it fixes the unity of the state and also provides for its political variation (through democratic alternation). Likewise the Rechtsstaat controls the exercise of force and representation to secure consent (1984d: 107). Moreover, because a constitution appears to introduce an asymmetry into the legal system, it disguises the political paradox that collectively binding decisions also bind the decision-maker (1984e: 39).

Further differentiation occurs with parliamentary representation and opposition. These provide the possibility of a symbiosis between the exercise of power (Machtpraxis) and sensitivity to issues outside the political system. In particular opposition implies the capacity to politicise new themes and to generate pressure over new political problems. The separation of powers and the institutionalisation of human rights carries this self-reflection to a higher level. For together these require the political system to operate only in terms of legally valid communications and decisions and exclude a simple resort to force (1984d: 112).

More generally, Luhmann treats the development of the state as a movement towards greater openness and greater closure. A developed political system with competition between government and opposition has

a 'redundancy of potential command' (sic) and is thus faced with a superfluity of self-steering possibilities. Rather than undermining the unity of the political system, however, this creates unity through the need to choose among these possibilities (1984d: 112). At the same time the complexity and the ends of the political system are underdetermined by the system itself. This creates a dilemma. For it increases both the chances that the system can move to ungovernability (because it is too open) and/or to self-destruction (because it is too closed) (1984d: 112, 118). A system which is too open is overwhelmed with information, internalises disorder, is forced to make ever more decisions (1984d: 118). But an absolutist state has only limited power because it is inflexible (1984d: 112).

F. The Limits of Luhmann's Work

Luhmann has considered social autopoiesis from three viewpoints: (a) the recursive reproduction of societies and their subsystems; (b) the operational closure or autonomy of specific subsystems; and (c) their self-thematisation, self-observation, and self-identity. But he has not really shown that social systems have the same autopoietic properties as biological or chemical systems. Above all he has not shown that social systems produce their own (quasi-)topological boundaries and his own arguments about the paradoxes involved in self-reference suggest that this might be difficult. One could perhaps argue that functional subsystems establish boundaries by applying a

binary code or that organisations do so by defining membership rules. But, whether or not these are equivalent to the boundaries of autopoietic systems in the natural world, societies and their subsystems certainly enjoy operational autonomy in so far as they are organisationally closed and create a certain internal coherence by their own operations (cf. Varela, 1979: 54-5; 1981a: 15-16; 1981b: 38).

Indeed his analyses of the economic, legal, and political systems demonstrate that they each match Varela's definition of autonomy. For each of these systems (i) recursively regenerates the network of interactions that produced them through further interactions of the same kind and (ii) secures the unity of this network in the social space in which its components exist by maintaining the system's self-constituted boundaries in contradistinction to its environment (cf. Varela, 1981a: 15). Thus Luhmann claims that the economy is a self-regenerating system of payments; that a normatively closed legal system creates normative acts through normative acts; and that a political system operates through collectively binding decisions which engender further decisions. Moreover, in so far as each has a unique code and operational programme for which no equivalent exists elsewhere, it can distinguish itself from other subsystems and societal communication in general. And, finally, in so far as each has a clear self-identity, can observe itself, and can use these observations in its own operations, it can enhance its autopoietic closure and self-reproduction in relation to its environment (cf. Teubner, 1986: 21).

Although Luhmann has demonstrated that one can study these systems as autopoietic (or, at least, as operationally autonomous), he does not always seem to have realised what this implies for his earlier structural-functional analyses of modern society. In this context we can pose two inter-related sets of questions.

The first set concerns the implications of Luhmann's communications-theoretical approach and his epistemological constructivism for functionalist analysis. For many years Luhmann has discussed subsystems in terms of their various institutionalised functions for society as a whole and he carries such arguments into his account of autopoiesis. But he does not consider what is involved in this continuity in discontinuity. Do autopoietic subsystems emerge simply through the constitution of a difference or does autopoiesis require that this difference be related to a societal function? Many of Luhmann's arguments suggest that autopoietic subsystems emerge merely on the basis of a discursive or communicative distinction. Yet he often treats autopoietic subsystems as functional for society. This involves a number of problems concerning the precise relationship between subsystem autopoiesis and societal function. Can autopoiesis emerge only when subsystems already perform specific functions and/or does its emergence enhance their functional capacities for society and/or does the emergence of a unique code constitute as such a function for society? Or, since an autopoietic system is supposedly inner-directed and self-referential rather than externally programmed and subject to the demand of functionality, does autopoiesis interfere

with subsystems' existing or potential functional capacities for the total social system? Indeed, if each subsystem has an exclusive and self-referential code, how could the societal system secure the performance of all the necessary societal functions? Luhmann would find it difficult to answer such questions because they presuppose a functionalist approach which is contradicted by other arguments he presents.

It would be purely formal and trivial to rescue a functionalist approach by arguing that such subsystems are functional because they necessarily contribute to the general autopoietic flow of communications in society as a whole. But it would be difficult to establish that all autopoietic systems (or, more accurately, all organisationally closed, internally coherent, operationally autonomous systems) necessarily perform essential functions for the total society. Moreover, since Luhmann defines the unity of society in terms of the totality of possible communications, it is unclear what meaning could be attached to the argument that subsystems perform functions for society. At most such functions would consist in making available certain resources or performance whose actual usage depends in turn on decisions taken in other systems. Such a minimalist account leads one to ask whether it is sensible to ascribe general societal functions to particular autopoietic subsystems and to assume the essential unity of the total system to which they belong. It is surely more plausible to develop two other concepts from the general theory of autopoiesis: structural coupling and mutual performances. Thus one could explore

the partial and contingent 'structural coupling' of different subsystems and/or focus on the operational rules and procedures which determine how various resources are taken up and used in autopoietic reproduction in specific cases.

The second set of issues concerns the relations among autopoietic subsystems and/or neighbouring allopoietic systems rather than their functions for the total society. Luhmann denies that autopoietic subsystems are involved in input-output or exchange relations but he still insists that the economy, law, and politics can realise specific performances for each other. If this is the case, how are the internal operations of autopoietic subsystems rendered compatible with societal reproduction and/or with the conditions of existence of other subsystems? For example, if they are closed in their self-reference, how do they get information from the environment? Moreover, if redundancy or multifunctionality are to be avoided, how do the different subsystems decide that their own codes and procedures are irrelevant to a particular case? Indeed, if such 'rejection values' exist in each subsystem, how are they rendered mutually compatible? Luhmann would find it particularly hard to answer such questions because he also denies that autopoietic subsystems can be integrated into a hierarchy of command or network of coordination (1985a: 2-3; 1985e: 17). In the absence of other solutions, we must conclude that any mutual consistency among the operations of autopoietic subsystems is a purely contingent, improbable, and provisional effect of evolution.

More generally, it seems that, in pursuing autopoietic reasoning, Luhmann continually runs the risk of formalism. His concern with the closed, recursive, and self-referential nature of autopoietic systems leads him to focus on the mechanisms which can generate these particular properties. But this involves abstracting from the properties which distinguish one autopoietic system from another and concentrating on the formal properties which they share as autopoietic systems. Perhaps Luhmann can explain how the formal unity of an autopoietic subsystem is grounded in the organisational closure which is produced through such mechanisms. But such mechanisms cannot explain the reproduction of any substantive unity they might possess as relatively coherent, smoothly functioning subsystems. Nor can this be explained simply in terms of the codes and programmes which distinguish one functional subsystem from another and/or the membership rules which distinguish one organisation from another. For, although these define the matrix within which substantive unity must be constructed, they do not themselves produce that unity. Luhmann himself recognises this when he writes, for example, of the possible 'involution' of the legal system in the face of strains in its performances for other systems (1985g: 122). He also refers to the role of dogmatics (e.g., legal dogmatics) and/or managerial policies (e.g., court-policy decisions, inter-court relations) in confining the decisions, performances, and functions of autopoietic systems within certain broad limits compatible with their relative unity (e.g., Luhmann, 1981c: 251-3; 1985g: 118-19). In short, in so far as he turns from the formal properties of

autopoietic systems to consider how they acquire a substantive unity, Luhmann resorts to concepts which are often ad hoc and/or refer to strategies and agents in ways which seem to contradict a systems-theoretical approach.

Moreover, although he often notes the paradox that autopoietic systems are open because closed (1984b), Luhmann does not really explore its implications for the mechanisms which link different systems. This problem is not resolved by arguing that, where there is a one-to-one correspondence between function and autopoietic system, each system is autonomous (e.g., 1985g). For such a correspondence does not always exist and, even where it does, the adequacy of the performances of one system for another can still be in doubt. This requires one to move beyond purely formal analyses to ask about the general strategic orientations and specific policies pursued by such systems towards their environment. In turn this means going beyond a system-subsystem framework to consider how specific social forces engage in calculation, exploit resources, adopt strategies, attempt to create some sort of unity, and so on.

In short Luhmann has not provided us with an analysis of how different subsystems are articulated. He only considers the internal dynamics and self-reflection of autopoietic systems. Such processes may secure certain conditions for the operational autonomy of these systems but they do not explain how these systems survive in an environment which can generate not only perturbations but also destructive interactions. An analysis of the structural coupling among

different social subsystems must go much further than Luhmann does and explore how 'other' subsystems are represented in the self-reflection and internal dynamics of each subsystem. Only in this way can autopoietic theories contribute to a more general understanding of the dynamic of economic, legal, and political systems. It is to these issues that we now turn.

G. Third-Order Autopoietics?

In general the autopoietic approach to social systems implies that autonomy and autopoiesis are variables. Luhmann rejects this implication and insists that a system is either autopoietic or it is not (1984b: 2). This position is inconsistent with Luhmann's own earlier remarks on law, politics, or the economy; for he used to treat the autonomy of these systems as linked to three variables (temporal, material, and social) and often referred to their relative autonomy. Perhaps Luhmann has not taken sufficient account of second-order autopoietics in presenting this radical claim. For, whilst it is clear that society is either autopoietic or not (and, in fact, as a communicative system, is so), the same logic cannot be applied to societal subsystems. They are always autopoietic in so far as they participate in the interdiscursive or communicative field of society as a whole; but they can be more or less autopoietic in the practices which distinguish them as subsystems of the wider society.

Indeed one could go further. Since every autopoietic subsystem

participates in the general field of interdiscursivity, there is a limit to its internal closure (there is no absolute fixity of an autopoietic subsystem). On the other hand, if there were no fixity at all (i.e., a failure to stabilise a difference between subsystem and environment as the starting point for autonomy and autopoiesis), then we could not talk about the autonomisation or autopoietic take-off of subsystems. Luhmann himself has noted this problem in relation to the welfare state: he argues that the state must avoid being both too closed and too open (1981a/1983). This means that we must always locate second-order autopoietics within the limits of fixity and non-fixity. In turn this means that, whatever the case might be with the total field of possible communications which defines the social system as a whole, it must be true that subsystem autopoietics are always relative (cf. from a discourse-theoretical approach, Laclau and Mouffe, 1985).

This problem can also be tackled from the viewpoint of the system as a whole as well as from that of individual subsystems. If a complete autopoietic takeoff were possible for different societal subsystems, the concept of society itself and of its unity would become problematic. For a society would become less than the sum of its parts. It would consist in a series of self-closed systems whose correspondence would be merely the contingent, accidental result of a blind co-evolution of different systems. Yet such radical closure of individual subsystems is impossible for at least two reasons. Firstly, it is incompatible with the general phenomena of interdiscursivity and functional interdependence in societies. And, secondly, different

subsystems are also connected through interactions, organisations, and system performances. These issues can be explored through a 'third-order' analysis.

If first-order autopoietics is concerned with the general structure of communication in society and second-order autopoietics is concerned with the differentiation of autopoietic subsystems, we should develop a third-order analysis concerned with the contingent articulation among differentiated subsystems in a social formation. This can be tackled from two different directions: from a first-order autopoietics of society, i.e., from the viewpoint of interdiscursivity in general, or from second-order autopoietics, i.e., from the viewpoint of particular societal subsystems which have established operational closure. The first approach leads one to consider whether there are general communicative or discursive practices which provide means of contingently articulating different discursive fields. In Marxist theory this has been widely discussed under the rubric of hegemony and recent work by Laclau and Mouffe has developed this approach within a discourse-theoretical framework. The second approach points to the different mechanisms which can be developed within individual subsystems to establish direct links and/or to further structural coupling with other subsystems. Within autopoietic theory this approach is particularly associated with Gunther Teubner and Helmut Willke. In the following remarks I draw on both approaches to present a preliminary list of possible solutions to the issue of contingent articulation.

At the most general level of analysis societies must be considered in terms of communication and interdiscursivity. In suggesting that a society comprises all possible communications, Luhmann adopts a very weak interpretation of its unity. This enables him to include all communications within the boundaries of society and thereby ensures that a society is autonomous and autopoietic. But it also reduces the concept of society to a mere sum of communications and denies it any more substantial unity. One way round this problem is to examine the extent to which different potential societies organised around alternative societal projects are realised in a given spatio-temporal field. Such an approach recognises that society as such does not exist (except in the weak, Luhmannian sense) and that a greater or lesser range of actual and potential social relations will be excluded from and/or prove marginal to specific societal systems. But it does avoid the problem implicit in Luhmann's approach that societal systems would seem too evanescent, fluid, and unstable. At issue is the dialectic of fixity and fluidity which provides a space for alternative projects and strategies of social action.

In this context Marxist theorists of hegemony and sociological theorists of value consensus have attempted to specify the unity and coherence of societies in terms of a dominant social project or value system. This would penetrate different subsystems and actions and impose limits on their autonomous operation according to their sui generis operational procedures. The role of value consensus in sociological explanation should be familiar to readers of this article

but some words on hegemony may be useful. This concept was elaborated by Gramsci in his attempt to break with economic reductionism in explaining social order. He argued that any correspondence between the economic system and so-called political and ideological 'superstructures' was not due to some automatic mechanism of economic determination in the last instance. Instead it emerged, to the extent that it did, through the reciprocal adaptation of base and superstructure so that they formed a relatively coherent 'historic bloc'. Gramsci argued that this process of mutual conforming was greatly facilitated by the elaboration of a hegemonic project which satisfied the short-term interests of subordinate classes at the same time as it secured the long-term interests of the dominant class in economic and political domination. He described this in terms of a pattern of political, intellectual, and moral leadership. But he also noted that hegemony was always armoured by coercion and that periods of crisis would see a shift towards greater coercion (Gramsci, 1971; for a longer summary, see Jessop, 1982).

Periods of relative consensus or hegemony in particular societies can certainly be identified historically. The dominance of social democracy in conjunction with macro-economic management and the welfare state provides many examples in postwar European history. But it is less clear that such periods can be explained in terms of the political, intellectual, and moral leadership of the dominant class. For this would imply that the economy still has the determining role (since it is a class which enjoys hegemony) and it would also imply

that there is a key site for the exercise of class domination (for Gramsci this site is the state but he interprets the state very broadly). Yet, as Luhmann has stressed, the functional differentiation characteristic of modern societies makes it difficult, if not impossible, to organise and co-ordinate them from a single centre. This also implies that hegemony cannot be constructed by just one set of social forces anchored in just one subsystem (as implied in the notion of economic class) but emerges through the interaction of various social forces in different subsystems (as implied, for example, in the notion of an 'Establishment'). This should not lead us to reject notions of relative hegemony or consensus but it should make us reconsider the specific conditions under which such global projects can emerge. Thus, alongside concepts (such as 'structural coupling') which focus on the structural aspects of social order, one should also develop concepts (such as that of hegemony) to deal with the 'strategic coupling' of different subsystems. Both aspects are relevant in explaining how operationally closed subsystems come to be articulated into relatively unified and stable societal systems.

In considering this question a number of clues can be found in existing theories of autopoiesis and relative autonomy. In a very summary fashion, these can be enumerated as follows:

1. All subsystems are part of the general field of communicative interaction and their communications are available in principle to other subsystems. This creates the space for attempts to

hegemonise different fields of activity by providing moral, intellectual, and political leadership. Such leadership cannot be confined to a specific subsystem (even if Marxist theorists tend to privilege the political system and the state): it must extend across all fields of activity. In this way these fields would have certain common orientations and share certain elements in their internal models of how other domains operate. This means that one must examine the resources available to would-be hegemony to articulate different subsystems. In turn this means that one must forego first-order autopoietics to consider the specific organisational forms and operational procedures of the different fields of social action.

2. The general field of interdiscursivity is overlain by more direct links between particular communications or discursive fields. These links can be secured through single agents (whether persons or organisations) with roles in several areas, through personal interactions, through communication between organisations, or through the interfaces which exist between subsystems (whether boundary roles, boundary structures, or linking procedures). They provide bridges between otherwise closed systems and contribute to the possibilities of society-wide communication. In turn this provides the means to articulate the operation of different areas of social life.
3. Occupants of boundary roles, specific organisations, and spontaneous orders such as markets can all play a role in linking

subsystems. For they can make communications originating in one subsystem relevant to another subsystem. Thus market researchers can provide a link between needs originating beyond the economy and the effective demand which stimulates economic activity; pressure groups and public opinion translate social interests into demands which have political implications; and legal publics can make noise about unmet problems and call for legal action.

4. Conversely an autopoietic subsystem can declare itself irrelevant or redundant in particular cases. This provides the space for another subsystem to operate and avoids clashes between them. Thus entrepreneurs can refuse to meet certain types of demand, the government can make votes a matter of conscience rather than of party discipline, and courts can declare themselves incompetent to try certain issues. Such acts of abstention might be motivated solely by the need to avoid problems within a subsystem but they can also be prompted by broader concerns about other subsystems and/or society as a whole. If the rejection values of different subsystems are to prove compatible, some form of coordination or blind co-evolution will be required.
5. The construction of internal models to represent other systems and their behaviour provides one means of structural coupling. This would permit the mutual observation of systems without the need for direct communication with, or interference in, other systems. When conditions are sufficiently stable to permit such internal models to be refined, a certain blind co-evolution could

develop. Actors in each system can begin to anticipate how other systems will operate and/or to 'understand' why they have already operated in particular ways. Thus two or more systems could react to crises in their self-maintenance through appropriate adaptations and these crises would thereby act as a steering mechanism for their co-evolution. This is especially likely where there is a limited set of possible co-variations which are consistent with the survival of such systems.

6. Direct communication through system interfaces is also possible. Apparently autonomous or autopoietic subsystems can be connected not only interdiscursively but also through common structural elements or procedures. The taxation system provides a clear example for our purposes: taxes are simultaneously economic, legal, and political in character. There is an economic orientation to taxes (costs for private economic agents, revenue for the state), a legal aspect (obligations, avoidance, evasion), and a political aspect (ranging from electoral calculations through social engineering to economic management). Such interfaces enable systems to communicate with each other through appropriately ordered complexity rather than through ungraspable noise. Different aspects or moments of this interface may be primary in different systems but it always exists and provides a means of coordinating different systems within certain limits (cf. Teubner, 1985b).
7. It is also possible to develop inter-system systems which rely on

organisations to represent system interests. These can then communicate across the boundaries of their respective systems in discussion circles, collective negotiations, interrogation procedures, concerted action, and so forth. One obvious example of such procedures is provided by the neo-corporatist interface between law, economy, and the state (Teubner, 1985b: 45-7; Willke, 1983; Willke, 1985).

8. One system can also attempt to regulate another even though both are closed. This creates what Teubner has called the regulatory trilemma, i.e., three possible adverse effects of regulation. These comprise the disintegration of the unity or elements of one system, the disintegration of the unity or elements of the other system, or the failure to establish a structural link-up so that the regulatory attempts are met with indifference (Teubner, 1984b; Teubner, 1985a). Regulation will work only where there is an adequate understanding of the sui generis dynamic of the regulated system so that measures can serve as system-modifying perturbations rather than provoke disintegration or prove irrelevant. Thus legislators or economic policy makers in government would act in terms of an internal model of how the economy works: this will not map all the complexities and spontaneous properties of the market economy but would provide indicators and guidelines for action. Crucial to the success of such regulatory attempts is the capacity of the regulating system to work in and through the operational codes and procedures of

the regulated system and/or to provide a framework within which self-regulation becomes possible.

PART IV: CONCLUSIONS

We have now reviewed some Marxist theories about the capitalist economy and the relative autonomy of the state and law in capitalist societies. We have also reviewed autopoietic theories and their application to the operational closure of societal subsystems. Now we can make some concluding remarks about the respective merits of these two basic approaches and their implications for the analysis of the state. In general there seems to be a broad theoretical convergence between those Marxist theories which operate with an 'internal-external' dialectic and those theories which argue that autopoietic systems are simultaneously closed and open. But, whereas Marxist theories usually locate the internal dynamic of law and the state to their external determination through the economy, the 'internal' moment of organisational closure receives most emphasis in theories of autopoiesis. We have already noted the theoretical difficulties this entails for Marxist analyses and have concluded that it is meaningless to claim an ultimately determining role for the economy in the overall structure and dynamic of societal systems. This might seem to lend support to the autopoietic approach with its emphasis on the radical autonomy of societal subsystems. But this approach is also implausible in so far as it treats society as a

mechanical aggregate of several autopoietic subsystems. This approach can only be sustained if it can explain not only the self-closure of some (if not all) of the subsystems of society but also their structural coupling and relative coherence to produce a 'society effect'⁹.

1. Applying the Theory of Autopoiesis

In this respect there is a fundamental problem with autopoietic theory. It is a general theory which applies to many systems and which must therefore be neutral across systems. As a heuristic device drawn from biological systems theory, it has proved very stimulating. But it must be combined with other theoretical concepts, assumptions, and arguments before it can provide anything more than a general matrix or conceptual grid for considering specific social spheres. Autopoietic theory itself cannot determine where these other concepts, assumptions, and arguments come from: at most it can demand that the two (or more) sets of arguments be commensurable. Luhmann's own work falls down here. For his functionalist assumptions are inconsistent with his arguments about the self-closure of autopoietic systems. Functionalism implies that societal subsystems are structured around specific

9. The concept of 'society effect' serves to emphasise that one cannot posit society as a pre-given, a priori cause of this coupling and coherence. It is 'society effects' which need to be explained, not the presence of a society which explains how different subsystems fit together.

functions which must be performed if society is to be reproduced. This implies in turn that functional subsystems are allopoietic rather than autopoietic. It is more consistent with autopoietic theories to start out from the stipulation of a difference around which a specific institutional ensemble can be constituted with its own boundaries and operational procedures. One could then examine how, if at all, such ensembles are linked with other social relations.

Even for the economic system quite different analyses are compatible with an autopoietic approach. We have already noted that Marxist analyses of the circuit of capital can be made compatible with such an approach. The marriage of these two previously divergent approaches is fruitful on both sides. For Marxist analyses of the dominance of the value form and the determining role of production within the overall circuit of capital provide a better insight into the dynamics of the capitalist economy than does Luhmann's emphasis on the autopoietic reproduction of the payments system within a market economy. Conversely autopoietic concepts are particularly useful in defining the limits of legal and state intervention in the capitalist economy and in determining some aspects of its dynamics. Some elements of an autopoietic analysis have already been anticipated in Marxist theories but they can be brought out more clearly within an autopoietic framework. Teubner's analysis of the 'regulatory trilemma' provides just one example and there is still a need to develop similar accounts. A combination of Marxist form analysis (focusing on the different moments of the commodity form) and autopoietic theory

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analysed in terms of the combination of political and civil society. Moreover, in his earlier discussion of the social, temporal, and material requirements for autonomy in the state apparatus, Luhmann also provides a framework which can be usefully adopted in Marxist analyses of relative autonomy. But Luhmann's work also points beyond much contemporary Marxist theorising in two important areas. For he focuses on the problems inherent in the self-closure of political discourse and he also explores the paradoxes involved in the self-thematisation of the state. The involution of politics has often been neglected in Marxist analyses which emphasise the functionality of the capitalist state for capital accumulation and do not consider the extent to which form can also problematise function. Likewise his explicit recognition of the paradox of self-reference and his views on political discourse as the self-description of society provides new ways of thinking about the old problem of hegemony.

Finally we should note that theories of autopoiesis can cast new light on the question of how different social ensembles can be articulated to produce more or less coherent chains of social relations without resorting to a single hierarchy of command or a privileged site of social power. The ideas on structural coupling explored above are very sketchy but they should indicate the wide range of ways in which a non-necessary correspondence can be produced among different social ensembles. In this context a key difference between autopoietic systems in the chemical and biological fields and those in the social domain is the manner in which choice and strategic calculation can

occur in the latter. Yet Luhmann's work tends to ignore strategic processes in favour of systems-theoretical considerations and is correspondingly weakened. Here again we find Teubner's work on reflexive law more fruitful and suggest that more emphasis be given to the interaction between structure and strategy in exploring the issue of autonomy and autopoiesis.

2. Final Remarks

This paper has explored a number of theoretical issues involved in discussions of the relative autonomy of economics, law, and politics in capitalist societies. It has highlighted the problems raised in orthodox Marxist accounts and stressed the theoretical limits to Marxist explanations of the relative autonomy of the legal and political systems. Ideas about autopoiesis were then reviewed to see what light they shed on these issues. Our preliminary conclusions from this review argued that theories of autopoiesis enabled one to analyse the sui generis operation of different social subsystems even though they were not (and could not be) completely insulated from their environment and in many respects depended on it. Some aspects of this new approach were illustrated from Luhmann's extensive writings. But these were also criticised for their continued commitment to functionalist assumptions and their one-sided emphasis on the self-closure of autopoietic subsystems. Luhmann's functionalism enables him to side-step the question of how different subsystems are

articulated to produce 'society effects' because he argues that autopoiesis is possible to the extent that each autopoietic subsystem performs a unique and necessary function for societal reproduction. Other theorists have given more attention to this problem of contingent articulation or non-necessary correspondence among different institutional ensembles. It is in exploring the latter approaches that one can more adequately understand both the nature and limits to autonomy.

We can conclude by returning once again to the problems involved in Marxist analyses and autopoietic theories. We argued above that Marxist accounts find it difficult to justify the assumption of economic determination in the last instance; but we also argued that autopoietic theories find it difficult to explain how a 'society effect' arises from the structural coupling of several autonomous subsystems. Any attempt to resolve these difficulties in abstract theoretical terms which hold good for all societies is likely to fail. But it is possible to outline a solution for capitalist societies alone. Luhmann argues that the functional differentiation of modern societies means that no one functional subsystem could occupy the peak position in a single hierarchy of subsystems and/or act as the coordinating centre for all subsystems. But he has also argued that that functional subsystem which attains the greatest degree of organised complexity and flexibility will tend to dominate a society. For the dynamic of this subsystem will have a disproportionately great influence on the performance of other subsystems. And he has suggested

that, in modern societies, this subsystem is the economy (Luhmann, 1981: 00). We should perhaps qualify this argument by adding that, whilst the economy may well be the dominant subsystem in the long-term, crises elsewhere can lead to other subsystems acquiring short-term primacy. This would happen to the extent that solving these crises becomes the most pressing problem for the successful reproduction of all systems. One could also argue that the economic system, in addition to its greater complexity and flexibility, has a greater capacity for perturbing other subsystems and also makes greater demands on their performance as preconditions of its own reproduction. Thus, whilst accepting the concept of 'structural coupling', one could argue that this is asymmetrical and that the economy plays a key role in determining how different systems are coupled.

This suggests a possible synthesis of Marxist and autopoietic approaches. For the Marxist assumption that the economic system is primary can be re-interpreted through autopoietic theory and then retained. But it can be retained only on two conditions. Firstly, the primacy of the economic system must be justified in terms of its level of autopoiesis relative to other subsystems; and, secondly, and a fortiori, it is likely to occur only in capitalist societies (and not in all societies whatever their level of functional differentiation). In turn this permits one to redefine the 'external-internal' dialectic adopted in certain Marxist analyses and, indeed, to generalise it beyond the role of the economy as the 'external' moment in this dialectic. Thus, while the external moment in the dialectic can be

associated with whichever subsystem is most complex and flexible, the internal moment will vary with the specific forms assumed by the autonomy (or autopoiesis) of the other subsystems upon which it makes demands for performances. It should be stressed that the proposed solution to the problem of economic determination is empirical as well as theoretical. Should the economic system lose its relative superiority in terms of autopoietic complexity, then the form and dynamic of any 'external-internal' dialectic would clearly change. In addition this solution requires one to combine structural with strategic analyses. For it is not enough to argue that the economic (or, indeed, another) subsystem is structurally dominant. One must also show how this structural dominance is reflected in the performances of other subsystems and thus in the overall articulation of the societal system itself. Hopefully enough has already been said to show that this requires going beyond both functionalism and autopoietics to develop explanations which refer to the actions of social forces as well as the properties of social systems. Only in this way can one reveal how autonomy emerges as a product of strategy as well as structure.

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