



On-Line Papers – Copyright

This online paper may be cited or briefly quoted in line with the usual academic conventions. You may also download them for your own personal use. This paper must not be published elsewhere (e.g. to mailing lists, bulletin boards etc.) without the author's explicit permission.

Please note that if you copy this paper you must:

- include this copyright note
- not use the paper for commercial purposes or gain in any way
- you should observe the conventions of academic citation in a version of the following form:
Bob Jessop, 'Capitalism, the Regulation Approach, and Critical Realism', published by the Department of Sociology, Lancaster University, Lancaster LA1 4YN, at <http://www.comp.lancs.ac.uk/sociology/papers/Jessop-Capitalism-Regulation-Realism.pdf>

Publication Details

This web page was last revised on 30th November 2003; the paper was previously published at http://comp.lancs.ac.uk/sociology/soc_soc071rj.html in 2001

Department of Sociology, Lancaster University, Lancaster LA1 4YL

Capitalism, the Regulation Approach, and Critical Realism⁽¹⁾

Bob Jessop

Forthcoming in A. Brown, S. Fleetwood, and J. Roberts, eds, Critical Realism and Marxism, London: Routledge (in press, 2001). Placed on www: 10 May, 2001

Committed critical realist commentators on the economics discipline have not discussed, as far as I am aware, the regulation approach as an exemplar of critical realism (e.g., Baert 1996; Lawson 1989, 1995, 1997; Pratten 1997; Fleetwood 1999; Nielsen 2000). In some cases this neglect is due to a concern to develop a meta-theoretical critique of orthodox economics and/or to uncover critical realist aspects of heterodox economic theorising. In other cases it is due to a concern to show that Marx's own work at its best already illustrates critical realism (Bhaskar 1991: 143; Marsden 1998, 1999) (2) or can be re-interpreted in critical realist terms (Pratten 1997; Ehrbar 1998, 2000; Kanth 1999). Where critical realists have shown interest in Marxism, their neglect of regulationism may reflect a judgement that regulationism can be safely ignored as just another current within a critical realist Marxism or, more likely, it occurs because the regulation approach, whether or not regarded as critical realist, simply does not appear within the horizon of those critical realists interested in economics.

This chapter responds to this neglect in five ways: first, it introduces the regulation approach (hereafter RA) to readers interested in critical realism; second, it identifies four of its distinctive features as a specific current in heterodox economics; third, it reveals the critical realist assumptions that inform early regulationist work and suggests that it has engaged in middle-range retroductive inference to explain the specificities of Atlantic Fordism as an



object of scientific investigation; fourth, it argues that this work has also developed some insights that are useful for critical realist purposes more generally -- notably in regard to the doubly tendential nature of tendencies and counter-tendencies, the co-constitution of objects and modes of regulation, the articulation of the economic and extra-economic, and issues of structure and agency; and, fifth, it offers some new retroductive arguments from a regulationist perspective about spatio-temporal fixes and contemporary capitalism. In addressing the first three themes, I focus on early contributions to the RA (especially by two Parisian regulationists, Aglietta and Lipietz) and also suggest how their initial arguments can be developed. This emphasis might seem odd given that the RA emerged over 25 years ago, that it comprises many different schools and currents, and that recent studies are much more complex and detailed. However, as regulationist concepts have become common academic currency and regulationists have become increasingly concerned with more middle-range issues in comparative institutionalism, the original methodological concerns of the pioneer regulationists tend to be forgotten. Yet it is these pioneer texts that most clearly state the key ontological, epistemological, and methodological assumptions underpinning the RA -- and neglect of which explains some of the weaknesses of current regulationism despite strengths in other respects. (3) Scientific progress often depends on forgetting pioneering work but this does not always hold: classic texts may have a continuing relevance. This latter claim informs my discussion of the fifth set of issues.

What is the Regulation Approach?

The regulation approach is a still evolving research programme (4) that offers a very interesting and fruitful way to analyse the interconnections between the institutional forms and dynamic regularities of capitalist economies (for a comprehensive anthology of regulationist work, see Jessop 2001). In contrast with orthodox economics but in line with Marx's own work, the RA does not aim to provide a general, transhistorical account of economic conduct or economic performance. Nor does it seek to naturalise capitalism by treating its continued reproduction as an essentially unproblematic expression of rational economic behaviour. Instead it aims to develop concepts and models that correspond to the historically specific features of capitalism (regarding both its *differentia specifica* relative to pre- or non-capitalist modes of organisation and the distinctive stages of capitalist development itself) and to enable its adherents to explain why capital accumulation, although it is inherently improbable in the light of these features, can nonetheless continue for relatively extended periods without witnessing major crises. These concerns are linked to interest in the generic crisis-tendencies of capitalism, the specific forms of these crisis-tendencies in specific accumulation regimes, and the major ruptures and structural shifts that occur as accumulation and its regulation develop in and through class struggle. In this context it treats economic activities and institutions as socially embedded and emphasises that it is impossible to secure continued accumulation purely through economic mechanisms -- the analysis of which, taking its lead from Marx's abstract reproduction schemas, it treats under the rubric of 'reproduction'. Accordingly, the RA provides a retroductive account of the changing combinations of economic and extra-economic institutions, norms, and practices that help to secure, if only temporarily and always in specific economic spaces, a certain stability and predictability in economic conduct and accumulation -- despite the fundamental contradictions and conflicts inherent in capitalism. Regulation is the overall category that the eponymous RA deploys to summarise (and, as appropriate, to synthesise) the various processes and practices involved in this always relative stabilisation of the capital relation.

The regulationist research programme has four principal features. Two of these are methodological and two substantive. All four are rooted in the Marxist heritage of early regulationism -- something that has become less evident with time but that still links the main regulationist schools. This shared inheritance derives primarily from Marx's 'scientific' studies (notably the 1857 *Introduction*, the *Grundrisse*, and, above all, *Capital*) rather than his political, utopian, or eschatological writings. It is also reflected in the regulationists' concern to develop institutionally sensitive comparative and historical analyses of capitalism rather than to look beyond capitalism(s) in order to propose alternative, post-capitalist modes of production and/or regulation. Indeed, this basic concern with the generative mechanisms, crisis tendencies, and recurrent stabilisation of capitalism has provoked from some quarters fierce -- but mistaken -- criticism of the RA's alleged confirmation of capitalism's inevitability



and its role in belittling the class struggle to overthrow it (see, for example, Bonefeld and Holloway 1991; Bonefeld 1994; Gambino 1996; for responses, see Jessop 1997a; Hay 1994).

The first feature of the regulationist research programme to be explored here is that the RA typically works with an *implicitly* critical realist scientific ontology and epistemology. These are implicit in the sense that, whilst the RA adopts critical realist assumptions and procedures in practice, it does not present them as critical realist. This is largely because it is examining capitalism as a specific object of inquiry with specific structures and mechanisms rather than presenting an underlabouring philosophical argument for the validity of critical realism in general. (5) Second, its broad substantive theoretical concerns derive from the general Marxist tradition of historical materialism with its interest in developing a critical political economy of capitalism and anatomy of bourgeois civil society. Taking Marx's own more abstract-simple arguments in the *Grundrisse* and *Capital* for granted, however, the RA explores these themes at more concrete-complex levels of analysis. Third, more specifically, it explores the changing forms and mechanisms -- extra-economic as well as economic -- through which the expanded reproduction of capital relation is at least provisionally secured despite its inherent structural contradictions and emergent conflictual properties. And, fourth, in line with this implicit critical realism and its substantive concerns, the RA rejects both the essentialist method of 'subsumption' and the reductionist method of 'logical derivation' in developing its concepts and analysis. (6) Instead, emphasising the contingent actualisation of natural necessities, it adopts a method of 'articulation' in building accounts of regulation. This can be seen in its progressive elaboration of its key categories at different levels of abstraction-concretisation and simplicity-complexity (immediacy-mediation) as it approaches specific conjunctures. I will now elaborate on some of these features.

Critical Realist Aspects of the Regulation Approach

Ontologically, the RA's implicit critical realism derives initially from Marx but was then elaborated via a critique of Althusserian structuralism (Althusser 1969; Althusser and Balibar 1970; on Althusserian structuralism, see, for example, Benton 1984; Elliott 1994; Resch 1992; and, for a regulationist critique, Lipietz 1993). Althusser identified an alleged 'epistemological break' occurring around 1847 that enabled Marx to develop a scientific analysis of capitalism and, like critical realists in Britain, this French philosopher discussed the distinctive features and conditions of possibility of science as a theoretical practice. In this context he distinguished between 'dialectical materialism' and 'historical materialism'. Whereas the former designates the general ontology and epistemology of Marxist scientific inquiry, the latter refers to the particular ontology and epistemology appropriate to studying modes of production and their transformation in and through class struggle. (7) Developing these ideas, Althusser rejected Hegelian readings of Marx on the grounds that they erroneously reproduce an Hegelian unitary, 'expressive totality' rather than recognising that Marx's ontology and epistemology both involved a dialectical, 'overdetermined totality'. (8) Accordingly he introduced the concept of 'structural causality' to designate what critical realists would call the hidden inner structure of capitalism as the generative mechanism of its phenomenal forms and surface movement. In his approach to these issues he affirmed Marx's insight that 'all science would be superfluous if the outward appearances and essences of things directly coincided' (Marx 1971: 817). Thus Althusser's 'symptomatic reading' of *Capital* sought -- not wholly satisfactorily -- to identify the categories and mechanisms through which Marx explained how surface appearances are related to the underlying realities of capital as a social relation. He and his collaborators also sought retroductively to show how surface phenomena are often distorted, inverted, or misrecognised effects of these mechanisms (Althusser and Balibar 1970). These themes were taken up by Aglietta and Lipietz, the pioneer Parisian regulationists. But they also argued that Althusser paid insufficient attention to the transformative potential of social action (notably class struggle) in shaping the dynamic of individual modes of production and transitions between them (see Lipietz 1993 explicitly, Aglietta 1979 implicitly).

Marx's work is actually far better described in critical realist than structural Marxist terms even though both involve notions of ontological depth and commitments to retroduction. By breaking with the more structuralist elements of Althusserianism whilst embracing its account of the specificity of the Marxian dialectic, Aglietta and Lipietz were able to develop a better



retroductive analysis of capitalism than that provided by Althusser and his collaborators. Thus they sought to identify the 'naturally necessary' properties and laws of motion of capital as a social relation, i.e., properties and laws that are inherent in the relation between capital and labour and/or between individual capitals. Moreover, although certainly strongly interested in the categories of money and capital, the RA was also particularly concerned with the nature of the wage relation (*rapport salarial*). In this sense their work can be interpreted as an attempt to correct the 'one-sidedness of *Capital*' (Lebowitz 1982) by providing the 'missing book of *Capital*' (Lebowitz 1991). The starting points for such regulationist analyses are the basic contradictions of the commodity and/or value as the most basic 'structural forms' (or modes of existence) (9) of the capitalist mode of production, the implications of the generalisation of the commodity form to labour-power (even though it remains a fictitious commodity, i.e., one that is not produced in formally rational, profit-oriented capitalist enterprises), the historically specific nature of capitalism as a mode of production (or 'mode of organisation of social labour', Aglietta 1979: 37) that is based on the capital-labour relation and capitalist competition, and the centrality of the wage relation and the variant forms of capitalism, both historically and geographically.

With the continued development of the RA, however, these relatively abstract-simple starting points are increasingly taken for granted and regulationists now focus on more middle-range (concrete-complex) aspects of capitalism that are also rooted in the centrality of the commodity form. This is linked to a second round of retroduction and theorisation of more concrete properties and 'laws' of capitalism. For, just as Marx could not elaborate his abstract 'laws of motion' (such as the law of value or the law of the tendency of the rate of profit to fall) without considering the inherent structural properties of capitalism as a mode of production, the RA had to retroduce intermediate categories of analysis to address more specific periods and/or variant forms of capitalism. Thus Aglietta writes that, '[i]n order to achieve a precise analysis of the forms of regulation under capitalism, it is necessary first to define an intermediate concept, less abstract than the principle of accumulation so far introduced. This is the concept of the regime of accumulation' (Aglietta 1979: 68). Having defined this, he later introduces the related concept of 'mode of regulation'. Likewise, Lipietz writes that: 'it (sc. capitalism) works ... except, of course, when there is a crisis. In order to understand how it works we have to produce new concepts. A number of French research workers have proposed the concepts of '*regime of accumulation*' and *mode of regulation*' (1987: 14). In this sense the RA builds on concepts and arguments from *Capital* (10) and re-specifies them so that they can be deployed at more concrete, complex levels of analysis. Five such concepts are of particular importance for the Parisian regulation approach.

The most general of these concepts, taken for granted in the preceding quotation from Aglietta, is, of course, 'régulation' as a complement to 'reproduction'. This was initially introduced, as a pre-theoretical intuition, in Aglietta's doctoral thesis (1974); it has since been grounded theoretically in the Marxist critique of political economy by later regulationist work (beginning with Aglietta 1979). The other four are 'industrial paradigm', 'accumulation regime', 'mode of regulation', and 'model of development'. Together these enable the RA to identify the internal structures associated with more concrete-complex features of specific periods of capitalist development and/or specific national variants of capitalism. I will now briefly define these latter concepts and show how they related.

First, an *industrial paradigm* is a model governing the technical and social division of labour. One such paradigm is mass production. This concept is primarily micro-economic. Secondly, an *accumulation regime* is a complementary pattern of production and consumption that is reproducible over a long period. Accumulation regimes are sometimes analysed abstractly in terms of their typical reproduction requirements; but, specified as national modes of growth, they can be related to the international division of labour. This concept is broadly macro-economic. Third, a *mode of regulation* is an emergent ensemble of norms, institutions, organisational forms, social networks, and patterns of conduct that can stabilise an accumulation regime. This is a more meso-level concept embracing both economic and extra-economic factors. It is generally analysed in terms of five dimensions: the wage relation (labour markets and wage-effort bargaining, individual and social wages, life styles); the enterprise form (its internal organisation, the source of profits, forms of competition, ties among enterprises, links to banking capital); the nature of money (its dominant form and its



emission, the banking and credit system, the allocation of money capital to production); (11) the state (the institutionalised compromise between capital and labour, forms of state intervention); and international regimes (the trade, investment, monetary settlements, and political arrangements that link national economies, nation states, and the world system). And, fourth, according to Lipietz, when an industrial paradigm, an accumulation regime, and a mode of regulation complement each other sufficiently to secure for a time the conditions for a long wave (12) of capitalist expansion, the resulting complex is often analysed more inclusively and comprehensively as a *model of development*. This is a holistic concept that attempts to depict the economy in its most inclusive or integral sense. It could also be described as a meta-economic concept (cf. Ruigrok and van Tulder 1995: 33; Messner 1997) but, whether or not one accepts this designation, it is clearly the most concrete-complex of the new concepts introduced by the pioneer regulationists. All of these are typically defined to take account of the conflictual and antagonistic nature of capitalism. This explains why four complementary concepts are used, why the Parisian regulation school insists on the provisional, unstable, and contradictory character of capitalism, and, of course, why the very concept of *régulation* was developed in the first place to modify and complement that of *reproduction*.

Such retroductively inferred objects are introduced for two main reasons. The first is to explain in relatively abstract-simple terms the general mechanism that compensates for the posited inability of purely economic mechanisms (i.e., in this context, market forces) to secure the expanded reproduction of capitalism. The second is to re-specify this general mechanism in more concrete-complex terms to explain the historically specific dynamics of different periods and/or variants of capitalism, including the distinctive forms of appearance of their crisis-tendencies. In particular, the RA originated in the attempt to explain the relative stability of Atlantic Fordism and its distinctive crisis-tendencies -- especially the apparently anomalous phenomenon of stagflation (for a detailed commentary on regulationist analyses of Fordism and post-Fordism, see Jessop 1992). The categories it has developed to analyse these problems would have belonged in the three unfinished books of Marx's project critique of political economy but they are no less potentially valid for being more relevant to these later theoretical stages in a Marxist appropriation of the 'real-concrete' as a 'concrete-in-thought'.

Indeed, far from being inconsistent with Marx's project, the RA could help to realise it. For Marx could not present the full complexity of the social embeddedness and social regulation of the circuit of capital and the complex reciprocal relationship between the so-called 'base' and 'superstructure' at more abstract, simple levels of analysis. This is amply indicated in the many and varied similes, metaphors, and circumlocutions that Marx had to deploy in dealing with the complexities of capitalist social formations in order to avoid simple functionalist or economic reductionist arguments. Once concepts and arguments are introduced on more concrete and complex levels of analysis, however, both reductionism and figurative language can be expected to disappear (cf. Woodiwiss 1990). Instead attention can turn to the structural coupling and co-evolution of different structural forms, social practices, and discursive systems in the overall reproduction-regulation of the economy. Delivering such analyses is one of the promises of the regulationist research programme.

Epistemologically, both the RA and critical realism imply the inadequacy of attempts to develop scientific knowledge on the basis of constant conjunctions or other empirical regularities. Instead they pose retroductive questions about the necessary and/or sufficient conditions of a given explanandum and thus to develop knowledge of real causal powers or mechanisms. It also implies that an explanation is only adequate relative to a given definition of the explanandum. This requires a movement from abstract to concrete, i.e., the increasing concretisation of a given phenomenon (e.g., from commodities in general to labour-power as a fictitious commodity to the wage relation on to the determination of the nominal money wage to the real wage, and so on). It also requires a movement from simple to complex, i.e., introducing further dimensions of a given phenomenon (e.g., state, capitalist state, patriarchal capitalist state, multicultural patriarchal capitalist state, etc.). Elsewhere I have described the methodology of this dual movement from abstract to concrete and from simple to complex as that of 'articulation' (Jessop 1982: 213-20).



Implications of the Regulation Approach for Critical Realism

Having established important affinities between the RA and critical realism, I now address three general theoretical issues: (a) the ontological assumptions that typically underpin the RA; (b) the complex movement involved in theory construction and explanation; and (c) the order of presentation appropriate to studies of regulation. The main ideas here were already present in the classic Marxian texts and then outlined more systematically in early regulationist texts. Thus it is surprising that more recent commentaries on the RA rarely critically examine its methodological foundations. This might be explained through the increasing identification of the RA with the analysis of Fordism and post-Fordism, topics that could be understood in purely 'middle-range' terms and integrated into a wide range of analyses. This has led to the weakening or abandonment of the early RA's distinctive methodological assumptions. But only by re-examining the RA's methodological assumptions can we understand both its key contributions and its limitations for an analysis of capitalism.

Hans Ehrbar has recently proposed that

'Although Hegel's system was probably the best framework available at Marx's time to represent the structure of modern society, it still does not fit well enough for the purposes for which Marx put it to work. ... As a consequence, the understanding of Marx could not progress past the stage of a secret science, open only to the "initiated" ... critical realism would have given a better framework than Hegel for Marx's arguments' (Ehrbar 2000: 3, 4; cf. Ehrbar 1998; contrast Brown 1999: 12-14).

The RA is an interesting example of a Marxist account of capital as a social relation that, inspired by structural Marxism, rejects a Hegelian reading of Marx and instead develops an alternative, albeit implicit, critical realist account. (13) Indeed, both the realist ontology implicit in *Capital* and its associated epistemology, outlined in the 1857 *Introduction* and elsewhere, were affirmed and adopted by the early Parisian regulationists. For Marx the causal powers and liabilities in the domain of capital as a social relation were typically analysed in terms of tendencies and counter-tendencies that together constitute its 'laws of motion'. These 'laws' operate as tendential causal mechanisms whose outcome depends on specific initial conditions as well as on the contingent interaction among tendencies and counter-tendencies; thus, in addition to real mechanisms, Marx also described their actual results in specific conjunctures and sometimes gave empirical indicators for these results. Labour-power is the most obvious example of a real power; but, as Marx emphasised, its actualisation depends on the outcome of the struggle between capital and labour in specific conjunctures. The tendency of the rate of profit to fall and its counter-tendencies are the best known (and certainly the most contentious) of these real mechanisms: whether or not the profit rate actually falls or not (and by how much) depends on the conditions in which the tendency and counter-tendencies operate. In turn this realist ontology implies that the social world comprises a complex synthesis of multiple determinations.

Given these ontological assumptions, Marx concluded that the ultimate task of theory is to appropriate the 'real concrete' as a 'concrete in thought'. Modern epistemologists might well argue, however, that, as it really exists beyond thought, the 'real concrete' can never be fully apprehended. For, although realists presuppose the existence of the real world and make this belief into a crucial 'regulative idea' in their critique of rationalist and pragmatist accounts of science, they do not make any strong epistemological claims about having direct access to this reality. Indeed, as Aglietta notes, the empirical is not external to theoretical construction itself:

'facts are not atoms of reality to be classified, linked and assembled. Facts must rather be treated as units in a process, or articulations between relations in motion, which interfere and fuse with one another. They can only be grasped by the collaboration of different modes of investigation, and this is why the concrete can be reached in thought only at the end of a globalising procedure in which deductive and critical moments interact' (Aglietta 1979: 66).

Our knowledge of the real world is never theoretically innocent. This implies that the starting point for any enquiry is discursively constituted: one cannot move from a theory-free 'real-concrete' to a theory-laden 'concrete in thought' (cf. Althusser and Balibar 1970; Aglietta



1979: 15). In this sense the movement from 'real-concrete' to 'concrete in thought' is a movement from a simple and superficial category to an account which is complex (synthesising multiple determinations) and also has ontological depth (identifying the underlying real mechanisms and connecting them to the actual and empirical aspects of the real-concrete). Thus, Marx begins to move from the analysis of money to that of capital in the *Grundrisse*, he notes that, '[i]f we speak here of capital, this is still merely a word' (1973b: 262). He then proceeds to show that '[c]apital is not a simple relation, but a *process*, in whose various moments it is always capital' (1973b: 258). Likewise, in his 1857 *Introduction*, he suggests that scientific inquiry would begin with simple categories, 'chaotic conceptions', such as population, but would then decompose them into their elements and reconstruct them again as a complex of diverse determinations (1973a: 100-1).

As the spiral of scientific enquiry continues, the elements of the 'real concrete' are defined with increasing complexity and concreteness. This means that 'concepts are never introduced once and for all at a single level of abstraction but are continually redefined in the movement from abstract to concrete – acquiring new forms and transcending the limits of their previous formulations' (Aglietta 1979: 15-16). In this sense 'the objective is the development of concepts and not the 'verification' of a finished theory' (Aglietta 1979: 66, cf. 15). Lipietz likewise argues that realist theorists have 'always to strive for greater precision in the concepts and thus always be producing more concepts that must then be articulated (1987: 5-6). And Norton criticises the American radical economists who work on 'social structures of accumulation' for failing to rethink and transform their initially-positing causal mechanisms as they develop their argument more concretely and consider additional processes and relationships. Instead, in contrast with Aglietta's approach, he argues, they treat these mechanisms as fixed, once established at an abstract level (Norton 1988: 203, 220-2).

This is not to deny the key role of empirical evidence in theory construction and evaluation. Indeed, as Beamish notes:

'a major dimension to Marx's method is located within the actual concrete processes of inquiry, elaboration, and intellectual reconstruction. No attempt to comprehend his method will be satisfactory unless it deals with the fundamental, dialectical relationship between abstract and concrete in Marx's intellectual labor process -- that is, the dialectic between Marx's conceptions (the abstract) and his interaction with a variety of textual materials, plus the practical activities involved in the writing and indexing of his texts (the concrete)' (1992: 4).

A similar point is made by Marsden, who writes:

'Regarded less grandly and more prosaically than is customary, Marx's method of critique-retroduction is a serendipitous process of writing, editing, revising and rewriting -- sitting up into the middle of the night scrutinising the logical structure of other people's work and writing, revising and rewriting his own. It is a process of conceptual writing or modelling, an *a posteriori* mode of concept formation, the ultimate aim of which is to orient empirical work by indicating where investigations "must enter in" (Marx 1858, p. 460)' (1998: 309).

Aglietta likewise argues that '(p)recise conclusions can be reached only after assembling, classifying and interpreting a vast number of data' and also describes how his own work results from 'an interchange between conceptual elaboration and historical analysis of the economy of the United States' (1979: 22). And Lipietz adds that regulationists must 'study *each national social formation in its own right*, using the weapons of history, statistics and even econometrics to identify its successive regimes of accumulation and modes of regulation' (1987: 20).

If Marxist epistemology can be described as involving the appropriation of the 'real-concrete' as a 'concrete in thought', appropriation must refer to the qualitative transformation of our understanding of the 'real world'. This would involve a complex and spiral process in which theoretical statements and evidential statements are confronted and modify each other (cf., on the natural sciences, Bhaskar 1989: 12). Thus the essence of science for critical realism is a continuing, spiral movement from knowledge of manifest (empirical) phenomena to knowledge of the underlying structures and causal mechanisms that generate them. This



spiral movement is not purely theoretical -- it also involves careful consideration of empirical studies of actual tendencies (cf. Marx on 'the working up of observation and conception into concepts', 1973a: 101; also Beamish 1992; Marsden 1999). Or, as Aglietta put it, 'the progression of thought cannot just consist in exposition of conclusions already implicitly contained in an axiomatic system; instead it should move between hypothetico-deductive and experimental phases so that there is a continual, dialectical transformation of concepts. Indeed it is the dialectical phases that are most important for scientific development and make theory something other than the exposition of conclusions already implicitly contained in an axiomatic system' (Aglietta 1976:15-16; see also Lipietz 1987: 5, 20, 26-7). Hence, theory is an open process, not a final product.

This argument does not fundamentally challenge Marx's methodology. For this comprises a dialectical interplay of abstract and concrete: an interplay which involves a spiral movement because the introduction of lower order concepts entails modifications in higher order concepts (cf. Benassy et al. 1977; Gerstein 1989). Likewise explanation would remain the same: an explanation would be adequate if, at the level of abstraction and the degree of complexity in terms of which a problem is defined, it establishes a set of conditions that are together necessary and/or sufficient to produce the effects specified in the explanandum. Indeed, if concepts are transformed 'by an experimental procedure, a concatenation of concepts can become a representation of a historical movement' (Aglietta 1979: 16).

This suggests two strategies for explanation. Either an explanation must recognise its indeterminacy vis-a-vis lower levels of abstraction and leave certain issues unresolved at its chosen level of operation; or it must make certain assumptions which permit a determinate explanation without pre-empting subsequent concretisation. The former strategy can be seen in the argument that the formal possibilities of capitalist crisis do not mean that a crisis will actually occur and/or must take a given form; the latter can be seen in the postulation of an average rate of profit or the assumption that individual capitals act simply as "bearers" (*Träger*) of the capital relation. This criterion also implies that explanations adequate to one plane of analysis should be incommensurable with those adequate to the explanation of other planes. In the case of incommensurability, however, any rules for preferring one of these explanations to others must be conventional. There are no formal rules that could guarantee a correct choice as to which explanation should be retained and which rejected. In addition, of course, any substantive rules will depend on the specific theoretical framework(s) within which investigators work.

Third, whatever the specific methods of discovery, Marx's methodology requires that the theory itself be presented as a movement from abstract to concrete. This holds both for a systematic presentation of the basic theoretical framework as well as for specific explanations of historical events and/or processes. However, in focusing mainly on the economic region in the capitalist mode of production (with its characteristic institutional separation and relative autonomy of different societal spheres), Marx tended to overlook the fact that there are actually two types of movement in any realist analysis: abstract-concrete and simple-complex. The first involves the position a given concept should occupy in the spiral movement from abstract to concrete along one plane of analysis. The second type of movement concerns the combination of different planes of analysis. The greater the number of planes of analysis which are articulated, the more complex is the analysis. This second movement is particularly relevant for understanding the overdetermination of events, processes, and conjunctures through the interaction of several regions. Although Marx himself did not explicate this distinction between types of theoretical movement, it is certainly implicit in his well-known statement that one should aim to reproduce the 'real-concrete' as a 'concrete-in-thought', i.e., as the concrete synthesis of multiple determinations and relations (Marx 1973a: 100).

The regulation approach is more explicit about this movement from the immediate to the mediate as well as from the abstract to the concrete. For it denies that there can be a 'pure economy'. Thus Aglietta argues that the concept of the economy is 'solely a methodological demarcation within the domain of social relations, one perpetually probed and shifted by the development of theoretical analysis itself. The study of capitalist regulation, therefore, cannot be the investigation of abstract economic laws. It is the study of the transformation of social relations as it creates new forms that are both economic and non-economic, that are



organised in structures and themselves reproduce a determinate structure, the mode of production' (Aglietta 1979: 16). In short, the RA is specifically concerned with the extra-economic as well as economic conditions of accumulation. It argues, for example, that the state is always already present in the constitution of capitalist social relations and that norms of production and consumption are essential to the institutionalisation of an accumulation regime.

To these arguments Lipietz has added another. He suggests that the original Marxian method involved not only a movement from abstract to concrete to analyse the natural necessities (laws, tendencies) entailed in the internal articulation of objective social relations but also a movement from the 'esoteric' to the 'exoteric' to analyse the connections between these objective relations and the fetishised world of lived experience and the impact that this enchanted world has on the overall movement of capital (1986: 11-12; cf. Marx 1978: 269-72, 290-2). According to Lipietz, this exoteric, enchanted world comprises all those representations created by economic agents in connection with their own behaviour and the circumstances they face. Even though their conduct and circumstances are rooted in the esoteric world, men live their lives through these representations. Ignoring these external forms would therefore prevent any significant understanding of a large part of reality (1986: 12-13). For Lipietz, the key category for deciphering the enchanted world of lived experience is 'fetishism', with particular forms of fetishism associated with each of the three main contradictory relations in capitalism as well as a number of secondary forms (1986: 18-31, 45-52). He also argues that crisis is rooted as much in the exoteric as the esoteric world. Thus different connections between the esoteric world of values and the exoteric world of prices obtain in the competitive and monopoly modes of regulation and this entails different forms of crisis (1986: 102-3).

One final point should be made about this methodology: its open character. Thus Aglietta stated in his doctoral thesis: 'regulation theory would not be a closed theory describing the functioning of an economic model; this is the theory of equilibrated growth in its many forms. It must be open, i.e., susceptible to continued elaboration; which means not only additions and refinements, but ruptures in the theory which must be made possible by the problematic adopted' (1974: VI). Theory, for its part, is never final and complete; it is always in the process of development. The progression of thought does not consist simply of hypothetico-deductive phases; these rather alternate with dialectical phases. It is the dialectical phases that are most important, and make theory seem something other than the exposition of conclusions already implicitly contained in an axiomatic system' (Aglietta 1979: 15-16). It is in this sense too, as well as in the 'family resemblance' among different approaches to regulation, that we can see regulation studies as moments in a continuing research programme.

Regulationist Challenges to Critical Realism

In this section I consider some aspects of the early regulation approach that provide important challenges to critical realism; the next section in turn develops some newer regulationist arguments with a similar significance. The first question to be posed here is why does capitalism need regulating? The answer suggested in the pioneer works in the RA (notably of Aglietta and Lipietz) is the indeterminate but antagonistic nature of capital as a social relation. Indeed Lipietz goes so far as to claim that 'the existence of concrete capitalisms is more improbable than necessary' (1987: 16). Since this claim was largely taken for granted in the early texts, however, I will suggest an explanation that is faithful both to Marx and the RA. This has three key aspects, listed here in increasing order of concreteness and complexity:

- a. the constitutive incompleteness of the capital relation in the real world such that a pure (capitalist) economy is impossible and its reproduction depends, in an unstable and contradictory way, on changing extra-economic conditions;
- b. the various structural contradictions and strategic dilemmas inherent in the capital relation and their forms of appearance in different accumulation regimes, modes of regulation, and conjunctures; and



c. conflicts over the regularisation and/or governance of these contradictions and dilemmas as they are expressed both in the circuit of capital and the wider social formation.

First, the constitutive incompleteness of capital refers to the inherent incapacity of capitalism as a mode of production to achieve self-closure, i.e., to reproduce itself wholly through the value form. This incompleteness is a defining, i.e., naturally necessary, feature of capitalism. For, even at the most abstract level of analysis, let alone in actually existing capitalism(s), accumulation depends on maintaining an unstable balance between its economic supports in the various expressions of the value forms and its extra-economic supports beyond the value form. This rules out the eventual commodification of everything and, *a fortiori*, a pure capitalist economy. In other words, capitalism does not (and cannot) secure the tendential self-closure implied in the self-expanding logic of commodification. This is rendered impossible by the dependence of capital accumulation on fictitious commodities and extra-economic supports (see especially Aglietta 1979: 32; Lipietz 1987: 30-2). Instead we find uneven waves of commodification, de-commodification, and re-commodification as the struggle to extend the exchange-value moments of the capital relation encounters real structural limits and/or increasing resistance and seeks new ways to overcome them. This is also associated with uneven waves of territorialisation, de-territorialisation, and re-territorialisation (Brenner 1998).

Second, the various structural contradictions and strategic dilemmas inherent in the capital relation are all expressions of the basic contradiction between exchange- and use-value in the commodity form. There are different forms of this contradiction. The commodity is both an exchange-value and a use-value; productive capital is both abstract value in motion (notably in the form of realised profits available for re-investment) and a concrete stock of time- and place-specific assets in the course of being valorised; the worker is both an abstract unit of labour-power substitutable by other such units (or, indeed, other factors of production) and a concrete individual with specific skills, knowledge, and creativity; the wage is both a cost of production and a source of demand; money functions both as an international currency exchangeable against other currencies (ideally in stateless space) and as national (14) money circulating within national societies and subject to state control; land functions both as a form of property (based on the private appropriation of nature) deployed in terms of expected rents and as a natural resource (modified by past actions) that is more or less renewable and recyclable. Likewise, the state is not only responsible for securing certain key conditions for the valorisation of capital and the social reproduction of labour power as a fictitious commodity but also has overall political responsibility for maintaining social cohesion in a socially divided, pluralistic social formation. In turn, taxes are both an unproductive deduction from private revenues (profits of enterprise, wages, interest, rents) and a means of financing collective investment and consumption to compensate for so-called 'market failures'.

Such structural contradictions and associated strategic dilemmas are permanent features of the capital relation but assume different forms and primacies in different contexts. They are typically expressed in the opposition between different agents, institutions, and systems as the prime bearers of one or other aspect of a given contradiction or dilemma. They can also prove more or less manageable depending on the specific 'spatio-temporal fixes' and the institutionalised class compromises with which they are from time to time associated. According to the early Parisian regulation theorists, this spatio-temporal fix was organised around the primacy of national state, which was seen to have a key role in securing the mode of regulation (Aglietta 1979: 28-9, 32, 69, 70-1; Lipietz 1987: 19-20). However, insofar as these compromises marginalise forces that act as bearers of functions or operations essential to long-run accumulation, the emergence of significant imbalances, disproportionalities, or disunity in the circuit of capital will tend to strengthen these marginalised forces and enable them to disrupt the institutionalised compromises associated with a particular accumulation regime, mode of regulation, state form, and spatio-temporal fix (cf. Clarke 1977). Such crises typically act as a steering mechanism for the always provisional, partial, and unstable re-equilibration of capital accumulation (cf. Lindner 1973; Hirsch 1977).

Third, modes of regulation and governance vary widely. This follows from the constitutive incompleteness of the capital relation and the various forms of appearance of capitalism, accumulation regimes, and modes of regulation, the relative weight of different contradictions,



etc.. For there are different ways to seek the closure of the circuit of capital and to compensate for its lack of closure. Which of these comes to dominate depends on the specific social and spatio-temporal frameworks within which these attempts occur. Indeed, notwithstanding the tendency for capital accumulation to expand until a single world market is achieved, there are important counter-tendencies and other limits to complete globalisation. Hence specific accumulation regimes and modes of regulation are typically constructed within specific social spaces and spatio-temporal matrices. It is this tendency that justifies the analysis of comparative capitalisms and of their embedding in specific institutional and spatio-temporal complexes. It also justifies exploration of the path-dependent linkages between different economic trajectories and broader social developments.

These arguments have important implications for modes of regulation. The key ontological and methodological question here is whether its objects pre-exist regulation. The regulationists' answer is 'yes and no!' For they both pre-exist regulation and are constituted in and through it. The incompleteness of the capital relation implies that the various aspects of the value form exist as relatively underdetermined 'elements' but, once subject to regularisation, they are transformed into so many 'moments' within a mode of regulation characterised by relative 'structured coherence'. In Marxian terms, capital as a social relation becomes a 'definite' object of regulation. Moreover, pursuing this line of analysis, the same elements have points of articulation with alternative modes of regulation and can never be fully fixed within any one mode of regulation. Thus regulation is always partial and unstable and the balance between fixity and fluidity (or, in terms more familiar to regulation theorists, rigidity and flexibility) is complex and changing. Accordingly we must explain how regulatory procedures emerge, interact, and combine to produce particular objects of regulation rather than others and, once produced, what follows for the crisis-tendencies of capitalism. One could perhaps re-interpret the work of Aglietta and Brender (1984) along these lines. For they argue that regulation depends on a network of routines and institutions which fix practices in ways compatible with accumulation. And crises occur when these routines and conventions lose their meaning and create periods of radical uncertainty until new patterns emerge.

A second issue raised by the RA with significant implications for critical realism is the doubly tendential character of capitalism. For it suggests that the tendencies and counter-tendencies of capitalism are doubly tendential. This idea can already be discerned at the level of categories for economic analysis (such as commodity, value, capital, or wage) in Marx's critique of Proudhon, who, according to Marx, has not seen that '[e]conomic categories are only the theoretical expressions, the abstractions of the social relations of production. ... Thus these ideas, these categories, are as little eternal as the relations they express. They are *historical and transitory products*' (Marx 1976: 165-6, italics in original). Likewise, referring to what critical realists would term the intransitive dimension of the social relations of production, Aglietta notes that the inherent properties of the capital-labour and capital-capital relations are reproduced insofar as the capital relation itself is reproduced (1979: 24-5). Let us explore this doubly tendential nature of the inherent properties and laws of motion of capitalism. First, they are tendential because the real causal mechanisms that produce them are only actualised in specific conditions that both activate the tendencies and limit the effects of any counter-tendencies. Second, they are tendential in a deeper sense: for their underlying causal mechanisms are themselves tendential, provisional, and unstable. If we accept that social phenomena are discursively constituted and that they never achieve complete closure, it follows that any natural necessities entailed in the internal relations of a given social phenomenon are themselves tendential. They would only be fully realised if the phenomena themselves were fully constituted and continually reproduced through recursive social practices entailed in such phenomena. Yet capitalist relations always exist in articulation with other relations of production and, at most, they occupy a position of relative dominance in the overall economic formation or productive system. Thus their laws of motion are always liable to disruption through the intrusion of other social relations which undermine the formal and/or the substantive unity of the capital relation. This can be established even at the most abstract levels of analysis since the reproduction of the capital relation itself always depends on the contradictory articulation of commodity and non-commodity forms (cf. Jessop 1983; 1997a; 1997b; 2000). In turn this implies that capital accumulation is never automatic but depends on a continuing struggle to prevent the disarticulation of the capital relation and a resulting loss of



formal and/or substantive unity. Moreover, as we have already indicated, this is always and inevitably a struggle to maintain definite capitalist relations rather than capitalism in general. How this is achieved has been the RA's principal theoretical concern

This also implies that the distinction between internal and external relations is at best relative rather than absolute (Lipietz 1987: 22-3). For, whatever the typical case in the natural world, real social objects are not fully constituted with clear and unambiguous boundaries within which definite internal relations could then generate natural necessities. On the contrary, real objects in the social world exist only tendentially and, *a fortiori*, as we have argued above, their 'laws of motion' are doubly tendential. This suggests in turn that well entrenched and stable modes of regulation could be seen as having their own natural necessities and laws of motion - which would, of course, be doubly tendential in the same way as the tendencies and counter-tendencies of the capitalist mode of production. Thus one could examine the logic of Fordism as an accumulation regime and/or mode of regulation in exactly the same way as one might explore the dynamic of the capitalist mode of production. Indeed, since neither capitalist production in general nor general capitalist production actually exist but only particular capitalist production and capitalist production as a whole and since the two last are always overdetermined by specific modes of regulation, there cannot be a radical break in the spiral movement of analysis as one proceeds from the abstract and simple to the concrete and complex - with natural necessities on one side, contingent events on the other. For any natural necessities of capitalism must be recursively and tendentially reproduced through social practices which are always (and inevitably) definite social practices, articulated more or less closely as moments in specific modes of regulation. In this sense these natural necessities are rational abstractions: there is no logic of capital but a series of logics with a family resemblance, corresponding to different modes of regulation and accumulation strategies. In turn this means that Fordism could have its own laws of motion (which would modify the abstract tendencies of capitalism) constituted in and through the stable articulation between the invariant elements of capitalism and the variant elements of Fordism: the invariant elements are nonetheless transformed as they become 'moments' within Fordism. On more a concrete level still, we could distinguish the laws of motion of US Fordism from those of West German 'flexi-Fordism' or British 'flawed Fordism' in terms of the stable tendencies and counter-tendencies of the three different concrete forms of Fordism (cf. Jessop 1988). Here the focus would be on how the invariant elements of Fordism in general are overdetermined through their articulation with elements specific to each social and economic formation. In short the distinctions between invariant and variant elements, natural necessities and contingent circumstances, and reproduction and regulation, would, in each case, be relative to the particular stage in the movement from the abstract and simple to the concrete and complex.

Another area where the RA has a potential contribution to make to the RA is in its analysis of the relationship between 'structure and agency'. Baert has criticised the transformational model of social agency developed by Bhaskar for being unable to explain social change. Conversely, 'relying upon a recursive model of social action (in which structures are both medium and output of social action) the TMSA is well-placed to explain the reproduction of structures, not their transformation' (Baert 1996: 521; cf. Archer's critique of Giddens's structuration theory, Archer 1995: 93-134). In contrast, the RA starts out, not from a general ontology of social action, but from a specific account of conflictual and antagonistic nature of the capital relation; and it insists, as we have seen, on the inherent improbability of continuing, stable capital accumulation. In this context, regulationists refuse to study regulation in terms of a structuralist model of reproduction or a voluntarist model of intentional action. For the reproduction of capitalist societies is neither a fateful necessity nor a wilful contingency. Thus Aglietta (1982) and Lipietz (1987) regard the emergence of modes of regulation as improbable; and Lipietz described them as chance discoveries (1986, 1987). Many other accounts stress how accumulation regimes and/or modes of regulation emerge in a contingent, non-intentional manner. Where strategic conduct is involved it could well be more concerned to impose some coherence and direction on an already emergent structure in order to bring it into existence. But such efforts will co-exist with others seeking to impose different forms of coherence and other trajectories. Thus any accumulation regime and mode of regulation always represents an unstable institutionalised compromise. In this sense, any



regime has many, often unacknowledged and/or uncontrollable, conditions of existence and emerges from the clash of multiple strategies. It has only a relative unity and, in this sense, is better described as a structural ensemble than as a simple structure. Moreover, within such an ensemble, there are typically many irrelevant, residual, marginal, secondary, and even potentially contradictory elements; and even the unity of the more central elements typically involves gaps, redundancies, tensions, and contradictions. This explains why some regulationists insist that accumulation regimes, modes of growth, and modes of regulation are 'discovered' rather than planned. There is no global subject to plan accumulation strategies, regulatory mechanisms, or hegemonic projects and to guarantee their successful implementation. Instead we find only different subjects whose activities are more or less coordinated, whose activities meet more or less resistance from other forces, and whose strategies are pursued within a structural context which is both constraining and facilitating. And this in turn creates many opportunities for agents to intervene, intentionally or otherwise, to disrupt the expanded reproduction of a given regime. Failure to recognise these issues can lead to just that *Begriffsrealismus* (reification of concepts) which Lipietz condemned in theories of imperialism and also claimed to discern in some recent regulation theories (Lipietz 1987: 11, 27). Moreover, given the contradictions at the heart of the capital relation, its inner structure generates crisis-tendencies and conflicts that continually threaten the relative stability of the accumulation regime and its mode of regulation.

Rethinking Regulation and the Role of Spatio-Temporal Fixes

Marx argues in the 1857 *Introduction* that there is no production in general or general production, only particular production and the totality of production. This implies that there can be no regulation in general nor general regulation. Instead, following Marx, we can expect 'a definite regulation' oriented to 'a definite consumption, distribution, and exchange as well as *definite relations between these different moments*' (Marx 1973a: 99). The RA emphasises not only the labour process and accumulation regimes but also the mode of regulation (including the wage relation, forms of competition, money, the state, and international regimes) and the broader social consequences of the dominance of capital accumulation. It extends the scope of reproduction-régulation well beyond the capitalist economy in its narrow sense (profit-oriented production, market-mediated exchange) to include the direct and indirect extra-economic conditions of accumulation as well as the handling of the various repercussions of commodification and accumulation on the wider society.

Building on these arguments, I infer retroductively that reproducing and regularising capitalism involves a 'social fix' that partially compensates for the incompleteness of the pure capital relation and gives it a specific dynamic through the articulation of its economic and extra-economic elements. This helps to secure a relatively durable pattern of structural coherence in the handling of the contradictions and dilemmas inherent in the capital relation. One necessary aspect of this social fix is the imposition of a 'spatio-temporal fix' on these economic and extra-economic elements. It achieves this by establishing spatial and temporal boundaries within which the relative structural coherence is secured and by externalising certain costs of securing this coherence beyond these boundaries. Even within these boundaries we typically find that some classes, class fractions, social categories, or other social forces located within these spatio-temporal boundaries are marginalised, excluded, or subject to coercion.

Spatio-temporal fixes have both strategic and structural dimensions. Strategically, since the contradictions and dilemmas are insoluble in the abstract, they can only be resolved – partially and provisionally at best – through the formulation-realisation of specific accumulation strategies in specific spatio-temporal contexts. These strategies seek to resolve conflicts between the needs of 'capital in general' and particular capitals by constructing an imagined 'general interest' that will necessarily marginalise some capitalist interests. Interests are not only relational but also relative, i.e., one has interests in relation to others and relative to different spatial and temporal horizons. The general interest thus delimits the identities and relations relative to which calculation of interests occurs; and it confines the spatial and temporal horizons within which this occurs. It involves specific notions about which identities and interests can be synthesised within a general interest, about the intertemporal articulation of different time horizons (short-, medium-, and long-term, business cycle, electoral cycle,



long wave, etc.), and about the relative importance of different spatial and/or scalar horizons (local, regional, national, supranational, etc.). Thus a conception of the general interest privileges some identities, interests, and spatio-temporal horizons and marginalises or sanctions others. It also refers to what is needed to secure an institutionalised class compromise and to address wider problems of social cohesion. Such success is often secured only through a trial-and-error search that reveals the requirements of 'capital in general' more through repeated failure than sustained success (Clarke 1977; Jessop 1983, 1999). In establishing this general interest and institutionalised compromise, however, accumulation strategies and hegemonic projects typically displace and defer their material and social costs beyond the social, spatial, and temporal boundaries of that compromise. This can involve super-exploitation of internal or external spaces outside the compromise, super-exploitation of nature or inherited social resources, deferral of problems into an indefinite future, and, of course, the exploitation and/or oppression of specific classes or other social categories.

Different scales of action and different temporal horizons may be used in a given spatio-temporal fix to handle different aspects of capital's structural contradictions and/or horns of resulting strategic dilemmas. For example, in Atlantic Fordism, the national state set the macro-economic framework, the local state acted as its relay, and intergovernmental cooperation maintained the conditions for national economic growth. Likewise, in contemporary neo-liberal accumulation regimes, the neo-liberal state's relative neglect of substantive (as opposed to formal) supply-side conditions at the international and national levels is partly compensated by more interventionist policies at the regional, urban, and local levels (Gough and Eisenschitz 1996; Brenner 1998). In addition, the withdrawal of the state is compensated by capital's increasing resort on all levels to networking and other forms of public-private partnership to secure its reproduction requirements. Another illustration of spatial-scalar divisions of labour is the tendential dissolution of the distinction between foreign and domestic relations. State organisation is premised on a distinction between nation states; and, in this context, some parts of the state apparatus specialise in external relations, some in internal relations. However, with the growing impact of globalisation and new forms of competitiveness, inherited divisions of state labour have changed. Not only is the distinction between domestic and foreign policy becoming blurred but we also find sub-national governments engaging in foreign (economic) policy through cross-border cooperation, international localisation, etc..

There can also be temporal divisions of labour with different institutions, apparatuses, or agencies responding to contradictions, dilemmas, and paradoxes over different time horizons. For example, whereas finance ministries deal with annual budgets, industry ministries would assume responsibility for longer term restructuring. Similarly, corporatist arrangements have often been introduced to address long-term economic and social issues where complex, reciprocal interdependence requires long-term cooperation – thereby taking the relevant policy areas outside the short-term time horizons of electoral cycles and parliamentary in-fighting. In both cases there is also scope for meta-steering to re-balance the relations among these institutions, apparatuses, or agencies through a differential allocation of resources; allowing them to compete for legitimacy in changing circumstances, etc..

Concluding Remarks

This chapter has addressed the role of realist assumptions and arguments in the regulation approach and describes some its implications for critical realism more generally. It has argued that the RA's import is as much methodological as substantive and that its research potential depends critically on how fully and explicitly the core methodological presuppositions are integrated into future studies (for an argument that it has failed to transcend a middle-range analysis in this regard and has turned from an initial mild structuralism to an equally mild post-structuralism and post-modernism, see Mavroudeas 1999). Thus I identified four distinctive features of the RA. It works with a realist ontology and epistemology; adopts the method of 'articulation' in theory construction; operates within the general Marxist tradition of historical materialism with its interest in the political economy of capitalism and the anatomy of bourgeois society; and is especially concerned with the changing economic *and extra-economic* forms and mechanisms (institutions, networks, procedures, modes of calculation,



and norms) in and through which the expanded reproduction of capital as a social relation is secured. Nonetheless there are important differences within and across the various regulation schools and currents which provide a continuing stimulus to further theoretical work.

In this light I think the following remarks on the RA's critical realism and on critical realism more generally are justified. First, if we take Bhaskar's approach to realism as a reference point, the regulation approach works (whether implicitly or explicitly) with a critical realist ontology and epistemology. It clearly rests on the distinction between real mechanisms, actual events, and empirical observations. Obviously, while the transcendental approach can justify a 'critical realist ontology and epistemology in general', it cannot validate a 'critical realist ontology and epistemology in particular'. The latter depends on specific analyses of a specific object and its associated self-movement of a contradictory essence rather than on a simplistic and generic application of the critical realist approach (Roberts 2000: *passim*; cf. Lawson 1997: 60, 326; and Burkett 2000: 384-88). There are various distinctive features in the RA's critical realism that can be attributed to its Marxist assumptions and antecedents and that deserve more extended treatment than they have received here. In particular I want to stress that the regulationist approach is, in important respects, 'strategic-relational'. It treats capital as a social relation and analyses it as a complex system of relations among relations; and, in this context, it regards these relations as produced in and through meaningful social action. Thus an adequate account of regulation must not only consider the material preconditions of, and constraints upon, reproduction (e.g., as revealed in the reproduction schemas and their significance for the quantitative constraints on capital accumulation) but must also take account of the different modes of calculation and the orientations of the various social forces involved in economic and social regulation. An important theoretical development in this context would be a more explicit concern with the 'spatio-temporal fixes' within which capitalist reproduction and regularisation occur.(15)

Second, building on the RA, I hope to have shown that the real mechanisms are doubly tendential: not only do these mechanisms themselves operate in terms of tendencies which may or may not be actualised, they are themselves only tendential. This can be seen as an alternative way of thinking about Bhaskar's claim that, whereas real causal mechanisms in the natural sciences exist independently of their actualisation, in the social sciences they cannot exist apart from their reproduction in and through social action and are short-lived and contingent compared to tendencies in the natural world. The concept of spatio-temporal fix helps us here by identifying the specific social contexts within which these specific mechanisms, tendencies, and counter-tendencies are tendentially reproduced and regularised.

Third, the regulationists' insistence that their work is concerned with regulation rather than with simple (or even expanded) reproduction indicates that they work with a transformational analysis of social relations. Regulation theorists treat the reproduction of the capital relation as a process that is secured in and through the actions of social agents: but they do not create this relation, they transform or reproduce it (cf. Bhaskar 1989: 76). Moreover, as I have argued elsewhere (e.g. Jessop 1983, 1990, 1996), their actions in reproducing the capital relation have a strategic dimension. For the dominance of the value form (including its various moments - the forms involved in the commodity, money, capital, wage, tax, legal, state, etc.) involve only a formal unity: any substantive unity depends additionally on the dominance and consistency of specific accumulation strategies. Here, too, we find one of Bhaskar's theses confirmed: that, 'because social structures exist only in virtue of the activities they govern, they do not exist independently of the conceptions that the agents possess of what they are doing in their activity; that is, of some theory of these activities' (Bhaskar 1989: 78). But the regulation approach can take this argument and its associated transformational model of social action further insofar as it is concerned not with a general ontology of social structuration but with the ontology of a specific object of analysis (capitalism in its inclusive sense) that is inherently self-contradictory and therefore generates pressures and opportunities for more or less radical transformation.

Finally, my proposed revisions to the RA imply a critique of the hegemonic Parisian regulation school. In particular, I have re-specified the object, modes, contradictions, dilemmas, and limits of regulation. In doing so, I have proceeded more consistently than do most Parisian



regulationists (16) today from the Marxian premise that capital involves inherently antagonistic and contradictory social relations. Thus my approach stresses the inherent limits to the regulation (or, better, regularisation) of capital accumulation and seeks to avoid a 'premature harmonisation of contradictions' (17) in analysing capitalist social formations. Nonetheless, in contrast to the tendency for non-Parisian theorists to turn the regulation approach into soft economic sociology, I share the Parisians' hard political economy emphasis on the central role of economic mechanisms in capital accumulation. Only thus can we develop a critical realist analysis of the reproduction and regulation of capitalism.

Notes

- (1) This chapter has benefited from discussions with Andrew Brown, Steve Fleetwood, Jonathan Joseph, Tony Lawson, Peter Nielsen, and Andrew Sayer and from some excellent written comments by John Roberts supplemented by his recent article (Roberts 2000). The usual disclaimers apply.
- (2) These are quite recent texts. It could be argued that Sayer anticipated the critical realist interpretation of Marx in his *Marx's Method*, 1979 (especially 75-150).
- (3) For example, some recent work has been shaped by trends in orthodox economics and in conventions analysis among economists (for a review, see Jessop 1997b).
- (4) Cf. Bhaskar's claim that 'it is vital to explicitly conceptualise historical materialism as an ongoing research programme ... committed to a scientific realist ontology' (Bhaskar 1986: 145, n 51).
- (5) Cf. in relation to Marx rather than the RA, Marsden's justifiable complaint that '(w)ith few exceptions ... realists use Marx to illustrate and legitimise the philosophy, rather than use the philosophy to rethink and further the work Marx began' (1998: 298).
- (6) On subsumption and derivation as methods, see Jessop 1982.
- (7) This explains the occasional references to dialectical materialism in early RA work: it is not to be confused with the essentialist Stalinist versions of 'diamat' but should be read in a structuralist manner (see Althusser 1969).
- (8) Bhaskar (1993) also seeks to overcome an Hegelian account of the dialectic.
- (9) This reflects Marx's own approach in starting with the commodity as 'the simplest economic concretum', 'the concrete social form of the labour-product', the 'simplest social form in which the labour-product is presented in contemporary society' (see Carver 1975: 169). On form as 'the mode(s) of existence of the contradictory movement in which social existence consists', see Bonefeld et al. (1992: xv et seq.).
- (10) The three volumes of *Capital* correspond essentially to the proposed books on capital, landed property, and, albeit only in part, that on wage-labour. See: Oakley 1983, 105-113; and Rosdolsky 1977: 40-62.
- (11) The best regulationist work on the money form is, of course, Aglietta's. See Aglietta 1986, Aglietta and Orléan (1982, 1998); and, for a commentary, Grahl (2000).
- (12) As a long wave (rather than a long cycle) account of capitalist dynamics, the RA treats the succession of stages as discontinuous, creatively destructive, and mediated through class conflict and institutional change. Long wave and long cycle theories can be distinguished as follows. Whilst both identify long waves of economic expansion and contraction, the former do not seek to identify a single causal mechanism which explains both the dynamic of individual long waves and the transition between them; the latter do regard the transition between periods as having a single causal mechanism (or set of mechanisms) which remains the same across succeeding cycles. Thus long wave theories emphasize the ruptural, discontinuous form of economic reproduction-regulation and search for the conditions leading to each long wave in chance historical discoveries.
- (13) In contrast, Marsden (1998, 1999) argues that Marx's critical realism is quite definitely Hegelian in inspiration; Brown (1999) prefers, in turn, to see Marx's scientific breakthrough as indebted more to a skillful reappropriation of Hegelian dialectics than to any implicit critical



realism. More generally, on 'systematic dialectics' as a new approach to the Hegel-Marx connection, see Smith (1990) and Mosely (1993).

(14) Plurinational monetary blocs organized by states could also be included here.

(15) It should be noted here that Bhaskar has acknowledged that 'critical realism' abstracts from time and space even though these issues are essential to understand transformation and suggests that his reformulated 'dialectical critical realism' can reincorporate them (Bhaskar 1993: 8). Nonetheless this move is subject to the same criticism that it provides a general account rather than one that reflects the specificities of a particular object of investigation.

(16) Lipietz is the principal current exception here: see Lipietz (1986, 1987, 1993).

(17) This phrase was introduced by Ernst Bloch to describe the function of utopian thought in maintaining social cohesion (1959: 178).

References

Aglietta, M. (1974) *Accumulation et régulation du capitalisme en longue période. Exemple des Etats-Unis (1870-1970)*, Paris: INSEE.

-- (1979) *A Theory of Capitalist Regulation: the U.S. Experience*, London: NLB (first published in French 1976).

-- (1982) 'Avant-propos à la deuxième édition', *Régulation et crises du capitalisme: l'expérience des Etats-Unis*, Paris: Calmann-Lévy, 1982.

-- (1986) *La fin de devises clés*, Paris: la Découverte.

-- and Brender, A. (1984) *Les métamorphoses de la société salariale: La France en projet*, Paris: Calmann-Lévy.

-- and Orléan, A. (1982) *La violence de la monnaie*, Paris: Presses Universitaires de France.

-- -- (eds) (1998) *La monnaie souveraine*, Paris: Odile Jacob.

Althusser, L. (1969) *For Marx*, London: Allen Lane.

-- and Balibar, E. (1970) *Reading Capital*, London: New Left Books.

Archer, M.S. (1995) *Realist Social Theory: the Morphogenetic Approach*, Cambridge: Cambridge University Press.

Baert, P. (1996) 'Realist Philosophy of the Social Sciences and Economics: A Critique', *Cambridge Journal of Economics* 20 (5): 513-22.

Beamish, R. (1992) *Marx, Method, and the Division of Labour*, Urbana: University of Illinois Press.

Benassy J.P., et al. (1977) *Approches de l'inflation: L'Exemple français, rapport au CORDES*, Paris: CEPREMAP, mimeo.

Benton, T. (1984) *The Rise and Fall of Structural Marxism: Althusser and his Influence*, Basingstoke: Macmillan Press.

Bhaskar, R. (1975) *A Realist Theory of Science*, Leeds: Leeds Books.

-- (1986) *Scientific Realism and Human Emancipation*, London: Verso.

-- (1989) *The Possibility of Naturalism*, London: Verso, 2nd edition.

-- (1991) *Philosophy and the Idea of Freedom*, Oxford: Basil Blackwell.

-- (1993) *Dialectic. The Pulse of Freedom*, London: Verso.

Bloch, E. (1959) *Das Prinzip Hoffnung, Kapitel 1-37*, Frankfurt: Suhrkamp.



- Bonefeld, W. (1994) 'Aglietta in England: Bob Jessop's Contribution to the Regulation Approach', *Futur Antérieur*, special issue: 299-330.
- --, Gunn, R., and Psychopedis, K. (1992) 'Introduction', in *idem* (eds), *Open Marxism: Theory and Practice*, London: Pluto Press, xi-xviii.
- -- and Holloway, J. (eds) (1991) *Post-Fordism and Social Form*, Basingstoke: Macmillan Press.
- Boyer, R. (1990) *Regulation Theory: A Critical Introduction*, New York: Columbia University Press.
- Boyer, R. and Saillard, Y. (eds) (1995a) *Théorie de la régulation. L'état des savoirs*, Paris: La Découverte,
- Boyer, R. and Saillard, Y. (1995b) 'Un précis de la régulation', in *idem* (eds), *Théorie de la régulation. L'état des savoirs*, Paris: La Découverte, 58-68.
- Brenner, N. (1998) 'Global Cities, Glocal States: Global City Formation and State Territorial Restructuring in Contemporary Europe', *Review of International Political Economy* 5 (1): 1-38.
- Brown, A. (1999) 'Developing Realistic Methodology: How New Dialectics Surpasses the Critical Realist Method for Social Sciences', Middlesex University Business School Discussion Paper, March.
- Burkett, J.P. (2000) 'Marx's Concept of an Economic Law of Motion', *History of Political Economy* 32 (2): 381-94.
- Carver, T. (1975) *Texts on Method*, Oxford: Basil Blackwell.
- Clarke, S. (1977) 'Marxism, Sociology, and Poulantzas's Theory of the Capitalist State', *Capital and Class* 2: 1-31.
- Ehrbar, H. (1998) 'Marxism and Critical Realism', Presentation for the Heterodox Economics Students Association, 25 September 1998 (downloadable from <http://www.econ.utah.edu/ehrbar/marxre.pdf> (accessed 2 December 2000))
- Ehrbar, H. (2000) Critical Realist Arguments in Marx's *Capital* (downloadable from <http://www.econ.utah.edu/ehrbar/argument.pdf> (accessed 2 December 2000))
- Elliott, G. (ed) (1994) *Althusser: A Critical Reader*, Oxford: Basil Blackwell.
- Fleetwood, S. (ed) (1999) *Critical Realism in Economics. Development and Debate*, London: Routledge.
- Gambino, F. (1996) 'A Critique of the Fordism of the regulation school', *Common Sense* 19: 42-63.
- Gerstein, I. (1989) '(Re)structuring Structural Marxism', *Rethinking MARXISM* 2 (1): 103-33.
- Gough, J. and A. Eisenschitz (1996) 'The Modernization of Britain and Local Economic Policy: Promise and Contradictions', *Local Government Studies* 14, 2: 203-219.
- Grahl, J. (2000) 'Money as Sovereignty: the Economics of Michel Aglietta', *New Political Economy* 5 (2): 291-316.
- Hay, C. (1994) 'Werner in *Wunderland* or Notes on a Marxism beyond Pessimism and False Optimism', *Futur Antérieur*, special issue: 331-62.
- Hirsch, J. (1997) 'Kapitalreproduktion, Klassenauseinandersetzungen und Wider-sprüche im Staatsapparat', in V. Brandes, J. Hoffmann, U. Jürgens, and W. Semmler (eds), *Handbuch 5 (Staat)*, Frankfurt: EVA, 161-81.
- Jessop, B. (1982) *The Capitalist State*, Oxford: Martin Robertson.
- -- (1983) 'Accumulation Strategies, State Forms, and Hegemonic Projects', *Kapitalistate* 10/11: 89-112.
- -- (1985) *Nicos Poulantzas: Marxist Theory and Political Strategy*, London: Macmillan Press.



- -- (1988) 'Neo-Conservative Regimes and the Transition to Post-Fordism', in M. Gottdiener and N. Komninos (eds), *Capitalist Development and Crisis Theory Accumulation, Regulation, and Spatial Restructuring*, Basingstoke: Macmillan, 261-99.
- -- (1990) 'Regulation Theories in Retrospect and Prospect', *Economy and Society* 19 (2): 153-216.
- -- (1992) 'Fordism and Post-Fordism: a Critical Reformulation', in A.J. Scott and M.J. Storper (eds), *Pathways to Regionalism and Industrial Development*, London: Routledge, 43-65.
- -- (1996) 'Interpretive Sociology and the Dialectic of Structure and Agency: Reflections on Holmwood and Stewart's "Explanation and Social Theory"', *Theory, Culture, and Society* 13 (1): 119-28.
- -- (1997a) 'Twenty Years of the Regulation Approach: the Paradox of Success and Failure at Home and Abroad', *New Political Economy* 2 (3): 499-522.
- -- (1997b) 'Capitalism and its Future: Remarks on Regulation, Government, and Governance', *Review of International Political Economy* 4 (3): 435-55.
- -- (1999) 'Narrating the Future of the National Economy and the National State? Remarks on Re-mapping Regulation and Re-inventing Governance', in G. Steinmetz, (ed.), *State/Culture: State Formation after the Cultural Turn*, Ithaca: Cornell University Press, 378-405.
- -- (2000) 'The Crisis of the National Spatio-Temporal Fix and the Ecological Dominance of Globalizing Capitalism', *International Journal of Urban and Regional Studies* 24 (2): 273-310.
- -- (ed.) (2001) *Regulation Theory and the Crisis of Capitalism*, Aldershot: Edward Elgar, 5 volumes.
- Kanth, R. (1999) 'Against Eurocentred Epistemologies', in S. Fleetwood (ed.) *Critical Realism in Economics*, London: Routledge, 187-208.
- Lawson, T. (1989) 'Abstraction, Tendencies and Stylized Facts: A Realist Approach to Economic Analysis', *Cambridge Journal of Economics*, 13 (1): 59-78.
- -- (1995) 'A Realist Perspective on Contemporary "Economic Theory"', *Journal of Economic Issues* 29 (1): 1-32.
- -- (1997) *Economics and Reality*, London: Routledge.
- Lebowitz, M. (1982) 'The One-Sidedness of *Capital*', *Review of Radical Political Economics* 14 (4): 40-51.
- -- (1991) 'The Significance of Marx's Missing Book on Wage-Labor', *Rethinking MARXISM* 4 (2): 105-18.
- Lindner, G. (1973) 'Die Krise als Steuerungsmittel', *Leviathan* 3 (4): 342-82.
- Lipietz, A. (1986) *The Enchanted World: Inflation, Credit, and the World Crisis*, London: New Left Books.
- -- (1987) *Mirages and Miracles*, London: New Left Books.
- -- (1988) 'Accumulation, Crises, and Ways Out: some Methodological Reflections on the Concept of "Regulation"', *International Journal of Political Economy* 18 (2): 10-43.
- -- (1993) 'From Althusserianism to "Regulation Theory"', in E.A. Kaplan and M. Sprinker (eds), *The Althusserian Legacy*, London: Verso, 99-138.
- Marsden, R. (1998) 'The Unknown Masterpiece: Marx's Model of Capital', *Cambridge Journal of Economics* 22 (3): 297-324.
- -- (1999) *The Nature of Capital: Marx after Foucault*, London: Routledge.
- Marx, K. (1971) *Capital, vol III*, London: Lawrence & Wishart.



-- -- (1973a) 'Introduction', in *idem*, *Grundrisse*, Harmondsworth: Penguin, 81-111 [This text is usually known as the *1857 Introduction*].

-- -- (1973b) *Grundrisse*, Harmondsworth: Penguin.

-- -- (1976) 'The Poverty of Philosophy', in *Karl Marx and Friedrich Engels, Collected Works*, London: Lawrence & Wishart, vol. 6, 215-312.

-- -- (1978) *Capital, vol II*, Harmondsworth: Penguin.

Mavroudeas, S. (1999) 'Regulation Theory: the Road from Creative Marxism to Postmodern Disintegration', *Science & Society* 63 (3): 310-37.

Messner, D. (1997) *The Network Society*, London: Cass.

Mosely, F. (ed.) (1993) *Marx's Method in "Capital"*, Atlantic Highlands, NJ: Humanities Press.

Nielsen, P. (2000) 'Critical Realism in Economics: Heterodoxy and Common Ground', Roskilde: Department of Economics, Roskilde University, unpublished paper.

Norton, B. (1988) 'Epochs and Essences: a Review of Marxist Long-wave and Stagnation Theories', *Cambridge Journal of Economics* 12 (2): 203-24.

Oakley, A. (1983) *The Making of Marx's Critical Theory: A Bibliographical Analysis*, London: Routledge and Kegan Paul.

Panitch, L. and Gindin, S. (1999) 'Transcending Pessimism: Rekindling Socialist Imagination', *Socialist Register 2000*, London: Merlin Press.

Pratten, S. (1993) 'Structure and Agency and Marx's Analysis of the Labour Process', *Review of Political Economy* 5 (4): 403-26.

Poulantzas, N. (1973) *Political Power and Social Classes*, London: New Left Books.

Resch, R.P. (1992) *Althusser and the Renewal of Marxist Social Theory*, Berkeley: University of California Press.

Roberts, J.M. (2000) 'Abstraction, Method and System: A Tale of Two Dialectics', Paper presented at the International Association of Critical Realism Annual Conference, Lancaster University 18-20 August.

Rosdolsky, R. (1977) *The Making of Marx's Capital*, London: Pluto Press.

Ruigrok, W. and van Tulder, R. (1995) *The Logic of International Restructuring*, London: Routledge.

Sayer, D. (1979) *Marx's Method: Ideology, Science, and Critique in 'Capital'*, Hassocks: Harvester.

Smith, T. (1990) *The Logic of Marx's "Capital". Replies to Hegelian Criticisms*, Albany: State University of New York Press.

Woodiwiss, A. (1990) *Social Theory After Postmodernism: Rethinking Production, Law And Class*, London: Pluto Press.