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The Crisis of the National Spatio-Temporal Fix and the Ecological Dominance of Globalizing Capitalism

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This article addresses globalization from a doubly heterodox regulationist viewpoint. The regulation approach is already heterodox in relation to mainstream economics; my own perspective also differs from that of the hegemonic Parisian regulation school. It can be interpreted as the work of an 'informed outsider' (1) who has attempted to re-specify the object, modes, contradictions, dilemmas, and limits of regulation in three main ways. First, I proceed more consistently than do most Parisian regulationists (2) today from the Marxist premise that capital involves inherently antagonistic and contradictory social relations. Thus my approach stresses the inherent limits to the regulation (or, better, regularization) of capital accumulation and seeks to avoid a 'premature harmonization of contradictions' (3) in analysing capitalist social formations. (4) 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's reproduction and regulation. Second, I aim to provide an account of the structural coupling and co-evolution of the economic and extra-economic in capitalist development that is more radical and extensive than Parisian studies have offered. (5) My analysis of these issues owes much to Polanyi and Luhmann and recent students of governance. In contrast to the approaches of most such thinkers, however, mine remains firmly rooted in Marxist political economy. In particular I will suggest how one can use their ideas to reformulate the traditional but inadequate Marxist principle of 'economic determination in the last instance' and to radically rethink its implications for base-superstructure relations. Third, while Parisian regulationists often privilege the national level in their analyses – an understandable tendency given their initial focus on Atlantic Fordism and its crisis, my analysis is more concerned with the creation and articulation of different scales of accumulation and regulation. My account is closer here to other variants of the regulation approach, notably the Grenoble and Amsterdam schools, and its appropriation by geographers (e.g., Groupe de recherche sur la régulation d'économies capitalistes 1991; Overbeek 1993; van der Pijl 1998; MacLeod 1998).

This approach is applied below to five issues regarding globalization. Much of the confusion surrounding this topic derives from failures to examine the interconnections among different scales and/or to define and analyse relevant topics of inquiry at equivalent levels of abstraction-concreteness and simplicity-complexity. Thus it is important to distinguish scales and levels of analysis in exploring the five issues. They comprise: (1) the structural and strategic dimensions of globalization seen from a perspective that is temporal as well as spatial; (2) the role of globalization, especially in its neo-liberal form, in enhancing the ecological dominance of the capitalist economy, i.e., in enhancing the relative primacy of the capital relation in an emerging world society; (3) the significance of the global scale for capitalist reorganization and its relationship to other scales of economic activity; (4) the impact of the new scalar dynamics of globalizing capitalism on the relative primacy and forms of appearance of capital's inherent contradictions and dilemmas; and (5) the implications of globalization for the state and politics.

To address these issues adequately, however, the theoretical underpinnings of my doubly heterodox regulationism must first be presented. Thus I begin with a strategic-relational analysis of capital and its inherent contradictions and dilemmas and also assess its implications for the regularization of capital accumulation. Then follows a review of some key concepts from evolutionary theory for analysing the relation between the economic and extra-economic moments of capital accumulation and the conditions under which the self-expansion of a globalizing capital might come to dominate an emerging world society. Next comes a discussion of the spatio-temporal fixes that help to secure the always partial, provisional, and unstable equilibria of compromise that seem necessary to consolidate an accumulation regime and its mode of regulation. This involves not only relatively stable institutions but also capacities for governance in the face of turbulence. Thus equipped, I then offer some provisional answers to the five issues mentioned above. My contribution ends with some general remarks on the limits to neo-liberal globalization.

Capital as a Social Relation and an Object of Regulation

In preliminary methodological remarks, Marx argued that there is neither production in general nor general production – only particular production and the totality of production. He added that one could still theorize production in general as a 'rational abstraction' in order to fix the elements common to all forms of production prior to examining distinct forms and modes of production and their overall articulation in particular economic formations. Thus, rather than develop a transhistorical account of production in general or general production (as still occurs in orthodox economics, with its emphasis on the generic features of economizing conduct), attention should be focused on 'a definite production' and how this in turn 'determines a definite consumption, distribution, and exchange as well as *definite relations between these different moments*' (Marx 1973: 85, 99, italics in original). These relations are never purely technical or economic but always already social. For, as Marx noted in regard to capitalism, capital is not a thing but a social relation (Marx 1974: 717).

Marx located the defining feature of capitalism as a mode of production in the generalization of the commodity form to labour-power. It was this that enabled the self-valorization of capital.



For only then did capital's sole source of surplus-value acquire a commodity form, economic exploitation through the appropriation of surplus labour acquire its distinctive capitalist mediation through exchange relations, and the disposition of labour-power become subject to capitalist laws of value. The dominance of the value-form in the organization of labour markets and production shapes the nature and stakes of class struggle between capital and labour as well as the forms of inter-capitalist competition around the most effective valorization of labour-power. Continuing attempts to valorize capital in these conditions are the main source of capitalism's economic dynamism.

Marx identified a fundamental contradiction in the commodity form between exchange- and use-value. This was the basis on which he unfolded the complex nature of the capitalist mode of production and its dynamic; and showed *both* the necessity of periodic crises *and* their role in re-integrating the circuit of capital as a basis for renewed expansion. Building on this argument, I suggest that all economic forms of the capital relation embody different but interconnected versions of this contradiction and that these impact differentially on (different fractions of) capital and on (different strata of) labour at different times and places. They also have repercussions going well beyond the circuits of capital in the wider social formation. These contradictions are necessarily reproduced as capitalism itself is reproduced but they need not retain the same relative weight or significance for accumulation or regulation. It is important to add here that 'the reproduction of these contradictions with their contradictory effects and their impact on the historical tendency of capitalist development depends on the *class struggle*' (Poulantzas 1975, 40-1, italics in original). For the dynamic of accumulation, including transitions between stages or forms of capitalism, is closely related to social struggles. (6) These act as the vector through which contradictions and dilemmas are realized in specific conjunctures.

Given these premises, one must ask what precisely is the object of regulation that has so pre-occupied regulation theorists? Obviously, if there is no production in general or general production, 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*'. In the case of capitalism, the object of regulation is, of course, *capital as a social relation*. It is important here to consider not only the articulation of the technical and social division of labour within the circuits of capital but also the articulation between its economic and extra-economic moments. Thus the regulation approach emphasizes 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. In short, the scope of reproduction-régulation extends 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.

The next question is: why does capitalism need regulating? The answer suggested here is the indeterminate but antagonistic nature of this social relation and its dynamic. 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 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 regularization 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. 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 (Offe 1984). Moreover, as we shall see below, this is also associated with uneven waves of territorialization, de-territorialization, and re-territorialization (Brenner 1997; 1998; 1999a; 1999b).

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 realized profits available for re-investment) and a concrete stock of time- and place-specific assets in the course of being valorized; 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 (7) 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 valorization 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'. (8)

Such structural contradictions and associated strategic dilemmas are permanent features of the capital relation but assume different forms and primacies in different contexts. They also frequently find expression in different agents, institutions, and systems as the prime bearers of one or other aspect of a given contradiction or dilemma (see below). They can also prove more or less manageable depending on the specific 'spatio-temporal fixes' and the institutionalized class compromises with which they are from time to time associated. Nonetheless, insofar as these compromises marginalize 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 marginalized forces and enable them to disrupt the institutionalized 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 1976, 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 globalization. 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; and also justifies exploration of the path-dependent linkages between different economic trajectories and broader social developments.

Attention to these issues can provide the basis for typologies for comparative and/or historical analysis. The differential competitive advantages of nations, variations in national or regional systems of innovation, contrasting historical patterns of finance-industry relations, and different modes of economic governance, to take just four examples, cannot be fully explained without referring both to the structural coupling and co-evolution of economic and extra-economic systems and to the differential embedding, disembedding, and re-embedding of economic relations in the lifeworld and various extra-economic institutional orders. These same factors also shape the forms of internationalization that are pursued from different national economic spaces and/or by multinational firms with their home base in different national economies. Thus Ruigrok and van Tulder have demonstrated that US, European, and Japanese firms tend to pursue different internationalization strategies based on the specificities of their home bases – leading to the non-exclusive dominance of globalization strategies in the USA, of glocalization strategies in Japan, and of multi-domestic internationalization strategies in Continental Europe (Ruigrok and van Tulder 1995: 174-99). These strategies are associated in turn with different preferences in the strategic trade policy pursued by the states that provide the home base for these firms (Ruigrok and van Tulder 1995: 231-38). I return to these arguments below. Moreover, if different accumulation regimes and/or modes of regulation can be shown to succeed each other, this can also inform chronological and/or causal analyses of capital's periodization (Jessop 2001).

This approach also implies that the genesis of specific modes of regulation is historically contingent rather than capitalistically pre-ordained and that the objects of regulation do not, and cannot, pre-date regulation in their full historically constituted identity. Regulation is always historically specific and the forms it assumes in different contexts modify the objects subject to regulation. Hence modes of regulation and their objects can be seen as structurally coupled and historically co-evolving and no *a priori* primacy should (or could) be accorded to one or other. Because capitalism is underdetermined by the value-form, each mode of regulation compatible with continued reproduction imparts its own distinctive structure and dynamic to the circuit of capital – including distinctive forms of crisis and breakdown. This implies that there is no single and unambiguous 'logic of capital' but, rather, a number of such logics with a strong family resemblance. (9) Each of these will be determined through the dynamic interaction of the value-form (as the invariant element) and specific modes of regulation and accumulation strategies (as the variant element) (cf. Jessop 1990a: 310-11). Moreover, since each accumulation regime and/or mode of regulation is the product of the variable articulation between the economic and the extra-economic in specific spatio-temporal conjunctures, these distinctive structures and dynamics are always overdetermined by the embedding of the circuit of capital in broader social relations. This embedding is not simply a matter of interpersonal relations à la Granovetter (1985) but extends to institutional embedding (Polanyi 1944, 1957) and the coupling of economic and extra-economic system logics (Messner 1997; Wilke 1992, 1996).

A third implication is that the social struggles that serve as vectors for realising contradictions and dilemmas in specific conjunctures are not reducible to class struggles – let alone economic class struggles. They include many different social forces and many different types of struggle. For, taking account of the economic and extra-economic preconditions of capital accumulation and the problems involved in extending exchange relations into other systems and the lifeworld, one can identify many different sites and forms of social struggle that affect accumulation. Few are best described in terms of 'class struggle'. I prefer to restrict this term to struggles to establish, maintain, or restore the conditions for self-valorization within the capitalist economy understood in its integral sense. (10) Even here the class relevance of struggles is never given once-and-for-always but is both fought for and played out over time and space. Other types of struggle relevant to capitalist reproduction include struggles to resist extending the logic of accumulation (hence commodification or re-commodification) to non- or de-commodified social systems; struggles to prevent the colonization of the 'lifeworld' in defence of identities and interests that lie outside and/or cross-cut class interests (e.g., gender, race, nation, stage in the life-course, citizenship, human rights, or the environment);



and struggles over the dominant/hegemonic principle of societalization – struggles that extend well beyond class struggles, even broadly understood (cf. Jessop 1997a).

Ecological Dominance, Structural Coupling, and Co-Evolution

Marxist analysis commonly presupposes the primacy of the relations of production over the forces of production (11) in the mutual development of technologies and the economy. Affirming this does not commit one, however, to the notorious principle of determination in the last instance of the extra-economic by the economic. Indeed, in the last instance, this is a theoretically incoherent notion. For production relations (12) can be regarded as primary only in the economy and not in the wider society. But one could defend such a principle of determination if it were couched in systems-theoretical terms, i.e., in terms of the economy's 'ecological dominance' vis-à-vis other systems in its environment.

The idea of ecological dominance emerged in work on plant and animal ecosystems, where it refers to the capacity of one species to exert an overriding influence on others in a given ecological community. This is not the place to discuss evolution in biological ecosystems. However, I do want to suggest that the notion of 'ecological dominance' can be usefully extended to social systems once allowance is made for their specificities as communicatively- or discursively-mediated systems and for the capacity of social forces to reflect and learn about their own evolution and engage in attempts (successful or not) to guide it. Thus one could study social systems as bounded ecological orders formed by the co-presence of operationally autonomous systems and the lifeworld – with the structural coupling and co-evolution of these systems and the lifeworld mediated by various competitive, co-operative, and exploitative mechanisms. Ecological dominance would then refer to the capacity of a given system in a self-organising ecology of self-organising systems to imprint its developmental logic on other systems' operations through structural coupling, strategic co-ordination, and blind co-evolution to a greater extent than the latter can impose their respective logics on that system.

Such ecological dominance is always a relative, relational, and contingent feature of operationally autonomous systems. Thus a given system can be more or less ecologically dominant, its dominance will vary in relation to other systems and spheres of the lifeworld, and it will depend on the overall development of the ecosystem as a whole. It follows that there is no 'last instance' in relations of ecological dominance. Instead it is a contingently necessary rather than a naturally necessary aspect of a given operationally autonomous system. In other words, we are dealing with an ecological relation wherein some systems may be dominant, but not where one dominates (Morin 1980: 44). Later I propose that the economy is the ecologically dominant system in contemporary societies (especially in its globalizing form) but I first elaborate the general concept.

Luhmann has suggested that the functional sub-system that attains the highest degree of organized complexity and flexibility will tend to dominate the wider societal system in which it is located. For its dynamic will then have a greater influence on the performance of other sub-systems than they do on it (Luhmann 1974, 1981). This suggestion can be taken further in regulationist terms by identifying five analytically distinct, but empirically interrelated, aspects (13) of an operationally autonomous system that affect its potential for dominance. These are: (1) the extent of its internal structural and operational complexity and associated in-built redundancies, i.e., alternative ways of operating and communicating information, and the resulting degrees of freedom this gives it in how a given outcome may be achieved; (2) its ability to continue operating, if necessary through spontaneous, adaptive self-reorganization, in a wide range of circumstances and in the face of more or less serious perturbations; (3) its capacities to distantiate and compress its operations in time and space in order to exploit the widest possible range of opportunities for expanded self-reproduction; (4) its capacity to resolve or manage its internal contradictions, paradoxes, and dilemmas, to displace them into its environment, or defer them into the future; and (5) its capacity to get actors in other systems and the lifeworld to identify its own operations as central to the reproduction of the wider system of which it is merely a part – and thus to subordinate their own operations to their understanding of its particular reproduction requirements. These aspects can be decomposed into many, more specific features attributable to complex, operationally



autonomous systems and there have been many suggestions regarding the best criteria for identifying and operationalizing them (see, for example, Ashby 1958; Bendor 1985; Cillier 1998; Grabher 1994; Luhmann 1986; Morin 1980; Thompson 1994; Willke 1996).

Overall, where one system has superior capacities in these regards than the other systems in its environment, it will tend to be ecologically dominant. This does not exclude reciprocal influences on the ecologically dominant system. Nor does it exclude resistances to such dominance or attempts to brake or guide it through various forms of strategic co-ordination and meta-governance (see below). Indeed, one of the distinctive features of social systems is their capacity to engage in self-reflexive attempts to alter their environments, to guide their (co-)evolution, and even to change the forms in which (co-)evolution occurs (cf. Willke 1996: 48-51).

Ecological dominance is an emergent relationship between systems rather than a pre-given property of a single system and, as such, it depends on specific structural and conjunctural conditions. First of all, it presupposes the operational autonomy of the ecologically dominant system vis-à-vis other systems. This in turn presupposes clear boundaries between organizations or other social forces and/or a high degree of functional differentiation in macro-social formations. Pre-capitalist economies could not have been ecologically dominant, for example, because they were deeply embedded in wider social relations and lacked an autonomous operational logic. (14) Only with the generalization of the commodity form to labour-power does the capitalist economy acquire a sufficient degree of operational autonomy. But even when capitalism has gained its distinctive self-valorising dynamic, ecological dominance is one of its contingent and historically variable features rather than one of its generic, naturally necessary properties. For it depends on the specific qualities of particular accumulation regimes and modes of regulation, the general nature of the other systems in its environment, and specific conjunctural features.

We should note here the considerable historical and conjunctural variability in the structural and operational complexity and equifinality of capitalist economies; in their capacity for self-reorganization; in their power to stretch and compress economic relations in time and space; in their ability to handle contradictions, paradoxes, and dilemmas; and their capacities to secure support for the primacy of accumulation over other principles of societalization. And we should note, conversely, that other systems vary in their capacity to limit or resist the commodification of social relations and to contain the scope of different economic processes within specific territorial boundaries. Indeed the ecological dominance of capitalism would seem closely related to the extent to which its degrees of freedom, opportunities for self-reorganization, scope for time-space distantiation and compression, externalization of problems, and hegemonic capacities can be freed from confinement within limited ecological spaces policed by another system (such as a political system segmented along Westphalian lines into mutually exclusive sovereign territories). This is where globalization, especially in its neo-liberal form, becomes significant for the relative ecological dominance of the capitalist economic system.

Moreover, even when the conditions do exist for the capitalist economy to become ecologically dominant in the long-term, crises elsewhere could well lead to other systems acquiring short-term primacy. This is inherent in the fact that no subsystem represents, or can substitute for, the whole. For, as noted above, each autopoietic system is both operationally autonomous and substantively interdependent with other systems. It follows that even an ecologically dominant system depends on the performance of other systems and that primacy may even shift to a system that is normally non-dominant in specific conjunctures. This would happen to the extent that solving crises affecting them and/or solving more general crises that require their distinctive contributions becomes the most pressing problem for the successful reproduction of all systems – including the capitalist economy. For example, during major international or civil wars or preparations for such events, national states may seek to subordinate economic activities to politico-military requirements. This can be seen in both World Wars in the twentieth century and in the activities of national security states during the Cold War. After such states of emergency (note the term), however, considerations of accumulation are likely to re-assert themselves. This does not exclude, of course, path-dependent traces of such exceptional conditions within the normally dominant system (e.g.,



the distinctive features of peacetime war economies or the legacies of total war on post-war economic trajectories). But the ecologically dominant system will still have a larger impact on other systems' development in the multilateral process of structural coupling and co-evolution than these other systems do on it.

In general terms, one could argue that the economic system is internally complex and flexible because of the decentralized, anarchic nature of market forces and the role of the price mechanism both as a stimulus to learning and as a flexible means of allocating capital to different economic activities. More specifically, as capitalism develops, different organizations, institutions, and apparatuses tend to emerge to express different moments of its contradictions, paradoxes, and dilemmas and these then interact in an unstable equilibrium to compensate for market failures. Capital also develops its capacity to extend its operations in time and space (time-space distantiation) and to compress its operations, making it easier to follow its own logic in response to perturbations (time-space compression). Through these and other mechanisms it develops the capacity to escape the structural constraints and control attempts of other systems. This can occur through its own internal operations in time (discounting, insurance, risk management, futures, etc.) or space (capital flight, relocation, extra-territoriality, etc.) or through attempts to subvert these systems through personal corruption or colonization by the commodity form. This is truer of the exchange-value moment of the capital relation with its capacity to flow through time and space – and less true of capital considered in its substantive aspects. For capital in its substantive aspects is itself always already strongly overdetermined by its embedding in other social orders and its coupling to other systems (see below). In addition to its greater complexity and flexibility, the capitalist economy has a greater capacity for perturbing other subsystems and also makes greater demands on their performance as preconditions of its own reproduction.

Globalization powerfully reinforces this always-tendential ecological dominance in at least five interrelated respects. Before specifying these, however, it is important to note that globalization is not a single causal process but the complex, emergent product of many different forces operating on various scales. The first aspect is that globalization is associated with an increasing complexity of the circuits of capital and an increasing flexibility in its response to perturbations. Second, globalization enhances capital's capacity to defer and displace its internal contradictions, if not to resolve them, by increasing the scope of its operations on a global scale, by enabling it to deepen spatial and scalar divisions of labour, and by creating more opportunities for moving up, down, and across scales. These enhanced capacities are associated with a marked reinforcement of uneven development as the search continues for new spatio-temporal fixes. This is closely related to time-space distantiation and time-space compression. Third, it reinforces the emancipation of the exchange-value moment of capital from extra-economic and spatio-temporal limitations. This extends the scope for capital's self-valorization dynamic to develop in a one-sided manner at the expense of other systems and the lifeworld. Fourth, it magnifies capital's capacity to escape the control of other systems and to follow its own procedures in deciding how to react to perturbations. This is particularly associated with its increased capacity for discounting events, its increased capacity for time-space compression, its resort to complex derivative trading to manage risk, and its capacities to jump scale. Fifth, it weakens the capacity of national states to confine capital's growth dynamic within a framework of national security (as reflected in the 'national security state'), of national welfare (as reflected in social democratic welfare states), or some other national matrix.

The tendential ecological dominance of the capitalist economy does not mean that its influence on other systems and the lifeworld is unilateral and uniform. It is, on the contrary, asymmetrical and variable. The political system, which is currently materialized above all in the institutional architectures of national states and international relations and linked to the lifeworld through public opinion, also has important reciprocal influences on the development of the capitalist economy. Indeed it poses the biggest challenge to the latter's ecological dominance. For, whilst the state system is responsible for securing certain key conditions for the valorization of capital and the social reproduction of labour power as a fictitious commodity, it also has overall political responsibility for maintaining social cohesion in a socially divided, pluralistic social formation. The always-problematic relationship between these functions generates risks and uncertainties for capital accumulation as does state



failure in either regard. This is why there is typically a strong structural coupling and co-evolution between the economic and the political in accumulation regimes and their modes of regulation. It is also why struggles over political power are so crucial to the reproduction-régulation of capital accumulation and why the state is so central to securing the spatio-temporal fixes in and through which relatively stable accumulation becomes possible. And it is why globalization, especially in its neo-liberal form, represents such a challenge to the actually existing institutional architecture of the political system. For it tends to weaken the typical form of the national state in advanced capitalist societies as this developed during the period of Atlantic Fordism and to disrupt the spatio-temporal fixes around which both accumulation and the state were organized. These issues are elaborated later.

Other systems are typically less likely to attain the relative ecological dominance of the political system, let alone that of a globalizing economy, as they depend more on the performances of the political and economic systems than the latter do on them. Nonetheless, even though the relations between operationally autonomous but substantively interdependent systems may be more or less strongly asymmetrical, there will always be structural coupling and co-evolution among them. This can be explained through the usual trio of evolutionary mechanisms: variation, selection, and retention (Campbell 1969). Variation in activities in each system will prove more or less perturbing to the self-organization of other systems. Thus, where operationally autonomous but interdependent systems share the same social space, their development tends to become structurally coupled through mutual adaptation to the changes in their environment generated by the operations of the other systems – adaptations which are governed by each system's own operational code or organizational logic. If a particular pattern of interaction reveals a damaging incongruence in *mutual* expectations, it will either be suspended or expectations will be varied. Those variations will get co-selected that least interfere with the distinctive autopoiesis of the different interacting systems and they will then be co-retained as these selections become suitably sedimented in the programmes, organizational intelligence, strategic capacities and moral economies of the various co-existing systems. Although attempts are often made to co-ordinate or steer co-evolution in social systems, no consensus is needed for this sedimentation to occur. Indeed, it would be impossible to guide such a complex process – any attempts at design are always located within broader processes of blind co-evolution. All that is necessary for such sedimentation to occur is a long-run congruence between individual system autopoiesis and inter-systemic interaction.

The relevance of these general evolutionary arguments to capitalist development becomes clear as soon as one recalls that the capital relation cannot be reproduced exclusively through the value form. For it is asymmetrically interdependent on other systems and the lifeworld for key inputs to help secure closure of the circuit of capital and for compensation for market failures. Thus, outside a wholly imaginary 'pure capitalist economy' (on which, see Albritton 1986), capitalism is 'structurally coupled' to other systems and to the 'lifeworld'. The former include the legal and political systems, which provide important extra-economic conditions for accumulation even in liberal, competitive capitalism; but which are nonetheless operationally autonomous from the capitalist market economy and have their own instrumental rationalities, logics of appropriateness, and institutional dynamics. They also include other self-organizing (or autopoietic) systems with their own mutually distinctive codes, rationalities, logics, and dynamics, such as education, science, medicine, sport, art, and religion. All such systems constitute environments for the self-valorization of capital, providing final markets as well as inputs. The 'lifeworld' in turn comprises various social relations, identities, interests, and values that stand outside and/or cut across specific systems rather than being anchored in them. (15) It includes social relations such as gender, generation, ethnicity, national identity, generation, associational memberships, new social movements, and so forth. These influence affect the economy by shaping opportunities for profit as well as influencing struggles over commodification, de-commodification, and re-commodification of the wider society. This can be illustrated through such phenomena as the gendered division of labour; dual labour markets structured around generational and ethnic divisions; the development of markets oriented to the 'pink pound'; concerns about regional, urban, and national competitiveness; or the impact of green movements on strategies for ecological modernization.



This implies that the development of the capitalist (market) economy is closely bound up with non-economic factors and that it never follows a purely economic logic. Its development is always overdetermined by its coupling to other systems and the lifeworld. Seen in these terms, the development of the capitalist economy is embedded in a wider nexus of social relations and institutions and the lifeworld; its evolution is linked to enviroing, embedding institutions and the activities of wider social forces; and these institutions and forces may either help or hinder its overall reproduction, regularization, and governance. Thus accumulation regimes are usually associated with modes of regulation that regularize the extra-economic as well as the economic conditions required for their expanded reproduction and that require the cooperation of extra-economic forces. This structural coupling develops in the first instance through co-adaptation among the economic, political, and other systems. Such blind co-evolution can generate an 'historical bloc', i.e., an historically constituted and socially reproduced correspondence between the so-called 'economic base' and 'politico-ideological' superstructures of a social formation. Moreover, insofar as it is the economy that is ecologically dominant, the historical bloc acquires an apparent 'base-superstructure' pattern conforming to economic determinist predictions. Yet this can be explained in blind co-evolutionary terms without the need to resort to the notorious principle of economic determination in the last instance understood as a unilinear, unilateral, and uniform causal relationship (cf. Jessop 1990a: 358-9).

Strategic Co-ordination, Governance, and Meta-Steering

Whereas 'structural coupling' refers to the formal and substantive articulation of different structures treated as autonomous structures, 'strategic co-ordination' refers to the strategic dimension of co-evolution from the viewpoint of specific social forces. The same systems theory that provides the idea of ecological dominance also offers key insights into the nature and limits of steering as applied to autopoietic systems. It explores how one operationally autonomous system can influence the operations of another such (relatively closed) system by altering the environment in which the latter reproduces itself and also examines how governance mechanisms might shape their joint evolution. This is especially relevant to the path-shaping efforts of economic, political, and other social forces to influence, steer, or govern the nature and direction of their co-evolution.

The evolution of the economy on a world scale is essentially anarchic and its relationship to other systems and the lifeworld is characterized by blind co-evolution based on *post hoc* structural coupling. Nonetheless, there is limited and localized scope for steering economic development and co-ordinating activities across the economic and extra-economic divide. Such activities can occur on different levels: interpersonal, inter-organizational, and inter-systemic. Such path-shaping efforts are mediated through subjects who attempt to engage in *ex ante* self-regulatory strategic co-ordination, monitor the effects of that co-ordination on goal attainment, and modify their strategies as appropriate. In this way cooperation among actors from different systems will follow from application of their own system's operating codes in changed circumstances rather than from an externally imposed imperative co-ordination (see Glasgow and Willke 1987; Willke 1992; Willke 1996). This can be facilitated by communication oriented to intersystemic 'noise reduction' (promoting mutual understanding among different systems), negotiation, negative co-ordination (mutual respect for the operational codes of other systems and attempts to avoid negative impacts on these systems), and cooperation in shared projects. It can also resort to symbolic media of communication such as money, law, or knowledge to modify the structural and/or strategic contexts in which different systems function. Such media play a crucial role in mediating the relations between operationally autonomous but substantively interdependent systems. For example, the economy depends on coercion (e.g., to secure property rights) which is not produced within the economy; the polity depends in turn on revenues (in the form of taxes) generated in the economy. Money and law provide crucial mediations between these two orders: money appears as a fictitious commodity in the economy, as taxation and public spending in the political system; law appears as property rights in the economy, as legal rights in the political system. Money and law also serve as regulatory devices to bridge relations between economics and politics. Thus money connects the productive and administrative economies and circulates between them; and law mediates between civil and political society. In this sense money and law stand at the centre of an indissolubly mixed public-private space – they belong to both the public and



private spheres, they must be valid within both the political and economic spheres, and they mediate between them (Théret 1991: 134-145).

Since the structure of the social world is always more complex than any social force can conceive and its overall evolution lies beyond the control of any social force, strategic co-ordination can only occur in the context of the uncontrolled and anarchic coupling of co-evolving structures and systems. Indeed, autopoietic systems theory also teaches us that such attempts at strategic co-ordination can never fully represent the operational logic (let alone fully comprehend the current conjuncture and future direction) of whole subsystems; and that the development of such mechanisms of co-ordination adds further layers of complexity to the social world. It thereby risks adding governance failure to market failure and state failure as problems to be confronted, if only through their unforeseen and/or unintended consequences and side-effects. This raises the issue of whether meta-steering might be possible, i.e., the use of higher-order mechanisms to collibrate different modes of steering (markets, states and other forms of imperative co-ordination, networks). (16) But the same arguments that indicate the probability of steering failure apply with equal force to meta-steering failure (see Jessop 1998).

These ideas have important implications for accumulation strategies, state projects, and hegemonic projects on various scales of action and over different time horizons. For these all represent different attempts to strategically co-ordinate activities across different systems and the lifeworld in order to achieve a limited, localized structural coherence in accumulation, state activities, and social formations respectively. Armed with these general arguments, I now consider: (a) the structural coupling and strategic co-ordination of capital accumulation and modes of regulation within specific spatio-temporal horizons; and (b) the role of these spatio-temporal fixes in facilitating the displacement and/or deferral of the contradictions and dilemmas of capital accumulation.

On Spatio-Temporal Fixes

Reproducing and regularizing 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 externalizing 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 marginalized, excluded, or subject to coercion.

The primary scales and temporal horizons around which these fixes are constructed and the extent of their coherence vary considerably over time. This is reflected in the variable coincidence of different boundaries, borders, or frontiers of scales of action (e.g., medieval polymorphy, Westphalian exclusivity, post-Westphalian complexity), the changing primacy of different scales (e.g., the displacement of the urban scale by the national territorial scale with the emergence of capitalism and the integration of cities into national economic systems and their subordination to the political power of states or the recent emergence of global city networks more oriented to other global cities than to national hinterlands) (cf. Braudel 1983; Taylor 1995a,b; Brenner 1998). In this context, then, it is worth enquiring after the implications of globalization for spatio-temporal fixes.

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-realization of specific accumulation strategies in specific spatio-temporal contexts (Jessop 1983). 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 marginalize 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 synthesized 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 marginalizes or sanctions others. It also refers to what is needed to secure an institutionalized 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, 1999b). In establishing this general interest and institutionalized 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 1997). 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 organization is premised on a distinction between nation states; and, in this context, some parts of the state apparatus specialize in external relations, some in internal relations. However, with the growing impact of globalization 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 localization, etc..

There can also be a temporal division 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 infighting. 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..

Governance has a key role here in modulating the scalar and spatial divisions of labour and allocating specific tasks to different sites of action. This may be triggered by changes in the unstable equilibrium of compromise around which accumulation is organized. The neglect of key economic and/or extra-economic conditions for accumulation generates increasing tensions to give them greater priority. These tensions may be evident from the emergence of crises and/or from the mobilization of social forces whose support is critical to accumulation but whose interests are affected adversely by this neglect (Clarke 1977). Meta-steering enters here as a means to collibrate different governance mechanisms and modify their relative importance. Collibration is concerned with the overall organization and balancing of the different forms of co-ordination of complex reciprocal interdependence (Dunsire 1996). In



addition to meta-steering practices within the more or less separate fields of anarchic market exchange, hierarchical organizations, and heterarchic self-organization, there is also extensive scope for meta-governance practices that steer the evolving relationship among these different modes of co-ordination. The need for such practices is especially acute in the light of the wide dispersion of governance mechanisms in an emerging world society and the corresponding need to build appropriate macro-organizational and intersystemic capacities to address far-reaching increases in the complexity of interdependencies without undermining the basic coherence and integrity of the (national) state.

The concept of spatio-temporal fix proposed here differs from David Harvey's notion of spatial fix in at least three respects. First, in attempting to redress what he regards as the exaggerated concern with time in earlier Marxist dialectical accounts, Harvey tends to focus one-sidedly on spatial fixes. But there is a close connection between spatiality and temporality in securing the relative structural coherence of capital accumulation. This holds not only in the trite sense that space and time are so inextricably interwoven that space cannot be seen as static, nor time as spaceless (Massey 1992: 77, 80); but also in the sense that these fixes involve the construction of specific time-space envelopes (or power geometries) that are based on differential articulations of time-space distantiation and time-space compression (Massey 1992; Sum 1999; Jessop 1999a,b).

Second, Harvey examines spatial fixes primarily in terms of just one of the many contradictions of capital accumulation, namely, that between productive capital as abstract value in motion (notably in the form of realized profits available for re-investment) and as a concrete stock of time- and place-specific assets in the course of being valorized. He analyses two aspects of this: (a) the impulsion to accelerate turnover time, to speed up the circulation of capital and, hence, to revolutionize the time horizons of economic development – all of which requires, however, long-term infrastructural investment; and (b) the pressure to eliminate all spatial barriers to accumulation, to 'annihilate space through time' – which requires the production of a fixed space. Although Harvey refers to problems of temporality in regard to both aspects, (17) the capitalist solution he identifies is spatial. In particular he focuses on the production of localized geographical landscapes of long-term infrastructural investments that facilitate the turnover time of industrial capital and the circulation of commercial and financial capital. Later these landscapes (of place relations, territorial organization, and inter-linked places) will need to be destroyed and rebuilt to accommodate a new dynamic of accumulation (Harvey: 1996, 6). This analysis is certainly important and insightful. But each of the different contradictions of capital accumulation has its own spatio-temporal aspects and associated dilemmas. A coherent spatio-temporal fix must reflect all aspects.

And, third, Harvey does not address the different forms of spatio-temporal fix in relation to different stages or forms of capital accumulation nor their articulation to institutionalized class compromise or modes of regulation. His is a general model that is illustrated from different stages of capitalism but does not actually distinguish different scales or temporal horizons as more or less important in particular periods or forms of capitalism. This does not mean that it cannot be adapted to take account of these issues – merely that it remains for this to be done.

Atlantic Fordism and The KWNS

No accumulation strategy can ever be completely coherent or fully institutionalized. This is due both to the opacity and indeterminacy of the conditions necessary to capital accumulation; and to the need to develop and build support for the strategy in and across conflictual fields of competing strategies associated with other social forces. Nonetheless, insofar as one accumulation strategy becomes dominant or hegemonic and is institutionalized within a specific spatio-temporal fix, it will facilitate the consolidation of an accumulation regime within the economic space linked to this fix. Because the underlying contradictions and dilemmas still exist, however, any such regimes are always partial, provisional, and unstable. The circuit of capital can still break at many points. Economic crises then serve to re-impose the always-relative unity of the circuit of capital through various kinds of restructuring. If these are compatible with the prevailing accumulation regime, growth will be renewed within its parameters. If not, a crisis *of* – and not just *in* – the accumulation regime



will develop, provoking the search for new strategies, new institutionalized compromises, and new spatio-temporal fixes.

In the so-called 'thirty glorious years' of post-war expansion in advanced capitalist economies, the national scale of economic organization dominated. National economies were the taken-for-granted objects of economic management. This can be seen not only in the circuits of Atlantic Fordism but also in the so-called mercantilist regimes or 'trading nations' of East Asia and the import-substitution accumulation strategies of many Latin American economies. While international institutions and regimes were organized to rescue European nation-states and to ensure national economic growth, for example, their sub-national (regional or local) states acted primarily as the relays of national policy. This 'naturalization' of the national economy and national state was linked (within Atlantic Fordism) to the relative closure of post-war economies undergoing reconstruction on the basis of mass production and mass consumption. In several East Asian economies, the same effect was achieved through 'national security' discourses that connected the nation's internal and/or external security to close control over the domestic economy.

These claims can be illustrated with some brief comments on accumulation regimes and modes of regulation in those economic spaces directly integrated into the circuits of Atlantic Fordism under US hegemony. These comments concern the structural coherence of this system, the factors leading to its breakdown, and the scope the latter offers for a coherent post-Fordism. Such issues cannot be theorized without starting from contradictions inscribed in capital's various structural forms and their associated strategic dilemmas.

Atlantic Fordism can be briefly defined as an accumulation regime based on a virtuous autocentric circle of mass production and mass consumption secured through a distinctive mode of regulation that was institutionally and practically materialized in the Keynesian welfare national state (hereafter KWNS – for more details, see Jessop 1993, 1994, 1999c). My interest here is in the limits of the KWNS as a mode of regulation. This made its distinctive contribution to the Atlantic Fordist regime by managing, at least for a while, the contradictions in the different forms of the capital relation. The Atlantic Fordist economies benefitted from a spatio-territorial matrix based on the congruence between national economy, national state, national citizenship, and national society; and from institutions relatively well adapted to combining the tasks of securing full employment and economic growth and managing national electoral cycles. This spatio-temporal fix enabled a specific resolution of the contradictions of capital accumulation as they were expressed under Atlantic Fordism. Thus, within relatively closed national economies which had been institutionally-discursively constituted as the primary objects of economic management, national states aimed to achieve full employment by treating wages primarily as a source of (domestic) demand and managed their budgets on the assumption that money circulated primarily as national money. The diffusion of mass production (and its economies of scale) through expanding Fordist firms as well as the development of collective bargaining indexed to productivity and prices were the primary means for controlling wages as a cost of production. And the combination of the Bretton Woods monetary regime and the GATT trade regime helped ensure that the (still limited) circulation of free-floating international currencies did not seriously disturb Keynesian economic management through state control over the national money. Welfare rights based on national citizenship helped to generalize norms of mass consumption and thereby contributed to full employment levels of demand; and they were sustained in turn by an institutionalized compromise involving Fordist unions and Fordist firms. Securing full employment and extending welfare rights were in turn important axes of party political competition.

Some costs of the Fordist compromise and the KWNS were borne within Fordist societies themselves by the relative decline of small and medium firms, by workers employed in disadvantaged parts of segmented labour markets, and by women subject to the dual burden of paid and domestic labour. Other costs were borne beyond Fordist societies by economic and political spaces that were integrated into international regimes (such as those for cheap oil or migrant labour) necessary to Atlantic Fordism's continued growth but that were not included within the Fordist compromise. Atlantic Fordism was also enabled through a Janus-faced temporal fix. On the one hand, it depended on the rapid exploitation of non-renewable



resources laid down over millennia (notably the 'subterranean forest' of fossil fuels as well as raw materials); and, on the other hand, it produced environmental pollution and social problems that it did not address within its own temporal horizons – as if working on the principle of *après moi, la déluge* (see, for example, Altvater 1993, 247-278; Brennan 1995; Stahel 1999).

Crises *in* and *of* Fordism are inevitably overdetermined. The typical manifestation of the crisis *in* Fordism was an increasing tendency towards stagflation – which reflected the distinctive grounding of its mode of regulation in the wage and money forms. But this crisis-tendency was usually overcome through a combination of crisis-induced economic restructuring and incremental institutional changes. The crisis *of* Fordism was manifested in the breakdown of these crisis-management mechanisms. A major contributing factor in this regard was the undermining of the national economy as an object of state management – notably through the internationalization of trade, investment, and finance and other features ascribed to globalization. This led to a shift in the primary aspects of its two main contradictions and gave renewed force to other familiar expressions of the underlying contradictions of capitalism. Thus the wage (both individual and social) came increasingly to be seen as an international cost of production rather than as a source of domestic demand; and money has increasingly come to circulate as an international currency and has thereby weakened Keynesian economic demand management on a national level. This shift in the primary aspect of the contradiction in the money form is related to the tendency for the dynamic of industrial capital to be subordinated to the hypermobile logic of financial capital and the tendency for returns on money capital to exceed those on productive capital. At the same time the relative exhaustion of the Atlantic Fordist growth dynamic posed problems of productivity growth and market saturation (which combine to intensify an emerging fiscal crisis of the state) and problems of how best to manage the transition to the next long wave of economic expansion (which entails changes in the temporal horizons of state economic intervention and thus in the forms and mechanisms of such intervention). The crisis of US hegemony is also reflected in struggles over the shaping of new international regimes and the extent to which they should serve particular American interests rather than the interests of capitalism more generally. (18) In addition, new conflicts and/or forms of struggle have emerged that cannot be stabilized within existing structural forms: two major examples are the rise of new social movements and the crisis of corporatism. New problems have also emerged, such as pollution and new categories of risk, which are not easily managed, regularized, or governed within the old forms. Finally, we should note that, relative to the growth phase of Atlantic Fordism, some contradictions have increased in importance and/or acquired new forms.

Globalization

This section considers the implications of globalization for the increasing ecological dominance of capitalism. The over-inflated, catchall quality of the word 'globalization' tends to increase rather than reduce the confusion about current tendencies and trends in capitalism and the wider world. My own view is that globalization is, in general, best interpreted as the complex resultant of many different processes rather than as a distinctive causal process in its own right. It is misleading to explain specific events and phenomena in terms of some general process of 'globalization'. If adequately re-specified, however, trends towards globalization can certainly help to situate and interpret current changes in the spatial scale of economic (and other types of) institutions, organizations, and strategies. Indeed, although there are certainly discernible trends towards globalization, they are inevitably linked closely and in complex ways to processes occurring on other spatial scales. Whilst the trend towards global economic integration is promoted through structural trends and explicit strategies on less inclusive spatial scales, the latter are also important sites of counter-tendencies and resistance to globalization.

Globalization has both structural and strategic moments. Structurally, it involves the processes whereby increasing global interdependence is created among actions, organizations, and institutions within (but not necessarily across) different functional subsystems (economy, law, politics, education, science, sport, etc.). These processes occur on various spatial scales, operate differently in each functional subsystem, involve complex and tangled causal hierarchies rather than a simple, unilinear, bottom-up or top-down



movement, and often display an eccentric 'nesting' of the different scales of social organization. This implies in turn, of course, that globalization is liable to uneven development in spatio-temporal terms. Nonetheless, globalization can be said to increase insofar as the co-variation of relevant activities is spatially more extensive and/or occurs more rapidly. For globalization involves both 'time-space distantiation' and 'time-space compression'. The former process involves the stretching of social relations over time and space so that relations can be controlled or co-ordinated over longer periods of time (including into the ever more distant future) and over longer distances, greater areas, or more scales of activity. In this regard globalization is a result of increasing spatial distantiation reflected in the increasing spatial reach of divisions of labour in different fields of activity and is made possible by new material and social technologies of transportation, communication, command, control, and intelligence. Time-space compression involves the intensification of 'discrete' events in real time and/or the increased velocity of material and immaterial flows over a given distance. This is linked to changing material and social technologies enabling more precise control over ever-shorter periods of action as well as 'the conquest of space by time'. Combined with time-space distantiation, differential abilities to compress time and space become major bases of power and resistance in the emerging global order. Thus the power of hypermobile forms of finance capital depends on their unique capacity to compress their own decision-making time (e.g., through split-second computerized trading) whilst continuing to extend and consolidate their global reach. It also poses serious problems for global governance insofar as this must be tackled across a range of potentially contradictory temporal and spatial horizons. This brings us to the strategic dimension of globalization.

Strategically, globalization refers to various actors' attempts to promote global co-ordination of activities in (but not necessarily across) different functional subsystems and/or the lifeworld. This does not require that the actors involved are physically present at all points in the globe, of course; all it requires is that they attempt to co-ordinate their activities with others in order to produce global effects. The latter can range from meta-steering (constitutional or institutional design) for a more or less comprehensive global order to the pursuit of specific economic-corporate interests within such a meta-framework. Among the most ambitious global projects one could include projects for world government, global governance, or a new world order. There is clearly scope for wide variation in such projects as evidenced by the neo-liberal, market-led globalization favoured by the World Bank, the horizontal 'global governance' favoured by proponents (especially NGOs) of international regimes, and plans for more top-down inter-statal government. Less ambitious but still global projects might range from attempts to establish 'international regimes' to govern particular fields of action on a global scale through strategic alliances orchestrated by transnational enterprises (alliances which may include more local or regionally-based firms as well as non-profit-oriented organizations) or cooperation among global cities to consolidate their dominance in the hierarchy of global cities down to the efforts of individual firms to consolidate a dominant or even a niche position within the international division of labour and/or circulation of goods and services. Forms of co-ordination involved in globalization can also vary widely – ranging from intersystemic co-ordination in major world forums through inter-organizational negotiation (e.g., strategic alliances) to interpersonal networking (e.g., the Chinese diaspora). Given the importance of the path-dependent contexts of such path-shaping activities as well as the inherent limitations of any attempt to steer the structural coupling and co-evolution of operationally autonomous but substantively interdependent systems, there is every likelihood that such projects will be more or less unsuccessful in their own terms even if they have significant repercussions on various scales.

Thus viewed, what is generally labelled nowadays as 'economic globalization' rarely, if ever, involves full structural integration and strategic co-ordination across the globe. Processes included under this rubric actually include: (a) internationalization of national economic spaces through growing penetration (inward flows) and extraversion (outward flows); (b) formation of regional economic blocs embracing several national economies – including, most notably, the formation of various formally organized blocs in the triadic regions of North America, Europe, and East Asia – and the development of formal links between these blocs – notably through the Asia-Pacific Economic Cooperation forum, the New Transatlantic Agenda, and the Asia-Europe Meetings; (c) growth of more 'local internationalization' or 'virtual regions'



through the development of economic ties between contiguous or non-contiguous local and regional authorities in different national economies – ties that often by-pass the level of the national state but may also be sponsored by the latter; (d) extension and deepening of multinationalization as multinational companies and transnational banks move from limited economic activities abroad to more comprehensive and worldwide strategies, sometimes extending to 'global localization' whereby firms pursue a global strategy based on exploiting and/or adjusting to local differences; (e) widening and deepening of international regimes covering economic and economically relevant issues; and (f) emergence of globalization proper through the introduction and acceptance of global norms and standards, the development of globally integrated markets together with globally oriented strategies, and 'deracinated' firms with no evident national operational base. In each case these processes could be said to be contributing in however mediated and indirect a way to the structural integration and strategic co-ordination of the capitalist economy on a global scale. But they do so in a dispersed, fragmented, and partial manner and they are far from producing an homogenized world economy marked by the absence of uneven spatio-temporal development.

Thus economic globalization clearly involves a combination of processes on many different scales and is certainly far from being a purely 'global' phenomenon. Indeed, as Budd (1992) notes, 'the global cannot abolish the local'. Instead what globalization involves in both its structural and strategic moments is the creation and/or restructuring of scale as a social relation and as a site of social relations. This is evident in the continuing (if often transformed) significance of smaller scales (notably the urban, the cross-border, the national, and macro-regional) as substantive sites of real economic activities; in economic strategies oriented to the articulation of other scales into the global – such as glocalization, 'glurbanization', (19) international localization, and so forth; and in new social movements based on localism, various 'tribalisms', or resurgent nationalism and resistant in different ways to globalization. This suggests in turn that what can be described from one perspective as globalization could equally well be described from other perspectives in terms of changing forms of triadization, regionalization, urbanization, and so on. None of these processes is confined to one scale: they are all multi-scalar, multi-temporal, and multi-centric. This implies that a global strategy should be sensitive to other scales than the 'purely' global – especially as the latter has social meaning only in relation to lesser scales. Indeed the global more often serves as the ultimate horizon of action rather than the actual site of action, i.e., as an ultimate horizon of action, it serves as a means to orient actions on lesser scales! This is not an insignificant role. For failure to take strategic account of the global, even if actions remain confined to other scales, could well lead to a more or less rapid loss of competitiveness.

Globalization is part of a proliferation of scales as institutionalized, narrated objects of action, regularization, and governance. The number of discrete scales of action that can be distinguished is potentially infinite but far fewer scales actually come to be institutionalized as explicit objects of regularization and governance. For this depends on the availability of specific technologies of power – material, social, and spatio-temporal – that transform potential scales of action into actual sites of action. In addition to logistical means (distantiation, compression, virtual communication), there are modes of governance, organizational technologies, and institutional architectures. In this context I suggest that economically and politically significant institutionalized scales of action have proliferated due to the development of new technologies, organizations, and institutions with new spatio-temporal horizons of action. Moreover, as new scales emerge and/or existing scales gain in institutional thickness, new mechanisms to link or co-ordinate them also tend to emerge. This in turn often prompts efforts to co-ordinate these new co-ordination mechanisms. Thus, as the triad regions begin to acquire institutional form and regional identity, new forums have developed to co-ordinating bilateral relations between them. In the wake of the North American Free Trade Area, the European Union, and an emerging East Asian economic region, for example, we can witness the emergence of the Transatlantic Dialogue, the Asia-Europe Meetings, and Asian-Pacific Economic Cooperation. Likewise, as regionalism develops within the European Union, we find not only an EU wide committee of the regions but also a proliferation of other peak associations and multi-lateral linkages among regions. Yet lower down the scale, local authorities develop national associations to represent their



interests at national, regional, international, and global levels. All of this produces increasing scalar complexity, increasing scope for deliberate interscalar articulation, and increasing problems in making such interscalar articulation work.

A similar process is at work regarding temporal horizons of action. New information, communication, logistical, and organizational technologies have enhanced the capacities of some actors to engage in time-space compression and this has helped to transform power relations within and across different systems and the lifeworld. Time-space compression contributes to globalization through the increased capacities it offers for time-space distantiation. It also reinforces the ecological dominance of the market economy by enhancing the opportunities for some economic agents to intensify the exchange-value moment of the capital relation at the expense of the use-value moment; and for others to respond to this by moving to just-in-time production and fast service to their markets (see Sum 1999). Trends towards time-space compression are also accompanied by growing recognition of longer-term temporal horizons up to the *longue durée* of environmental damage – although globalization is also associated with its acceleration. These developments pose problems of inter-temporal comparisons and calculation as well as inter-temporal co-ordination; and these call for more complex forms of organization and co-ordination – which thereby increase the complexity of the system as a whole.

Thus, far from producing an homogenized global economic space, processes involved in globalization actually involve the re-ordering – across a wide range of economic spaces on different spatial scales – of differences and complementarities as the basis for dynamic competitive advantages. This has both structural aspects linked to the structural coupling and co-evolution of different spaces within an emerging global division of labour and its eccentric, nested, sub-scales; and strategic aspects, with different actors looking for the best means of inserting themselves into the spatial, scalar, and temporal divisions of labour. In this context not all actors are (or could hope to be) major global players but an increasing number need to attend to the global as a horizon of action, to the implications of changing scalar divisions, and to the differential impact of time-space distantiation and compression on their identities, interests, and strategies. The implications of this for economic, political, and social action were anticipated by Henri Lefebvre in his argument that 'the viability of all strategies of capital accumulation, modes of state regulation and forms of socio-political mobilization has come to depend crucially upon the ability to produce, appropriate, organize, restructure and control social space' (Lefebvre 1972, cited Brenner 1997: 1). We need only to add that it is not merely the ability to produce, appropriate, organize, restructure and control social space that is at stake here but also the ability to do likewise in relation to the temporalities of social action.

The Relativization of Scale

This emphasis on the articulation of scales brings us to a key aspect of the current round of globalization – the relativization of scale. The crisis of Atlantic Fordism with its primacy of the national scale has disrupted the mutuality between cities and territorial states characteristic of Atlantic Fordism (Taylor 1995a,b); it has also disturbed the nested relationship between local, regional, and national governments. Similar problems are found in economies outside the former heartlands of Atlantic Fordism, its semi-peripheries in Southern Europe, or more peripheral regions that served as its production platforms. Thus there is a more general (indeed, global) problem today about the relative importance to be accorded to global, national, and so-called 'regional' sites and spaces of economic action.

As economic internationalization and globalization proceeded, the taken-for-grantedness of national economic space has been called into question as national economies became more crisis-prone and unmanageable through traditional forms of state intervention in a mixed economy. States could no longer act as if national economies were more or less closed and their growth dynamics were primarily domestic. This has undermined the national economy as an object of economic management and led to quite different conceptions of the economy and, *a fortiori*, its mechanisms of economic and social governance. Replacing the national economy as the primary object of economic governance is the knowledge-driven economy in an era of globalization (Castells 1996). Its growth dynamic depends on how effectively a given economic space – not necessarily a national economy – is inserted into the changing global



division of labour. This has prompted concern with international economic competitiveness and supply-side intervention – initially to supplement national demand management, later as the primary objective and means of economic intervention. Yet no other scale of economic and political organization (whether the 'local' or the 'global', the 'urban' or the 'triadic', the 'regional' or the 'supra-regional') has yet won a similar primacy. Indeed there is intense competition among different economic and political spaces to become the new anchorage point of accumulation around which the remaining scale levels (however many, however identified) can be organized in order to produce a suitable degree of structured coherence. This involves economic and political projects oriented to different scales and has not yet produced consensus on how these are to be reconciled.

Thus we now see a proliferation of discursively constituted and institutionally materialized and embedded spatial scales (whether terrestrial, territorial, or telematic), that are related in increasingly complex tangled hierarchies rather than being simply nested one within the other, with different temporalities as well as spatialities. There is a marked degree of unstructured complexity as different scales of economic organization are consolidated structurally and/or are approached strategically as so many competing objects of economic management, governance, or regulation. There is an increasingly convoluted mix of scale strategies as economic and political forces seek the most favorable conditions for insertion into a changing international order. There is no pre-given set of places, spaces, or scales that are simply being re-ordered. For, in addition to the changing significance of old places, spaces, scales, and horizons, new places are emerging, new spaces are being created, new scales of organization are being developed, and new horizons of action are being imagined. The resulting relativization of scale (Collinge 1999) has created both the perceived necessity for various forms of supra-national economic co-ordination and/or regulation as well as the possibility of regional or local resurgence within national economic spaces. The new politics of scale is still unresolved – although I suspect that 'triads' will eventually replace the nation as the primary scale for managing, displacing, and deferring the contradictions and dilemmas of a globalizing, knowledge-driven economy.

This relativization of scale has major implications for claims about the rise of a 'global economy'. For, whatever the current level of globalization in structural and/or strategic terms (issues which are still disputed), few would claim that the global economy is now the predominant taken-for-granted economic space. Certainly it would be mistaken to see a single global economy rather than a range of competing tendencies and projects to form economic activities into such a system. This can be seen in the initial bifurcation of views of 'naturalness' from the 'national' towards the global and local economies – evident in the fact that talk of globalization exists alongside the rediscovery of the local or regional economy. Subsequent material and social developments have complicated this position, however, with the emergence of cyberspace as a virtual arena of action and the increased importance attached to the three triad regions as sites of economic and political governance.

If a new primary scale is to emerge, it is likely to be at the level of the triad. This is particularly evident in the EU (especially as it continues to widen and deepen its role in structuring European economic space) and NAFTA (with the overwhelming dominance of the USA); but there is also a growing regional division of labour in East Asia and China is becoming a more significant player in this regard. Nonetheless, recognising the emergence of 'triad power' should not blind us to three other important tendencies: (a) the growing interpenetration of the triad powers themselves as they seek to develop and to deepen specific complementarities among the triads and as multinationals with headquarters in one triad form strategic alliances in others; (b) shifts in the spatial hierarchies within each triad due to uneven development – reflected not only in shifts among 'national economies' but also in the rise and fall of regions, new forms of 'north-south' divide, and so forth; and (c) the re-emergence of regional and local economies within some national economies or, in some cases, cross-cutting national borders – whether such resurgence is part of the overall globalization process and/or develops in reaction to it. All of these changes have their own material and/or strategic bases.

As well as these macro-regional tendencies (triads), there are other sub-global axes of regional organization with global implications. These include industrial districts, innovation milieus, learning regions, cross-border regions, and cities. Significant changes are affecting



all of them. For example, three major changes affect the position of the urban. First, there is a vast expansion of the size of leading cities within urban hierarchies so that they become larger metropolitan or regional entities with several centres. Second, as globalization develops further, cities' activities are increasingly structurally integrated and strategically oriented beyond national space. This creates potential conflicts with the national state as some cities become potential 'regional states' less oriented to their respective national hinterlands than to their ties with cities and economic spaces abroad. Third, paradoxically, some leading cities have become state-sponsored and state-protected 'national champions' in the face of intensifying international competition. This contrasts with earlier periods when it was specific firms or sectors that served as national champions.

For these and other reasons it is important to take account of the 'relativization of scale' and its implications for economic, political, and social strategies. This process involves very different opportunities and threats for economic, political, and social forces compared to the period when the national scale could be taken for granted as primary; and it encourages actions both to exploit the processes producing globalization to promote specific values, identities, and interests and/or to defend them against the frequently disruptive impact of globalization. Thus economic actors may engage in strategic alliances to extend their global reach or seek protection from global competition behind various protective barriers. Also, as these complex and contradictory processes unfold, states on various levels tackle the domestic repercussions of global restructuring by getting involved in identifying and managing the manifold processes that contribute to globalization.

This in turn points to potential for alliance strategies among states on similar or different regional scales (e.g., the European Union, whether as an intergovernmental organization of nation-states or a 'Europe of the regions') to secure the basis for economic and political survival as the imperatives of structural competitiveness on a global scale make themselves felt. These alliances will vary with the position of the economies concerned in the global hierarchy. Thus, whilst a small open economy (whether capitalist, post-socialist, or socialist) might seek closer integration with the dominant economic power in its immediate triadic growth pole, the dominant power might seek not only selectively to bind neighbouring economies into its strategic economic orbit but also to enter alliances with other dominant triad powers. An alternative strategy for a small open economy is to seek niche markets in the global economy (perhaps through encouraging strategic alliances with key firms in each triad region) or to form regional alliances with other small economies (whether they share borders or not) as a basis of increasing their economic capacities and leverage. Moreover, since the national economy is no longer so taken-for-granted, we also find sub-national regions, cities, and local economic spaces pursuing strategies oriented to the changing forms of globalization and international competitiveness. Inter alia this is reflected in the formation of strategic alliances between provinces, sub-federal states, regions, cities, and localities in different national states to promote competitiveness or co-ordinate political strategies (Hocking 1999). Such activities are often linked to various forms of 'entrepreneurial' city and region as well as in 'competition' (sometimes also called 'Schumpeterian') states on different levels. An important aspect of each of these different spatial scale strategies is their concern to limit competition within the region (structured coherence) through market-oriented cooperation as the basis of more effective competition beyond the relevant spatial scale. Yet other economic, social, or political forces may call for protectionism on different scales as past regional and local modes of growth are disrupted (ranging from 'Fortress Europe' to 'new localisms', from the Sao Paulo Forum or the People's Plan for the Twenty-First Century to the informal economic self-organization of shanty towns).

The Illogics of Capitalist Globalization

The problem of re-regulating capital accumulation after the Fordist crisis is not reducible to one of finding new ways of managing the old contradictions within the same spatio-temporal matrix. This is not just because the primary and secondary aspects of the two principal structural forms in Atlantic Fordism (the wage relation and money form) have been reversed. It is also because other contradictions and their associated dilemmas have become more dominant and the spatio-temporal contexts in which all the above-mentioned contradictions are expressed have become more complex. I will not spend much time here with the wage



relation and money forms of after-Fordist economies. These have been widely and intensively discussed and it is not yet proven that after-Fordist forms of wage relation and money have successfully resolved the crisis-tendencies of Fordism as opposed to deferring and/or displacing them and, in so doing, creating new forms of international and national disorder. This is especially clear in the dominant neo-liberal form of after-Fordist restructuring. For this reinforces the abstract-formal moment of exchange value in the structural forms of capital at the expense of the substantive-material moment of use value. It is capital in these abstract moments that is most easily disembedded from specific places and thereby freed to 'flow' freely through space and time. However, in each of its more concrete moments, as noted above, capital has its own particular productive and reproductive requirements.

These requirements can often be materialized only in specific types of spatio-temporal location. This leads to a general tension between neo-liberal demands to accelerate the flow of abstract (money) capital through an increasingly disembedded space and the need for the more concrete forms of capital to be 'fixed' in time and place as well as embedded in specific social relations as a condition for their valorization. Indeed, even where the two forms are relatively de-coupled as distinct fractions of capital, a concrete 'spatio-temporal fix' is still needed to enable disembedded capital to flow more easily (Harvey 1982). In the case of global finance capital, of course, the grid of global cities (Sassen 1996) provides this 'fix'. Moreover, since abstract capital or 'capital in general' cannot be valorized without the continuing valorization of at least some particular capitals (as well as, perhaps, through competition, uneven development, and 'gales of creative destruction', the devalorization of others), this general tension inevitably creates a whole series of contradictions and dilemmas.

Some of these contradictions were considered in discussing the crisis of Atlantic Fordism and the KWNS. I now consider three new contradictions and dilemmas that have emerged in the present period of 'after-Fordist' accumulation that are closely associated with the dynamics of globalization. These comprise: first, a dissociation between abstract flows in space and concrete valorization in place; second, a growing short-termism in economic calculation vs an increasing dependence of valorization on extra-economic factors that take a long time to produce; and, third, the contradiction between the information economy and the information society. In addition, though it is not a structural contradiction, major problems surround the ideal spatio-temporal fix, if any, within which the new configuration of contradictions might prove manageable.

The first contradiction expresses the growing separation between the exchange-value and use-value aspects of the value form that is enabled by the neo-liberal form of globalization. The best-known case is the separation of hypermobile financial capital from productive capital – with the former moving in an abstract space of flows, the latter still needing to be valorized in place. For, whereas money capital in its various forms is enabled to circulate further and faster around the globe, particular commodities must be produced using particular assets in particular places. The intensification of this contradiction is closely linked to the development of information and communication technologies, to the emergence of cyberspace, and to the creation of 'offshore' bases for capital's financial operations. But the same contradiction also appears within the individual circuits of financial, industrial, and commercial capital as well as within their interconnections. For, admittedly in different ways, each circuit depends on a complex relation between what Kelly (1998: 96) describes as a physical market/*place* and a conceptual market/*space*. However much economic activity migrates into cyberspace, territorialization remains essential to capital. Capital 'remains as dependent as ever upon relatively fixed, place-bound technological-institutional ensembles in which technology, the means of production, forms of industrial organization and labor-power are productively combined to create and extract surplus-value' (Brenner 1997, 11-12). As well as the grid of global cities and the role of innovation milieus, industrial districts, etc., even e-commerce needs such a distribution infrastructure – if only servers and optic fibre cables for a 'celestial jukebox' of digitalized music. Thus, an emerging globalizing, knowledge-driven, after-Fordism does not signal the final transcendence of spatial barriers but effects 'new and more complex articulations of the dynamics of mobility and fixity' (Robins and Gillespie 1992, 149).

The second contradiction is seen in the paradox noted by Veltz (1996: 12) that '(t)he most advanced economies function more and more in terms of the extra-economic'. The paradox



rests on the growing interdependence between the economic and extra-economic factors making for structural or systemic competitiveness. This is linked to new technologies based on more complex transnational, national, and regional systems of innovation, to the paradigm shift from the Fordist concern with productivity growth rooted in economies of scale to concern with mobilising social as well as economic sources of flexibility and entrepreneurialism, and to the more general attempts to penetrate micro-social relations in the interests of valorization.

This paradox is further intensified by the growing mobility of capital on a global scale. Regardless of scale, however, this paradox generates major new contradictions that affect the spatial and temporal organization of accumulation. Thus, temporally, there is a major contradiction between short-term economic calculation (especially in financial flows) and the long-term dynamic of 'real competition' rooted in resources (skills, trust, collective mastery of techniques, economies of agglomeration and size) which take years to create, stabilize, and reproduce. It is reflected in the growing emphasis given to social capital, trust, and communities of learning as well as the enhanced role of competitiveness based on entrepreneurial cities, an enterprise culture, and enterprising subjects. Interestingly, the reflexivity that is often said to characterize post-Fordism enhances this contradiction: it takes time to create collective learning capacities but '(t)hose firms, sectors, regions and nations which can learn faster or better (higher quality or cheaper for a given quality) become competitive because their knowledge is scarce and cannot be immediately imitated by new entrants or transferred, via codified and formal channels, to competitor firms, regions or nations' (Storper 1998, 250). And, spatially, there is a fundamental contradiction between the economy considered as a pure space of flows and the economy as a territorially and/or socially embedded system of extra-economic as well as economic resources and competencies. The latter moment is reflected in the wide range of emerging concepts to describe the knowledge-driven economy – national, regional, and local systems of innovation, innovative milieus, systemic or structural competitiveness, learning regions, social capital, trust, speed-based competition, etc.. These different aspects of Veltz's paradox are taken to new levels by the growing mobility of capital on a global scale. For this enables mobile capital to engage in short-term exploitation of extra-economic resources in one area without contributing to their long-term reproduction and then move elsewhere to engage in the same short-term behaviour. This holds not only for the exploitation of renewable and non-renewable natural resources but also for that of socially-reproduced use-values. An alternative strategy in this regard is seen in the selective migration controls that enable the costs of reproducing labour-power as a fictitious commodity to be borne in some areas and exploited for the benefit of capital in other places. A large part of the neo-liberal agenda for trade and investment is concerned with promoting the juridico-political conditions for such conduct and thereby reinforcing this contradiction by reinforcing the separation between the winners and losers from its realization.

A third contradiction that becomes important once again in the after-Fordist (or, at least, the post-industrial) accumulation regime is that between the increasing socialization of the productive forces and the continued dominance of private control in the social relations of production in networked knowledge-driven economies. Although this contradiction exists on many different scales, it is certainly reinforced by globalization. For this both widens the arena in which the contradiction can develop and over which it plays itself out as it matures. On the one hand, the growing importance of economies of agglomeration and, above all, so-called 'economies of networks' significantly enhances the socialization of productive forces. For the 'economies of networks' are generated in and through multi-actor, polycentric, and multiscale networks rather than by single (or quasi-vertically integrated) organizations, which are better able to realize economies of scale. In addition, there are almost exponentially increasing returns to network size. These mean that 'each additional member increases the network's value, which in turn attracts more members, initiating a spiral of benefits' (Kelly 1998: 25). These two features highlight the importance of the socialization of productive forces because they make it 'difficult legally to distinguish between different firms' intellectual property, since all intellectual property is a mixture of innovations arising from different places' (Kundnani 1998-9, 56). This in turn reinforces the tendency for network economies to be captured by the network as a whole – albeit often asymmetrically – rather than by a particular firm (Kelly 1998,



26-28). This suggests in turn the opportunity for new forms of enterprise to appropriate such network economies for private profit without destroying any broader network(s) involved in generating them. 'Virtual' firms and networked firms are said to correspond to this need (e.g., Castells 1996, 151-200) – although recent mega-mergers such as that between AOL and Time-Warner suggest that other, older solutions may still be viable. On the other hand, however, unless the 'virtual' firm becomes co-extensive with the collective labourer, the contradiction is still reproduced on the side of the social relations of production. For it is in the interests of every capital to have free access to the information, knowledge, expertise, and network economies that it needs to produce its own exchange-values and to be able to charge for the information, knowledge, expertise, and access to networks that it can produce for exchange. A particularly interesting current manifestation of this contradiction is the conflicts occurring around intellectual property rights regimes.

A fourth site of problems in the globalizing economy is linked to the relativization of scale. It concerns the spatio-temporal fix(es), if any, in and through which the old principal contradictions of Atlantic Fordism and newly important contradictions of the current period might prove manageable. This is closely linked to a new complexity of time-space due to the interaction of new forms of 'time-space distantiation' and 'time-space compression'. Facilitated by new information and communication technologies and enthusiastically embraced by some fractions of capital (and some states), this helped erode the spatio-temporal fix of Atlantic Fordism. The further intensification of both processes makes it more difficult to find new scale(s) on which to restabilize accumulation and establish effective regulation and governance mechanisms.

The importance of these contradictions and the relativization of scale in the 'after-Fordism' period suggest that a stable post-Fordist regime has not yet emerged either in the space of Atlantic Fordism or on a wider scale that would correspond to the emerging global capitalist economy. If pressed to identify the principal contradictions around which a new accumulation regime would crystallize I would suggest that they comprise the *forms of competition* (notably the growing importance of the extra-economic conditions of competitiveness and hence their colonization by the value form and, tied to this as well as the new knowledge-driven technological paradigm, the emergence of the networked firm as the dominant organizational paradigm) and the *forms of the state* (notably its restructuring in the light of the relativization of scale and of the incapacity of traditional state forms to govern the new economy). I have addressed both sets of issues in my recent work on the shift from the KWNS typical of Atlantic Fordism to an emerging Schumpeterian workfare post-national regime (SWPR) that could help re-regularize an after-Fordist accumulation regime (see Jessop 1993, 1994, 1999b, 1999c).

Globalization, Politics, and the State

My main substantive argument so far is that the tendential ecological dominance of the capitalist economy has been reinforced by the recent waves of globalization as well as by other changes in its structure and operations. This occurs because globalization enhances those generic features of the capitalist economy favourable to its exercise of greater influence on other systems and the lifeworld than they can have on it. This is associated with the emergence (or increased significance) of contradictions and dilemmas within the capitalist economy that encourage further colonization of other systems and the lifeworld in order to secure the conditions for continued valorization. But my argument would remain seriously incomplete if I did not directly address the other major system in the emerging world society with some claim to ecological dominance – the political system. This should not be confused with the state – let alone with the national state or even the sum of national states. Instead the political system, considered as an operationally autonomous system, comprises all those activities, organizations, and institutions organized around (or at least involved in) making collectively binding decisions for an imagined political community. In short, states do not exhaust the political system: they constitute just one, albeit important, part of the latter. Moreover, once we focus on the political system, we can see that the state, like capital, is a social relation (Poulantzas 1978: 128-9). This excludes any treatment of the state either as a simple instrument or as a subject. Instead it requires us to consider state power (not the state apparatus) as a *form-determined* condensation of the balance of forces in struggle over the



making of collectively binding decisions in the name of an imagined political community. (20) At the most abstract level of analysis of capital accumulation, this form determination is mediated through the institutional separation of the economic and political systems (and their common separation from the lifeworld) together with the separation of the state apparatus from the rest of the political system. Whereas the former separation is essential to the self-valorization of capital despite its dependence on fictitious commodities that cannot be reproduced exclusively in and through the value form, the latter separation is essential to the auto-poiesis of the political system in providing a reference point for political struggles in the face of the infinity of possible political goals and political communities.

In this sense, the demarcation between state and political system should be seen as a line drawn internally within the network of institutional mechanisms through which political power is exercised. Indeed, as Mitchell argues, '[t]he state should be addressed as an effect of detailed processes of spatial organization, temporal arrangement, functional specification, and supervision and surveillance, which create the appearance of a world fundamentally divided into state and society. The essence of modern politics is not policies formed on one side of this division being applied to or shaped by the other, but the producing and reproducing of this line of difference' (Mitchell 1991: 95). Exploring the theme of the state as a social relation involves two interrelated aspects of the state system. We need first to examine the state form as a complex institutional ensemble with a specific pattern of 'strategic selectivity' which reflects and modifies the balance of forces in political struggle; and, second, to consider the constitution of these forces and their strategies themselves, including their capacity to reflect on and respond to the strategic selectivities inscribed within the state apparatus as a whole (on strategic selectivity, see Jessop 1990a, 1990b). It is this latter capacity which is so crucial to a proper understanding of the reorganization of the state apparatus and state power as actors in the political system respond to globalization.

Thus, to explore the relations between the economic and political systems in an era of globalization, it is important to distinguish between the state apparatus and the political system. For this is a materially- and discursively-constituted distinction that makes a difference in politics. It is also important to accept the idea implicit in systems theory that the political system is self-substituting, i.e., that a crisis in the political system does not lead to its demise but to its reorganization. Clearly a fundamental part of such reorganization would include the redefinition of the restructuring of the 'line of difference' (or demarcation) between the state and the political system as well as the forms of institutional separation between the economic and political systems and their relationship to the lifeworld. This is the approach adopted below and I begin with further reflections on the state.

The national state is a relatively recent institutional expression of the territorialization of political power. It is the historical product of a specific, socially constructed territorial demarcation of the political system and divides the latter into a series of territorially exclusive, mutually recognizing, mutually validating, sovereign states. These in turn provide the reference point for political struggles and, indeed, the distinction between domestic and international politics. Other modes of territorializing political power have existed, new expressions are emerging, yet others can be imagined. Thus it is crucial to study the potential for the re-structuring of statehood through the de- and re-territorialization of political power. It follows that it is highly misleading to conceive the relationship between a *singular emergent globalizing flow-based economy* and a *plurality of traditional national territorial states* in zero-sum terms. For this would involve treating the current, partly globalization-induced crisis of the territorial national state – whether in its post-war Atlantic Fordist form, developmental statist, national security state, or other forms – as signifying the present and future impossibility of any other institutional form(s) for the territorialization of political power. Instead the approach developed here suggests that attempts will be made to reconstitute the national territorial state in response to globalization and/or to establish new territorial scales as the primary nodal point of the institutionalization of political power. This expectation is reinforced if we note that the westphalian state was never as rigid or as complete as 'the fetishization of space in the service of the [national] state' (Lefebvre 1978; cf. 1991: 280-2) might suggest. Moreover, once we accept that the delimitation of the state as an institutional ensemble is both internal to the political system and contingent, we can also assess whether non-territorialized forms of government-governance might acquire increased significance in the



exercise of political power. These points are reinforced when we recall the constitutive incompleteness of the capitalist economy and its dependence on extra-economic factors. For this suggests that economic globalization will require significant shifts in the institutional forms, principal activities, and primary scales in and through which its extra-economic supports are secured.

To consider the scope for de- and re-territorialization of forms of state power and/or for the substitution of non-territorial forms of political power, we must reconsider the alleged challenge to national states posed by globalization. The scope for increased ecological dominance of the globalizing economy depends on the capacities of leading economic forces to distantiate and/or compress time-space in ways that escape the control capacities of most state-based and state-oriented political forces. For there are few, if any, individual states with an effective global reach and an ability to compress their routines to match the time-space of fast hypermobile capital. This creates a growing disjunction between the latter's spatio-temporal horizons and routines and those of most contemporary states and, through their impact on the overall dynamic of the capitalist economy, a growing disjunction between a potentially global space of flows and the place-boundedness of a territorially segmented political system. Temporally this limits the typical state's ability to react according to its own routines and modes of calculation – which is why many state managers feel the pressures of globalization and believe they have lost operational autonomy. Likewise, spatially, given the porosity of borders to many different kinds of flow and the growing mobility of capital over a range of transnational scales, states find it increasingly hard, should they want to, to contain economic, political, and social processes within their borders or control flows across these borders. These changes are related in turn to a growing fragmentation of the westphalian state system to the extent, indeed, that some commentators suggest it is being re-placed by a neo-medieval system (e.g., Anderson 1996; Cerny 1997; Ruggie 1993).

In the short-term these spatio-temporal changes reduce the capacity of states and political systems in general to follow their normal operating procedures in responding to major economic events – which tends to produce a sense of crisis or powerlessness. This is reflected in reactive fire-fighting, a turn towards short-term emergency measures or more durable 'states of exception', and fatalistic submission to the demands of (potentially) mobile capital. In the medium term, however, as a self-organizing, self-substituting system, more effective responses to this tendential erosion of operational autonomy should develop, get selected, and become stabilized. These could well arise from 'chance discoveries' and random variation but, provided that the economic environment is relatively stable, they should become consolidated. This process will be characterized by structural coupling and blind co-evolution, of course; but, within certain limits, it can also be reflexively guided and strategically co-ordinated. Over time it may lead to new historic blocs and new unstable equilibria of compromise on a global scale. Before addressing such possibilities, however, let us consider the more general forms of the reorganization of the state and the political system.

This re-organization can be expected to include the following analytically distinct but empirically interrelated and often overlapping changes:

- a dialectic of de-territorialization and re-territorialization of specific powers in the political system, hence a reshaping of national states qua mutually exclusive, formally sovereign, spatially segmented instantiations of the westphalian order, the transfer of powers previously located at this territorial level upwards, downwards, or sideways, and the allocation of new powers to different scales;
- a dialectic of de-statization and re-statization as the internal demarcation within the institutional ensemble of political power is redefined and activities are re-allocated across this division;
- a re-articulation of the relationship between territorial and functional spaces in the political system, with implications for the significance of territorial 'power containers' on any scale as opposed to non-territorial forms of political power;
- a redefinition of the boundaries and division of labour between the political and economic systems in securing the reproduction-régulation of the capital relation to take account of



the re-articulation of the economic and extra-economic in an era of increasing systemic and/or structural competition;

- a re-ordering of political hierarchies associated with the relativization of scale noted above – with implications for the restructuring of international relations, domestic relations, and the interrelations between them;
- a re-imagining of the political communities (or publics) to which the political system is oriented together with new state projects to redefine the nature and purposes of the state and new hegemonic projects to redefine the imagined general interest of these new political communities.

I will now offer some brief comments on each of these axes of reorganization and their interconnections in relation to the globalizing capitalist economy. But it is first necessary to caution against treating states as if they were identical units. For the formal sovereignty accorded to national territorial states in the westphalian system does not imply any substantive identity or equality among them in terms of their capacities for exercising power internally and/or in the international arena. They will be presented with different problems by the multi-scalar, multi-temporal, multi-centric processes that generate globalization; and they will have different capacities to address these problems and reorganize themselves in response. Moreover, whereas the form-determined condensation of forces in some states leads state managers to resist globalization, other states are clearly heavily committed to promoting it in one form or another. I have already commented above on different scalar strategies in this regard and will not repeat these comments. Suffice to say that leading states are associated with different globalization projects and that less powerful states will often seek to position their economic spaces and actors more favourably within more specific local, regional, or functional niches within the emerging global division of labour. In so doing some states will reinforce their hegemony or dominance within the inter-state system, others will fall further down the inter-state hierarchy. In particular, after worries were expressed about its declining hegemony in the wake of the crisis of Atlantic Fordism, the USA has clearly gained in global influence in recent years through its identification with and promotion of globalization in its own image.

First, then, de- and re-territorialization are occurring. Given the primacy of the national scale in the advanced capitalist economies in the era of Atlantic Fordism, this can be described as the 'hollowing out' of the national state or, in more formal terms, as the de-nationalization of statehood. Thus the complex articulation of global-regional-national-local economies is linked to the transfer of powers previously exercised by national states upwards to supra-regional or international bodies, downwards to regional or local states, or outwards to relatively autonomous cross-national alliances among local metropolitan or regional states with complementary interests. The post-war primacy of the national scale of state power depended on the coincidence of national economy, national state, national citizenship, and national society and on the national state's survival as a sovereign body able to secure this coincidence. This structured coherence and its associated spatio-temporal fixes have been weakened by many of the processes usually subsumed under the rubric of globalization. The national economy has been undermined by internationalization, the growth of multi-tiered global city networks, the formation of triad economies (such as the European Union), and the re-emergence of regional and local economies in national states. In addition, the unity of the nation-state has been weakened by the (admittedly uneven) growth of multi-ethnic and multi-cultural societies and of divided political loyalties (with the resurgence of regionalism and nationalism as the rise of European identities, diasporic networks, cosmopolitan patriotism, etc.) (Jessop 1999a).

Second, there is a process of de- and re-statization. This involves the re-allocation of functions across the internal demarcation between public and private responsibilities within each territorialized political system. This is often described as a shift from *government* to *governance* but this slogan is misleading to the extent that it depicts the shifts as essentially one-way. In practice there may well be an asymmetrical shift in this direction but there is also traffic in the other direction as new responsibilities are acquired by states on different scales.



Third, there are changes in the relationship between territorialized and functionalized modes of exercising political power. At stake here is not the transfer of powers between different scales (including new ones) of territorialized power ('hollowing out') but the growth of modes of exercising power that do not depend on imperative co-ordination by a territorialized state apparatus and that are independent of its borders on whatever scale they exist. This process is often subsumed under the rubric of the shift from government to governance but it differs from the second set of changes noted above in being essentially extra-territorial and in dissociating the exercise of political power from imagined political communities whose interests are tied to territorialized state power. One way to distinguish between the second and third processes is to consider de-statization as involving public-private partnerships in which the state devolves responsibilities to the private sphere but attempts to remain *primus inter pares*; and to consider the growth of functionalized forms of power as involving self-organization that by-passes or circumvents state power – perhaps at the behest of state managers. The increasing importance of international regimes to the relative stabilization of a globalizing economy and the rise of cybernetworks in an extra-territorial, telematic space allegedly beyond state control are two contrasting examples of third process.

Fourth, there has also been expansion in the imagined scope and inclusiveness of the economy that needs governing through states, public-private partnerships, or functional networks. The economy is no longer interpreted in narrow terms but has been extended to include many additional factors, deemed 'non-economic' under the KWNS regime, that affect economic performance. This expansion is reflected in concepts such as 'structural competitiveness' (Chesnais 1987) or 'systemic competitiveness' (Messner 1997) – concepts that highlight the combined impact of diverse societal factors on competitiveness. This requires attention to a growing range of economically relevant practices, institutions, functional systems, and domains of the lifeworld to enhance competitiveness. This has two interesting and paradoxical effects on states and politics that are reflected in the two preceding sets of changes. First, whilst it expands the potential scope of state intervention for economic purposes, the resulting complexity renders post-war top-down intervention less effective – requiring that the state retreat from some areas of intervention and re-invent itself as a condition for more effective intervention in others (Messner 1997). And, second, whilst it increases the range of stakeholders whose cooperation is required for successful state intervention, it also increases pressures within the state to create new subjects to act as its partners. Thus states are now trying to transform the identities, interests, capacities, rights, and responsibilities of economic and social forces so that they become more flexible, capable, and reliable agents of the state's new economic strategies – whether in partnership with the state and/or with each other or as autonomous entrepreneurial subjects in the new knowledge-driven economy (Barry et al., 1996; Deakin and Edwards 1993; Jones 1999).

Fifth, political hierarchies are being re-ordered. The nested hierarchy of state power within territorially exclusive sovereign states and formal equality among such states was, of course, never fully realized in the westphalian system; but it did provide the institutional architecture within which forces struggled for control of state power and attempted to modify the balance of power in international relations. The decomposition of national spatio-temporal fixes, the de-nationalization of statehood and the dual de-statization of politics (i.e., the shifting internal demarcation between public and private and the growth of functional power networks) have since contributed to a relativization of scale and an increasingly convoluted, tangled, and eccentric set of relations among different scales of political organization. The structural coherence of the Atlantic Fordist spatio-temporal fix has decomposed and there is a marked degree of unstructured complexity as different scales of economic and political organization proliferate and different scale strategies are pursued.

Sixth, the political communities (or publics) towards which forces in the political system orient their actions are being re-imagined. These include, but are not exhausted by: new 'imagined nations' oriented to autonomy within and/or control of a defined territory below, above, or transversal to existing national states; a global civil society premised on cosmopolitan patriotism, the primacy of human rights over national citizenship, or some other global identity; new 'communities of fate' defined by shared risks regardless of specific territorial location and, perhaps, global in character (e.g., the risks generated by global warming); and new communities of interest defined by shared identities, interests, and values regardless of



specific territorial location (e.g., cybercommunities). Such new territorial or extra-territorial conceptions of political community are linked to struggles to redefine the nature and purposes of the state, to find alternatives to territorialized forms of political power, and to redefine the imagined general interest which political power, whether territorial or not, should serve.

So far I have described these shifts in general terms. I now want to make two further, final points about the ecological dominance of the capitalist economy in a global era and about states' capacities to reorganize themselves in response to globalization. Let me deal first with the adaptive capacities of states. Each of the six trends noted above has been alleged to involve a decline in the powers of the dominant forms of state associated with the Atlantic Fordist era. Whether or not this is true in the short-term, it does not exclude creative adaptation to the erosion of state power. The viability of such responses nonetheless depends either on their compatibility with the ecological dominance of the capitalist economy or their ability to contest, resist, and reverse this dominance. Which of these alternatives comes to dominate depends in turn on political struggles and this will determine the subsequent structural coupling and co-evolution of the economic and political systems on a global scale.

The de-nationalization of statehood and the re-ordering of political hierarchies are both associated with an enhanced role for national states in interscalar management, i.e., attempts to control the articulation of scales and the transfer of powers between them. This applies to the forms and scope of functional networks and cyberspace(s) and the activities that occur within them as well as to the re-articulation of terrestrial and territorial scales. Thus national states have an important role in the production and regulation of extra-territorial spaces, such as offshore financial centres, export processing zones, flagging out, and tax havens. For this 'create[s] spaces of differential regulation within and across states that add to the functionality of the border as much as they contradict it' (Cameron and Palan 1999: 280) and thereby helps to lubricate global flows of capital. States are likewise involved in the development and institutionalization of the new *lex mercatoria* because this has distinct strategic selectivities that differentially affect states and the economic spaces with which they are associated. Similar points obtain for the emerging governance of cyberspace (Loader 1997; Kahin and Keller 1997; Kahin and Nesson 1997; Saco 1999). Other levels of state may also try to engage in interscalar management but even the European Union, the most advanced supranational state apparatus, still lacks the powers and legitimacy to do this to the same extent as national states – especially larger member states. This does not exclude strategic alliances among states on various scales to steer interscalar articulation or an eventual new scale of territorial state that has acquired the necessary powers and legitimacy to co-ordinate the proliferating scales of action and to institutionalize new spatio-temporal fixes around this new primary scale. Indeed at least one commentator has already discerned the emergence of a global state (admittedly orchestrated by the USA) that is superseding the 'western state' that presided over the Atlantic Fordist era (Shaw 1997). Whether this is really better understood as a new primary scale on which political power is being territorialized or as an important emerging secondary scale (or nodal point) around which national states seek to pool their sovereignty in pursuit of common interests is open to discussion. In either case it would clearly involve new forms of parallel power network and strategic co-ordination to ensure the overall institutional integration and strategic coherence of policies pursued at this level. My own view is that the trends that Shaw identifies are currently part of the overall relativization of scale and therefore feed into the competition to define a new primary scale of action rather than resolve it.

Likewise, regarding the dual shift from government to governance, there is a counter-trend in the shift from government to meta-governance (or, better, meta-steering). For even as states cede their claim to sovereignty in the face of growing complex interdependence and seek to enhance their political capacities by participating in heterarchic co-ordination mechanisms or devolving some activities to private institutions and actors, they also seek to shape and steer these mechanisms through meta-steering practices. Thus states (on various scales) tend to get more involved in organizing the self-organization of partnerships, networks, and regimes. They provide the ground rules for governance; ensure the compatibility of different governance mechanisms and regimes; deploy a relative monopoly of organizational intelligence and information with which to shape cognitive expectations; act as a 'court of



appeal' for disputes arising within and over governance; seek to re-balance power differentials by strengthening weaker forces or systems in the interests of system integration and/or social cohesion; try to modify the self-understanding of identities, strategic capacities, and interests of individual and collective actors in different strategic contexts and hence alter their implications for preferred strategies and tactics; and also assume political responsibility in the event of governance failure. Of course, meta-steering is prone to failure just like markets, states, and governance mechanisms. But, insofar as they do succeed, however relatively, their success will depend on their fit with (and contribution to) the stabilization of the new (or newly redefined) objects of regulation and governance.

The expanded definition of the economic to include factors previously regarded as extra-economic clearly involves a key role for states (on whatever scale) in mediating this re-articulation, steering the resulting commodification and re-commodification of social relations, and dealing with the consequences of the increasing ecological dominance of capitalist logic on social cohesion and social exclusion. Moreover, whereas the promotion of the micro-social conditions for capital accumulation in these changing circumstances may well be better handled at other levels than the national, problems of territorial integration, social cohesion, and social exclusion are currently still best handled at the level of the large territorial national state. (21) For the latter is still currently non-substitutable given its fisco-financial powers and its scope for redistributive politics in re-arranging spatio-temporal fixes. (22)

The emergence of new imagined political communities is too complex to discuss in detail here but it is certainly worth noting how they are shaped by the growing ecological dominance of the capitalist economy within the system and lifeworlds. This is associated with the intensification of the contradictions of capitalism on a global scale – especially when system assumes neo-liberal form – and invites the rescaling of political communities and their responses to the resulting perturbations. The relativization of scale is likewise linked to the search for new spatio-temporal fixes on various scales and these always involve deferring and displacing the material and social costs of the fix and its associated institutionalized compromises onto marginal classes, strata, social categories, and spaces. These processes also lead to projects to brake, resist, or overturn the dominance of the globalizing capitalist economy and/or to complement it through the development of new forms of global governance.

Concluding Remarks

This contribution has traversed much ground over many different scales and levels of analysis. And, given my scepticism about much work on this theme, it has not put globalization at the heart of the analysis. Instead it has attempted to situate globalization as a complex, chaotic, and overdetermined outcome of a multi-scalar, multi-temporal, and multi-centric series of processes operating in specific structural contexts and to assess the implications of the emergence of the global as the ultimate horizon of action in the economic and political systems. This explains why globalization often figures only tangentially in the preceding analysis. Indeed, insofar as the global is merely one scalar viewpoint from which to describe the complex, tangled, and interdependent re-scaling of capital accumulation or the changing structural coupling and co-evolution of the economic and political, globalization could have been written out of the script entirely at many points without losing the force of many of the theoretical and substantive arguments. For they could also have been illustrated in terms of changing forms of localization, regionalization, nationalization, triadization, cross-borderization, and so forth. Nonetheless a focus on globalization is justified insofar as the global is more than just one scalar viewpoint among many but actually involves significant qualitative shifts in the overall dynamic of capitalism and its structural coupling and co-evolution of the economic and political. I have argued strongly for the latter conclusions on three main grounds.

First, the dominant neo-liberal form of capitalist globalization significantly enhances the generic tendencies of the capitalism economy to become the ecologically dominant system in global social order. Second, globalization has contributed significantly to the disruption and decomposition of the primarily national spatio-temporal fixes that provided the framework in which the Atlantic Fordist accumulation regimes and their modes of regulation were



established and consolidated. And, third, owing to the relativization of scale and the growing spatio-temporal complexities with which globalization is associated, no new spatio-temporal fix has yet emerged within which the illogic of the dominant neo-liberal form of globalization as reflected in its increasing contradictions, global-local disorder, and growing social polarization and social exclusion could be tamed and through which global economic governance could be established.

In pursuing these arguments in a much broader theoretical context I hope to have provided some substantive arguments that will serve as correctives to many of the more orthodox accounts of globalization. These arguments concern changes in capital accumulation and the state and their connection to globalization. They can be condensed into six main themes that will be presented here in telegraphic form.

The first theme is that of globalization as a 'chaotic conception'. Globalization is not an homogenous or homogenizing process; it is not a singular causal mechanism; it does not emanate from, nor is it initiated from, all points on the globe; and it does not develop evenly. Instead it is a contradictory, conflictual, contested, and complex resultant of multi-scalar, multi-temporal, multi-centric processes that develops unevenly in time and space, and, indeed, exploits and intensifies differences as much as, if not more than, it produces new complementarities and uniformities.

The second theme concerns the importance of studying globalization at different levels of analysis from the systemic and inter-systemic through the institutional and inter-institutional and then the organizational and inter-organizational down to the personal and interpersonal. In particular I argued for a treatment of globalization as an emergent feature of the capitalist economy as a whole rather than of individual economic actors or specific territorial units. For globalization, as I define it, emerges from the interconnections among different actors on many different scales and is intensified through new forms of time-space distantiation and time-space compression. An important contributing factor here is, of course, the increased salience of the global as the ultimate horizon of action of a growing number of actors but even this does not require that all these actors then act on a global scale.

The third theme concerns the importance of studying the complex relations between the two systems with the strongest capacities for ecological dominance within an emerging global society. These are the capitalist economy considered as an autopoietic system with its own profit-oriented operational code and institutional logic organized around the self-valorization of capital; and the political system considered as an autopoietic system with its own power-oriented operational code and institutional logic organized around the self-reproduction of ruling-ruled relations and territorialization of power. Their relations are complex because of the constitutive incompleteness of the capital relation in the real world such that its reproduction-régulation depends, in an unstable and contradictory way, on changing extra-economic conditions; and because the political system in capitalist social formations cannot produce key material resources for the performance of its political functions but depends on revenues generated from a capitalist economy whose overall dynamic it cannot control. This interdependence between operationally autonomous but substantively interdependent systems underpins the structural coupling, strategic co-ordination, and overall co-evolution of the economic and political orders and, under the ecological dominance of the capitalist economy, gives rise to the apparent base-superstructure relations in capitalist societies so beloved of orthodox marxism.

The fourth theme is the importance for the reproduction-régulation of a constitutively incomplete capital relation of securing specific spatio-temporal fixes within which its contradictions and dilemmas can be managed. These serve to displace and/or defer certain aspects of these contradictions and dilemmas either within the boundaries of the spatio-temporal fix (onto marginal classes, strata, or social categories) or beyond them (onto other economic and political spaces). This is where questions of scale enter crucially into the analysis and it is important to study how scales are continually created and interconnected in new ways rather than seeing them as pre-given and unchanging. Similar arguments hold for the temporal aspects of spatio-temporal fixes.



The fifth theme concerns the growing ecological dominance of the capitalist economy. This has many different causes. Indeed, given the always relational and relative nature of ecological dominance, it certainly could not be reduced purely to changes within the economic domain. Nonetheless, among these different causes, some of the emergent features of globalization – especially in its dominant neo-liberal form – do contribute significantly to this ecological dominance. In insisting on the complex nature of globalization as a resultant, however, I am also challenging the fatalism that comes from seeing it as an overwhelming, singular causal force. For, once we recognize its complexities, examine its different mechanisms, and appreciate how they are instantiated on many different scales of action, there is scope for struggles to resist globalization and/or to change its dominant forms. This leads us to my final topic.

The sixth theme concerns the response of the political system to the increasing ecological dominance of a globalizing capitalist economy. This has two very different faces. On the one hand, given the inherent inability of the capitalist economy to achieve self-closure and its need to be socially embedded within a market society and supported by state power, capitalist globalization is inconceivable without active involvement of at least some states in promoting the conditions for globalization. On the other hand, the existing institutional architecture of the state system and the more general spatio-temporal matrix of political routines make it difficult for the states and political systems that sustained accumulation regimes in the era of Atlantic Fordism to manage the transition to a new wave of accumulation on a more global scale or to cope with its consequences. In particular, the dominant, neo-liberal form of globalization and its associated 'politics of scale' intensify capital's basic structural contradictions and strategic dilemmas. This is reflected in struggles among different fractions of capital as well as in disputes within leading international economic and political agencies charged with global economic governance. It provides the context for a continuing and still unresolved search process to find new forms of state and new modes of governance on different scales to secure new spatio-temporal fixes within which accumulation on a world scale can be maintained – or to find new forms of state and new modes of governance with which to brake the (il)logics of accumulation on a world scale and develop alternative ways of organizing global-local order. New projects for global governance, whether rooted in markets, states, or civil society, are unlikely to succeed as long as neo-liberal accumulation strategies are still dominant. But this does not justify resignation, fatalism, or a do-nothing approach. Instead it calls for a reflexive, ironic 'optimism of the will' as a necessary complement to 'pessimism of the intellect'. Indeed, given the conflictual, antagonistic nature of the globalization-regionalization dialectic, it always confronts forms of resistance and structural limits that make a fully constituted globality hard to imagine (Altvater and Mahnkopf 1996). It seems appropriate to conclude by repeating one of Gramsci's comments in a new conjuncture: 'the old is dying, the new cannot be born' .

Footnotes

(1) This sobriquet was applied to the present author by Robert Boyer at a conference on the regulation approach at Hitotsubashi University, Japan, in November 1997.

(2) The principal current exception here is Alain Lipietz: see Lipietz (1985, 1993).

(3) This term was introduced by Ernst Bloch (1986), as cited Panitch and Gildin (1999).

(4) This does not preclude relative harmony in social relations (social cohesion) in specific conjunctures or at specific scales of analysis (cf. Gough 1992).

(5) Delorme, Lipietz, and Théret have all referred in different ways to self-organization, autopoiesis, and structural coupling. Théret's analysis is closest to that proposed below. See Delorme (1991, 1995), Lipietz (1985), and Théret (1991, 1992).

(6) My substitution of 'social struggles' for Poulantzas's term 'class struggles' is deliberate. What is important is the class-relevance of struggles (whether or not conducted by so-called class organizations in pursuit of explicit class interests), i.e., their impact on capitalist reproduction and regularization. A wide range of struggles affect these processes (see below; also Jessop 1997a).



- (7) Plurinational monetary blocs organized by states could also be included here.
- (8) States also fail, of course; as does governance (Jessop 1998).
- (9) Wittgenstein's 'family resemblance' of language games is a weaker notion than that posited here. Whereas there is no underlying logic to all conceivable language games, capitalism does have such a logic (see Bernans 1999).
- (10) By analogy with Gramsci's inclusive definition of the state, the integral economy can be defined as 'accumulation regime + mode of regulation' or 'the self-valorization of capital in and through *régulation*' (cf. Jessop 1997b).
- (11) The forces of production include social skills and forms of social organization as well as technical means of production (tools, machines, informatics).
- (12) Relations of production must be understood here as 'social relations of economic production'. It is always possible to extend this notion to equivalent relations in other fields of social practice (political, military, legal, etc.) but this deprives the notion of economic determination of any meaning since relations of production then become a feature of all social practices and they lose any specificity.
- (13) Only the first two aspects are explicitly theorized in autopoietic systems theory; the others derive from more general work on complexity and chaos theories.
- (14) Cf. Polanyi's contrast between an 'instituted economy' embedded in wider social relations and a 'market economy' structurally coupled to a market society (1957).
- (15) I extend the system world well beyond Habermas's couplet of economy and state to include any self-organizing system with its own instrumental rationality and interpret the 'lifeworld' more widely to include identity politics, etc., regardless of whether committed or not to undistorted communication.
- (16) My earlier work referred to 'meta-steering' as 'meta-governance'. But the latter is ambiguous because 'governance' refers both to all forms of co-ordinating complex reciprocal interdependence and to just one of these forms, i.e., self-organization or heterarchy. 'Meta-steering' avoids this ambiguity.
- (17) Concerning aspect (a) of this contradiction, Harvey does distinguish the temporal horizons of different fractions of capital (e.g., currency and bond markets, money and finance vs productive capitals, land speculators and developers) and note the stresses produced by the temporal compression powers of financial capital (1996: 6). But he nonetheless focuses more on aspect (b) and its distinctive spatial fix.
- (18) In contrast the new postwar international regimes established under American hegemony served broader interests in capital accumulation.
- (19) Whereas 'glocalization' is a strategy pursued by global firms that seek to exploit local differences to enhance their global operations, 'glurbanization' is pursued by cities to enhance their place-based dynamic competitive advantages in order to capture certain types of mobile capital and/or to fix local capital in place.
- (20) The equivalent view of capital as a social relation would treat capital accumulation (not capital as a factor of production) as a form-determined condensation of the balance of forces in struggle over the production and appropriation of surplus-value.
- (21) The national states of small open economies may lack the resources to compensate for the consequences of globalization and the demands of systemic competitiveness – especially where there are neo-liberal pressures to reduce the fisco-financial powers of the state. In this context there may a bigger role for international cooperation or emergent regional states such as the European Union.
- (22) Indeed, as Lefebvre noted, '[o]nly the state can take on the task of managing space "on a grand scale"' (Lefebvre 1978: 298, cited in Brenner 1997).



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