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MODERNITIES/GLOBALISATION/COMPLEXITIES

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Introduction

What are the implications of globalisation for the social inequalities? How does it re-structure winners and losers? How does complexity theory assist the conceptualisation of the processes of globalisation? There are four novel aspects to the conceptualisation and analysis of globalisation here. First, the inclusion of forms of difference and inequality additional to those of class, especially that of gender, but also those of ethnicity and nation. Second, the development of concepts informed by complexity theory to theorise the inter-relationship between social entities during globalisation. In particular, the development of concepts of 'co-evolution' of 'complex adaptive systems' within changing social environments or 'fitness landscapes'. Third, the development of the concept of 'path dependency' and critical turning points. Fourth, the development of the concept of wave, to capture the simultaneous significance of spatiality, temporality and non-linearity.

First, greater attention will be paid to variety of forms of difference and inequality additional to those associated with class relations than has been usual in globalisation theory. Much of the analysis of globalisation has analysed social processes primarily connected with changes in capitalism and associated class, political, economic and cultural relations (Brenner, 1999; Held et al, 1999; Ohmae, 1990). However, this is unduly restrictive, especially with the broadening range of interest in sociology in forms of difference (Calhoun, 1995), stemming from ethnicity, 'race' (Wilson, 1987) and gender (Felski, 1997). When the focus includes these forms of difference in addition to that of class, then a wider set of social forms and polities comes into focus on the world stage. In particular, religions can be prime carriers of ethnic, national and gender projects into global and regional conflicts.

Second, there are processes of the co-evolution of social entities, drawing on the developments in complexity theory in the theorisation of complex adaptive systems. This is to go beyond both the 'billiard ball' conceptualisation of the relations between polities of realist international relations (Waltz 1979), and the 'erosion of autonomous nation-states' conceptualisation that has developed within globalisation analysis (Crouch and Streeck 1997). Instead the focus is on the mutual impact of social entities and processes of globalisation. As one social entity changes, the environment within which other social entities act is changed, thereby changing the context that affects their actions. This process can be more effectively expressed using concepts derived from complexity theory. In particular, it can be understood as the co-evolution of complex adaptive systems within a changing fitness landscape (Kauffman 1993). The term co-evolution is not meant to imply that this interaction is devoid of hierarchy, dominance and competition. Indeed the notion of 'fitness' is intended to capture the way that certain environments suit some systems more than others. The concept of changing fitness landscape is intended to capture the way that a change in any one system alters the environment in which all systems compete and cooperate.

Third, the development and application of the concept of 'path dependency' (Mahoney 2000), in order to assist the analysis of processes of change that captures sudden ruptures and bifurcation into different pathways of development, as well as stability and gradualism.

Fourth, the concept of wave will be developed, so as to get a better grip on the spatial and temporal dimensions of the non-linear trajectory of some of the social forces associated with globalisation. Issues of space and temporality are key to a notion of globalisation that is centred on the transformation of time and space, yet the existing vocabulary of concepts for

capturing these transformations is quite thin. Additionally, there is a need for concepts to capture the non-linearity of certain types of social processes, to capture the process of escalation of change, as well as gradualism and rupture. The concept of wave enables us to better capture the co-existing spatial and temporal aspects of phenomena such as social movements, which start in one place and spread outwards in an escalating rather than linear fashion, before diminishing.

These conceptual issues are further developed in Walby (2006), while they are applied to global data sets and to the comparative development of the UK, US, Sweden and Ireland in Walby (2004).

What is globalisation?

Globalisation takes place on multiple economic, political and cultural levels. Economic globalisation, in particular, instantaneous global financial markets and some global product markets (Ohmae 1990, 1995), is just one of the key dimensions.   There is also a significant restructuring of political institutions, including the development of some institutions of global governance and global political networks (Held et al 1999). At a cultural level there is both an increased awareness of particularism, of comparison of values and practices in the context of global communications (Robertson, 1992), as well as the development of global discourses, such as that of human rights.

Globalisation is a process of increased density and frequency of international or global social interactions relative to local or national ones. This definition closely follows the definition of Chase-Dunn, Kawano and Brewer (2000: 78): 'changes in the density of inter-national and global interactions relative to local or national networks'. A more fulsome, though similar, definition of globalisation is that used by Held et al (1999: 16) 'A process (or set of processes) which embodies a transformation in the spatial organization of social relations and transactions – assessed in terms of their extensity, intensity, velocity and impact – generating transcontinental or interregional flows and networks of activity, interaction, and the exercise of power'. Held et al (1999) have a conceptualisation of globalisation with four dimensions that are analytically separable: the extent of networks of relations and connections; the intensity of activities and flows through these networks; a temporal dimension of the speed of the interchanges; and the impact of these phenomena.

This way of defining globalisation is minimalist in the sense that it does not include the specific causal processes. This is helpful in that it avoids conflating the causation of globalisation with its definition and, additionally, allows for the possibility of more than one wave of globalisation with different causes (Chase-Dunn et al 2000 identify three waves). Others have identified and conflated globalisation variously with internationalisation, liberalisation, universalisation, Westernisation, supraterritoriality (Scholte, 2000), and Americanisation. In particular, 'globalization' has often been treated as if it were effectively the same as the expansion of capitalist markets (Crouch and Streeck, 1997). The conflation of globalisation and capitalism is unhelpful because it does not allow for the significance of social relations other than capitalist ones and, further, precludes analysis of the political actions that may be facilitated by the increased global inter-linkages that may be in opposition to the growth in power of global corporations.

Globalisation also needs to be distinguished from universalism. The former is a specific social, economic and political process; the latter is an abstract, timeless, socially constructed principle. It is possible to assess the extent to which globalisation has occurred and the processes that have generated this, while universalism is an abstract principle that is seen to

stand outside of social location. This distinction is important in the analysis of the discourse of universal human rights. The practitioners of this discourse make appeals to an ostensibly timeless, universal set of principles as part of their claim for legitimacy and authority. This is different from the process of globalisation that is implicated in the construction of the institutional spaces that have facilitated the development of the discourse, such as, UN conferences and institutions. The set of principals known as universal human rights is actually constructed during a contested political process, rather than it being obvious or 'discovered' (Peters and Wolper 1995). The distinction between the socially specific construction of particular principles and the claim to their timeless unsituated relevance is knowingly elided by many of those active in promoting a human rights agenda (Walby 2001a).

When:

This paper is primarily concerned with the globalisation of the last three decades, but has some interest in earlier rounds of globalisation, in particular that of the late nineteenth century. The periodisation of globalisation depends upon the understanding of its nature and causation. Castells (1996, 1997, 1998) argues that the development of globalisation is associated with the rise of the information society, which he dates from the 1970s. However, there is need for caution as to whether there has been a sudden and new development of globalisation. Wallerstein (1974) has argued that there has been an expanding world capitalist system since the sixteenth century. Scepticism as to newness and extent of globalisation has also been rightly expressed by Hirst and Thompson (1996) in the light of the significant development of world trade and financial arrangements in the nineteenth century. More importantly, Chase-Dunn et al (2000) have identified three waves of globalisation, each related to the development of a particular hegemon within a capitalist system, which established conditions under which trade and travel could flourish. Current globalisation is best regarded as a new phase of world integration, with new dynamics, but not as a sudden completely new phenomenon, and the implications of previous, if less significant waves of globalisation need to be taken into account.

Globalisation and space

The key to globalisation is the decline in the time and resources needed for travelling or communicating over distance. The distinctive element is that of spatial scale. There is an apparent compression of space and thus of the time needed to overcome it, or space-time compression (Harvey 1989).

One view of globalisation is to suggest that it annihilates space (Scholte 2000) and to equate globalisation with a process of de-territorialisation, a process in which space becomes irrelevant because of the technology and resources available to overcome it. However, this is to take the argument about the new implications of space too far. This is because there is an irreducible territorial element to human social practices. Most global processes touch down in particular territorial locations for some functions. These processes need to be located somewhere, to have some kind of territorial bases, in which certain sorts of functions are carried out. Some services, such as health, need to be close to where people actually live. Indeed many transnational corporations still have a national base even if they trade globally or regionally (Hirst and Thompson 1996). Even the most de-territorialised trans-national corporation still needs to have its headquarters somewhere, may be in specialised 'world cities', and needs to be serviced by both executives and cleaners who have homes somewhere (Sassen 1991, 1999). It is important not to equate the phenomenon of transnational corporations with the wider notion of ending all borders (Woodiwiss 1996). Space does not have to be totally annihilated, as implied in the concept of supraterritoriality, in order to have sufficiently reduced social significance to hearken a new phenomenon. Space is not so much made irrelevant, as radically reconfigured by processes of globalization.

By contrast, the dominant conception of a nation-state has usually included a territorial element, firmly locating this entity in a spatialised location. This lies behind the conception of a 'Westphalian' state that has sovereignty over its territory, within its physical borders. This is the concept of state that lies within much social science, not only the international relations literature (Waltz 1979). For example, Weber (1948) defined the modern state as that body that had a monopoly of legitimate coercion in a given territory.

However, this spatialised conception of the state or nation-state serves us badly when we come to understand globalisation. This is because when we look hard there are many exceptions to a state having that monopoly of legitimate coercion in a given territory, and indeed to many other forms of monopoly authority (Krasner 1995). The temptation is then to declare these exceptions to the idealised notion of the Westphalian state as new and indeed as a consequence of globalisation.   However, these exceptions are not new (Walby 2003). There rarely if ever have been states that politically or otherwise saturated their territories. There have always been overlapping powers; other entities that claimed authority over specific domains, even the authority to use coercion. The notion of the nation-state is a myth, though one with significant implications (Walby 2003). The conventional notion of space and authority is one in which space has traditionally been conceptualised as a solid that could be under one authority or another. I think we need to replace this with a notion of space that is more of a porous sponge than a solid, as a location where many fluid entities can over-lap and co-exist, sometimes in different niches, sometimes mixed up, sometimes competing.

Divergent inequalities under globalisation

Much of the interest in globalisation and inequalities in the economy has focused on class relations to the exclusion of other forms of social inequalities. Globalisation has often increased class-based inequalities, by changes at both the top and bottom ends of the labour market. The focus needs to be broadened so as to include a wider range of inequalities. The changes in the levels and forms of inequality associated with gender and ethnicity are more complex and varied than those associated with class, not least because they are associated with changes in wider gender and ethnic systems of social relations. For example, the modernisation of the gender regime has taken place more slowly than the modernisation of the economic relations in which most men are involved, and at a different time and rhythm from social relations invoked by ethnicity.   The question here is to understand how globalisation may interact with the different temporalities of modernisation associated with different forms of social relations.

My key argument is that there are divergent implications for class and gender. Globalisation widens social inequalities based on possession of human capital and capital, that is, inequalities critically associated with class. However, globalisation has, at least in the economic North, often speeded the modernisation of the gender regime especially in those instances where national economies are most exposed to advanced capitalist forces. There is then the need to address the extent to which, and conditions under which, the modernisation of the gender regime is associated with reduction in gender inequalities between women and men (Walby 1997).

Globalisation affects inequalities in various forms of social relations in the economy by spreading the division of labour associated with a capitalist economy across greater distances (especially as a consequence of capital becoming more mobile as a result of the new information and communication technologies (Castells 1996 1997 1998) and cheaper transport (Ohmae 1990, 1995) and by speeding its further development (through capital and new technology).   The development of capitalism is associated with a move away from agriculture, away from manual work in manufacturing, and towards service work, especially

that associated with knowledge intensive work. While this is a general process in contemporary capitalist development, the allocation of particular jobs within this division of labour between different socially and spatially defined groups is restructured. It is useful to attempt to make a distinction between the development of capitalism from that of globalisation, even though the development of capitalism is implicated in increased global interconnections, since additional processes are involved in the development of globalisation.

In this way globalisation is associated with increases in class based inequalities as a result of the simultaneous increase in top jobs and downward pressure on other jobs. There has been an increase in jobs associated with knowledge intensive work by the highly educated who are able to use the latest technology and software, which are associated with higher pay and, arguably, associated with flatter hierarchies (Castells 1996; Flores and Gray 2000; Seltzer and Bentley 1999). For example, within the European Union between 1995 and 2000 over 60% of new jobs were created in the high-skilled non-manual occupations; employment growth in jobs that required higher education was 3% a year as compared with 1% in other sectors and in knowledge intensive service sectors it was 7% as compared with 1% in other service sectors (European Commission 2001). In contrast there is downwards pressure on the conditions of other work, as a consequence of the greater mobility of capital creating greater competition as a result of creating a larger product and labour market around the globe, that shifts the balance of power between capital and labour away from labour (Castells 1996; Crouch and Streeck 1997). This downward pressure is experienced not only directly in the labour market, but also via the political level with pressure to deregulate the workplace, removing protections for workers, as well as downward pressure on the extent and quality of welfare provision (Cerny 1995, 1996; Held 1995; Martin and Schumann 1997; Standing 1999). These divisions are re-configured spatially, reducing the extent to which these are primarily intra-national inequalities, and increasing the extent to which they are inequalities between countries, as a result of the position of different countries within a global market, though some significant development of local elites continues. The positioning of countries depends on a variety of forms of infrastructure, including educational (Reich 1993) and governance structures, and affordable telecommunications (Huws, Jager and O'Regan 1999).

The change in gender based inequalities between men and women is more complex because, although women like men are subject to typically widening class inequalities, there is a contrary dynamic, in certain locations, as processes associated with globalisation speed the modernisation of the gender regime. This modernisation of the gender regime is associated with an increase in the number and proportion of paid market based jobs for women as compared to unpaid carework and also family-based agricultural work, which is associated with an increase in the education of women and the closing of gender education gap. This is also, if there is a democratic regime, associated with an increased in the political representation of women in both the formal political arena and civil society associations, and the increased articulation of the interests of employed women (Manza and Brooks 1998). This is associated with the introduction of policies to regulate the labour market in respect of gender issues relevant to employment women (Huber and Stephens 2000), such as issues of working time (such as maternal and parental leave) and equal opportunities, and in the increased provision of welfare services preferred by employed women, such as childcare. For example, the European Union has introduced legally binding Directives to enforce working time provisions that make it easier to combine employment and caring, such as the right to extended maternity leave, and to ensure that equal pay extends to work of equal value (Pillinger 1992; Rees 1998; Walby 1999). Thus the impact of economic growth and the extension of market based economic relations associated with capitalist development may ameliorate gender inequalities in the workplace because of its impact on the modernisation of the gender regime. Of course, the activation of this process depends on the crucial intervening variable of the permeability of the polity to employed women's political pressure. So the impact of globalisation on gender inequality is critically mediated by the nature and level of democracy in the governing polities of a country and the international regimes within which it is inserted. In many countries of the South, these polities critically involve the global

financial institutions, which have demanded programmes of structural adjustment as a condition of their loans. Under such circumstances, where women's political voices are not heard directly, capitalist development may involve more work for women, and no amelioration of gender inequalities (Sparr 1994), though the actual balance between the effects of these two contrary dynamics may vary according to local circumstances (Çagatay and Özler 1995).

Globalisation is critically implicated in the increase of ethnic based inequalities, especially, in the economic North, those associated with citizenship status. Globalisation has entailed the greater movement of people around the world, including migration from the poor South to the rich North, for reasons varying from economic migration to asylum seeking. Inequalities between the dominant white ethnic group and minority ethnic groups within the rich North have been increasing for reasons associated especially with possession/non-possession of citizenship, which is frequently associated with minority ethnic status. In this way globalisation increases visible ethnic inequalities within the North. The inequality between the South and the North is experienced within countries as well as between them. Ethnic inequalities are associated with education, both real skill differences, but also differences in credentials (since educational credentials are rarely recognised as sufficient job qualifications beyond a narrow range of adjacent countries), language, and discrimination. As increasing proportions of native workers in the North have locally recognised credentialed education, the gap between them and migrants, who much less frequently have this, grows. In this way, globalisation increases nationality based, ethnicity associated, forms of inequality within the countries of the North. However, there is additionally a contrary process whereby some minority ethnic groups gain sufficient access to education, and manage to escape minority stigmatisation, so that second and ensuing generations experience less inequality than first generation migrants.

Globalisation increases some inequalities between the developed North and the economic South. Even though most of the South (though with exceptions including of sub-Saharan Africa (Castells 1998)) has experienced economic growth, that in the North has typically been more rapid, thus exacerbating the inequality between people living in different spatially defined locations. However, there are significant exceptions to any simple pattern, some of which are associated with developmental states, including the 'Tiger' economies of SouthEast Asia (Evans 1995), and specific regions, such as Kerala in India, and some highly educated minorities and elites in specific locations.

Ethnic inequalities cannot be reduced to class inequalities. Ethnic inequalities may have an embedded spatial dimension, as a consequence of the association of ethnic inequalities in a country in the North with the situation of the nation of 'origin', even if several generations back, in the poor South. The decrease in the cost and increase in the speed of travel, key features of globalisation, have played an important role here in the increase in the ethnic heterogeneity of the countries of the North as a result of migrations from the South. Diaspora (Cohen 1997) are common, linking countries through trans-national communities. These diaspora may play important roles in the engagement of polities in international relations, for example the involvement of the US (with an Irish diaspora) in the politics of the North of Ireland (Anderson and O'Dowd 1999).

Globalisation does not produce a simple effect on social inequalities. While it has been seen to increase class inequalities by having effects at both the top and bottom ends of the labour market, the effects on gender are more complex and contradictory. Gender inequalities have been subject to significant restructuring as a result of the modernisation of the gender regime, which, in the context of a democratic polity that is permeable to the articulation of employed women's political interests, tends to reduce gender inequalities. This effect cross-cuts that of globalisation on class. The dynamics of gender inequalities cannot be read off from class

inequalities. Further, the dynamics of ethnic inequalities, especially when linked to citizenship and diaspora, are another example of inequalities that cannot be reduced to class.

Political projects are often built around perceived patterns of inequalities. While class politics remain a significant component of political projects, they are not necessarily the sole or even lead component. Passions around ethnic, national and religious projects and perceived inequalities, especially when overlapping with gender projects of either modernisation or tradition, may form as powerful a set of justifications for political action. It is important not to conflate or reduce the complex inequalities that may be part of the underpinning of such projects.

Conceptualising global processes

The nature of the conceptualisation of the relationship between the global level and key social, political and economic units is a core issue in globalisation analysis. This both an ontological issue of determining the fundamental units of analysis as well as an empirical one of ascertaining the extent to which particular relations between social entities have effects.

There are five approaches to conceptualising the relationship between global processes and social and political entities, varying especially as to whether the entities involved are seen as stable or as changed by the globalising process. These are, first, the realist international relations school; second, world-systems theory; third, the clash of civilisations; fourth, the corrosion of nation-states; fifth, transformation.

First, analyses of the realist international relations school treated the states that were the focus of the analysis were conceived as the units in that system were solid 'billiard balls' pushing and being pushed around, but in which neither the nature of the states nor that of the overall system were changed during this competitive process of interaction (Waltz 1979). This has been shown to be problematic by both theoretical and empirical work that has demonstrated that the institutional milieu in which states operated does impact on the goals of states, that is, states are shaped by a changing international regime (Keohane 1989; Krasner 1983; Ruggie 1996, 1998).

Second, in an almost mirror-image of realist international relations analysis, world systems theory conceives of capitalism as a world system, in which states are merely nodes constituted by that system (Robinson 2001; Wallerstein 1974). Again the inter-play between states and system is left out of focus. In sharp contrast to the realist approach, the focus is on global level, which is seen as the key level for the system. Most prominent within this approach is the Marxist world-systems tradition, which considers that the search for causation should focus on the world-system of capitalism as a whole (Wallerstein 1974, 1980, 1989). Here the capitalist system is considered to be the prime mover. This system has had a global reach since the sixteenth century, although the process of saturation of all the economic and social relations in the world is still ongoing. States are nodes within this world-system. There can be no concept of autonomous, free-standing societies here, since all social relations are inter-connected through the capitalist world-system, though there are social formations with varying degrees of differentiation from each other. This is both an ontological and empirical claim about globality. This is a theory that privileges the role of capital in explaining social relations and, since capital is global, the analysis of local social formations must also take into account the global formation. This is a theoretical approach that has never lost sight of the need to explain processes of development in the poorer and less industrialised countries of the world, conceptualising such core-periphery relations as an integral part of the explanation of social relations anywhere.

A current debate within this school of analysis is over the extent to which there has developed a global capitalist polity, beyond the many states that were local nodes in the system. Robinson (2001) argues that economic globalisation, a long-standing centuries-long process, has produced a transnational class formation of global capital and global labour together with a transnational state, and that the nation-state is being transformed and absorbed into this larger trans-national state. Robinson is critical of the Weberian conception of states, which treats them as actors, rather seeing social classes and groups as the actors in a capitalist world-system. He considers such dualism between economy and politics inappropriate, preferring to conceptualise the economic and political merely as distinct moments of the same totality. The trans-national state is seen as a particular constellation of class forces and relations that arises out of capitalist globalisation.

However, not all Marxists agree with such a conceptualisation of the state, rather analysing the state as having a greater degree of autonomy. For example, Skocpol (1979) makes a strong argument for bringing the state back in to the analysis of political change. Within the world-systems approach, the work of Chase-Dunn (1989; et al 2000; with Bornschier 1999), in developing a theory of hegemons provides theoretical space for a more complex analysis of the relationship between states and global level.

Third, globalisation is resisted, or the social and political entities are resilient in the face of globalising strategies. This approach includes accounts where the focus of analysis is on political resistance in nationalist and fundamentalist movements, the resilience of political institutions (Rieger and Leibfried 1998; Smith 1998), and of civilisations (Huntington 1998). Huntington (1998) saw a clash of civilisations, that of the West and Islam, resulting from increased global interaction, in which the religious and cultural basis of civilisations was seen as robust and stable. A major problem with Huntington's analysis is that his apparently stable civilisational units turn out to be rather more changeable, internally divided, and capable of alliances, than is consistent with his overall framework.

Fourth, globalisation has been understood as a corrosive force eroding and changing the nature of existing social and political entities, such as societies and states, and especially nation-states (Crouch and Streeck 1997). Globalisation is here understood as a process that impacts on otherwise invariant economies, polities and cultures that might resist or be resilient to this process. It is seen to erode, undermine, and otherwise reduce the capacity for autonomous action of nation-states, especially over the provision of welfare, and hence to undermine their democratic accountability to their citizens (Cerny 1995, 1996; Held 1995; Martin and Schumann 1997), as a result of the corrosive power of global financial markets (Strange 1996) and the ensuing new balance of power between capital and labour. It is considered thereby to exacerbate inequalities in employment both within and between countries and to undermine the distinctiveness of cultures and the authority of traditional ways of acting. This, perhaps the dominant understanding of globalisation, is rather too one-sided in its conceptualisation of globalisation as a process that impacts on an already existing set of social and political entities, and leaves out of focus the way in which social and political entities affect the globalisation process itself, in a more subtle process of mutual change.

Fifth, globalisation has been seen as some kind of transformative process (Held et al 1999) in which the units within the process change as well as the overall environment. This includes a variety of conceptualisations that use of concepts such as transformation (Held et al 1999), glocalisation (Robertson 1992), and regime influence (Keohane 1989; Krasner 1983; Ruggie 1996, 1998). In this approach, often focused on the social construction of conceptions of identity and interest, the globalisation process is not a process of cultural homogenisation, but rather one in which cultures may see themselves relative to other cultures in the world, but nonetheless maintaining a discrete, if somewhat reformed, identity (Robertson, 1992).

Examples include the appeal to the doctrine of universal human rights to protect social practices authorised by religion by some Islamic minorities in the West (Soysal 1994), and the appeal to the Westphalian, now global, doctrine of the sovereignty of nation-states in order to resist external interventions.

The first four positions miss many important aspects of globalisation, which involves complex interactive effects between social, political and economic entities. The fifth position is the one that is built upon here. Globalisation is here considered not as a process that erodes or undermines, nor as a process that is met by resistance or resilience, but rather a process of co-evolution of a variety of entities. Hence the current changes in the configuration of spatial relations are complex rather than simple and are better not characterised by concepts such as 'impact', 'erode' or 'resist'. Rather the notion of 'co-evolution' of complex adaptive systems, drawn from complexity theory (Kauffman 1993), better captures the mutual effects of these changes on social and political entities. The concept of co-evolution enables us to include the specific phenomena noted by Held et al (1999), Robertson (1992), Robinson (1992), Keohane (1989), Krasner (1983) and Ruggie (1996, 1998) within this larger concept. This section aims to build on the insights of those who have conceptualised globalisation as a transformative process interacting with its environment, by developing the concept of co-evolution to capture the process more effectively.

The concept of co-evolution is part of a body of theory variously named complexity or chaos theory. Complexity theory offers a new way of conceptualising complex processes such as those involved in globalisation.

Complexity Theory

Complexity theory offers a new set of conceptual tools to understand the diversity of modernities and how they inter-relate. This is a trans-disciplinary theoretical development that provides new concepts, methods and epistemology to grasp the complexity of the contemporary world. Central to this development is the notion of emergence and the ability to address more than one layer of determination yet still retain holistic concepts, holding at its core an anti-reductionist analytic strategy. I think that this is parallel to core analytic concerns of sociology, which seeks to combine an understanding of both individual and social structure, that does not deny the autonomy of the individual while yet theorising changes in the social totality.

Most of the classic theory in Sociology has addressed the social within a large framing, invoking some kind of concept of social system, whether this is understood at the level of capital, as in Marx (1954), either global (Wallerstein 1974) or national (Jessop 1990), a society, as in Durkheim (1966) and Parsons (1951), especially nation-states (Giddens 1984), or a world religion (Weber 1958). In the turn against the metanarrative (Lyotard, 1984), which has overtaken social theory over the last two decades most large scale theorising, from Marxist to Parsonian, has been swept away. This has proceeded along with the privileging of issues of particularity, of difference (Felski 1997; Taylor 1994) and of agency (Emirbayer 1997; Giddens 1984) in social theory and analysis. Yet, the emergence of concern with global processes has led to a revival of interest in large scale processes, and of inequality alongside difference, in order to comprehend the meaning and implications of globalisation (Benhabib 1999; Castells 1996, 1997, 1998). In this new context, it is time to think again about the vocabulary of concepts available to social theory to address issues at a large scale, systemic and global level. It is in this context that an investigation of the relevance and usefulness of the concepts developed within complexity theory becomes especially relevant. While Sociology has had something of a hiatus in the development of its thinking about large scale processes and especially about systems during the postmodern turn, thinking within the

natural and mathematical sciences has proceeded apace. It is thus timely to investigate the advances that have occurred in these disciplines in order to see whether and if so how these might assist the development of thinking within sociology.

Complexity theory offers a new way of thinking about connections and linkages. Much conventional social theory has oscillated between on the one hand explanations of the social in terms of self-balancing systems, with a hierarchical relation between component elements, and on the other a rejection of such holism and its replacement with either thick description or a focus on social action or other phenomena that have a restricted ambit. The significance of difference, of multiple overlapping cross-cutting forms of inequality, continues to be a challenge to old forms of systems theory. The significance of the global challenges micro theories, which reject holism, to raise the scale of their horizon and to consider the theorisation of social linkages on a global scale. The simultaneous significance in the modern world of both continuity and gradual change on the one hand and of rupture and sudden change on the other challenges most social theories which are typically preoccupied with one or the other, but not both. To each of these three explanatory challenges, of difference, of global inter-connections, and of the simultaneity of stability and disruption, complexity theory offers powerful insights.

Complexity theory offers the opportunity to re-frame and transcend some unhelpful polarities in sociological theory such as the logic of industrialism versus divergent paths of development, since the concept of path dependency has much to offer; determinist realist approaches to explanation versus postmodern indeterminacy, since notions of probabilism and emergence have much to offer; and to develop the analysis using the concept of system, which has been much neglected in Sociology over the last couple of decades following the rejection of both Parsonian structural-functionalism and Marxist systems theory.   These issues include: path dependency; non-linear processes; positive feedback loops; temporality and sequencing; emergence; probabilism; implications for determinism/indeterminacy; system; autopoiesis and self-organisation; complex adaptive systems; co-evolving systems; the extent to which specific social phenomena are systems.

Features of the new systems theory

There are three key inter-related features of the new conceptions of systems that depart from older forms of systems theorising that are of particular importance: system/environment distinction; self-organising as autopoiesis; co-evolution and complex adaptive systems.

System environment distinction: One of the contributions of complexity theory is to the simplification of some of the concepts so that they can be made more flexible and transferable from one situation to another. A key example is that of the distinction between the system and its environment. This conceptualisation was originally made by Ludwig von Bertanffy in the 1950s (Luhmann 1995), and is now common across complexity theory (Capra 1997).

Autopoiesis: That systems are self-reproducing is an obvious and key part of the definition of a system. Much of the work in complexity theory on conceptualisation of this draws from the work of Maturana and Varela (1980). In this process of self-reproduction a system may be self-organising and self-defining. The system has internal processes that internally connect and reproduce the system. These features have been called autopoietic (Maturana and Varela 1980). Autopoiesis is a network of processes, in which each component participates in the production or transformation of other components in the network. In this way the entire network continually re-makes itself.   The system is produced by its components and in turn produces those components. This includes the creation of a boundary that specifies the

domain of the network's operations and thus defines the system as a unit (Maturana and Varela 1980).

Systems interact with each other. They may do so in such a way, called coupling by Maturana and Varela, that they assist in the reproduction of each other. In this case the mutual modifications of the systems as they interact does not lead to the loss of the identity of each system. Of course some interactions with other systems may lead to the loss of identity of one or both systems, but this is not coupling. Coupling may lead to the generation of a new unity in a different domain from that in which the coupled entities maintain their identities. This new unity may itself be autopoietic, in the sense of self-reproducing. Thus there may be a network of autopoietic systems dependent upon each other for the maintenance of their identities. 'An autopoietic system whose autopoiesis entails the autopoiesis of the coupled autopoietic unities which realize it, is an autopoietic system of a higher order (Maturana and Varela 1980: 109).

Co-evolution: The notion of co-evolution replaces the notion of hierarchical relations between systems or parts of systems. It replaces the notion of an entity having an impact on an environment. Rather, since every system takes all other systems as its environment, systems co-evolve as they complexly adapt to their environment. These are 'complex adaptive systems' rather than hierarchically related elements. The principle of autopoiesis is important for understanding the way that systems are seen to co-evolve and adapt to each other, rather than one simply impacting on another. This is because since each system has an internal system any initial impact will have complex effects upon the internal relations of the other system. Hence the response of the system is unlikely to be simple.

In order to respond to its environment a system changes internally. Since its environment is composed of other systems, these other systems also change internally. Systems impact on each other in ways that that are not those of a simple hierarchy or that of a simple impact on a stable environment. Rather, systems are co-evolving; they are complex adaptive systems (Holland 1995, 2000; Kaufmann 1993, 1995). This notion that as one system changes the others that it is interacting with also changes goes beyond the old conception that an entity simply acts on another entity. Rather there is mutual impact; they both change as a result of this interaction. They are co-evolving.

Kaufmann (1993) addresses this issue via the concept of 'fitness landscapes'. This concept is initially derived from analyses of the evolution of species, but may be regarded as a concept that is potentially transferable to other types of systems. The environment or landscape that each system faces is changed as a result of changes in the systems that constitute that landscape. So as one system evolves, it changes the landscape for others. The landscape can be adapted or deformed by systems as they co-evolve.

This process involves selection and temporality. It involves selection, in that the system has to recognise which phenomena, out of a range, are to be responded to. It involves temporality, since a process of change takes time. Co-evolution is not instantaneous, but a process that takes place over time.

Relevance to Sociology

This set of concepts – system system/environment distinction, autopoiesis, and co-evolution – provide a vocabulary that may be usefully mined by sociology in the development of its own concepts and theories of systems. This conceptualisation of systems and their inter-relationship creates the potential for a more flexible conceptualisation between elements of a

social system than that provided by older forms of system theory. In particular, it does not entail a presumption of hierarchy between inter-connected phenomena; rather hierarchy is a special case of differentiated systems. This makes for a more flexible conceptualisation, providing the conceptual possibility to avoid rigidities such as that of 'part and whole' (Parsons 1951) and of 'base-superstructure' (Marx 1967), as well as the ambiguities of 'relative autonomy' (Althusser 1971). In the old systems theory there are several attempts to do this that are overly rigid: sub-systems, base-superstructure and relative autonomy. These involve some kind of hierarchical relationship between nested sub-parts of a system. The sub-systems in Parsons' (1951) formulation are a particularly rigid example of this. Within Marxist systems theory there were two interpretations of the formulation. The simpler and more popular version was that of a base-superstructure model, in which the economic base determined the political and cultural superstructure. A more complex interpretation was that of Althusser's relative autonomy, that removed the simple hierarchy of these elements, making it a relative hierarchy. This in turn raised the question of the degree of autonomy entailed without unduly stretching the notion of relative hierarchy of the elements.

The solution to this problem in complexity theory is to consider that each system has as its environment all other systems. This replaces the rigid notion of a hierarchy of sub-systems by a much more fluid conception of the mutual impact of systems. This means that what many systems based Sociologists have treated as subordinate elements within systems, are here conceptualised as separate systems. This enables us both to keep the notion of system, and the notion of systematic inter-relatedness, while yet not pre-specifying, in a rigid way the nature of these inter-connections. This conception, with the primary exception of Luhmann (1995) and those associated with his work, has, until recently, rarely been applied within Sociology. However, there is increasing interest in the utilisation of the theoretical innovations of complexity theory in Sociology (Byrne 1998; Cilliers 1998; Medd 2001; Urry 2003).

Path Dependency

Path dependency is a crucial process in understanding different modernities within social science. Key to this is the role of social and political institutions that lock-in certain paths of development, through their shaping of power, opportunity and knowledge (Mahoney 2000; Pierson 2000). Developments in complexity theory have a parallel interest in path dependency, from different starting points. The underlying issue is the extent to which diversity between countries is due to different stages in economic development or to different paths of development.

The concept of path dependency facilitates the inclusion of temporality and sequencing within social theory. Path dependency means that events that occur at one moment in time have consequences at later times and that the order in which events and developments occur has consequences. In social science, path dependent processes usually involve the embedding the outcome of social events at one moment in time in an institution that endures over time, thus carrying the effect of the past into the present and future. The concept of path dependency has been significantly developed not only within social science (Mahoney 2000; Nee and Cao 1999; Pierson 2000), but also within transdisciplinary debates on complexity theory (Capra 1997; Waldrop 1992).

There are several issues within the analysis of path dependency. First, whether the paths taken are significant, or minor, rare and temporary (Liebowitz and Margolis 1995); second, whether the cause of a turning point is to be treated as contingent (Mahoney 2000) or to be explained within the theory; third, the nature of the processes and institutions that secure the 'lock-in' to the particular path of development (North 1990); fourth, the extent to which the sequencing of events has consequences (Goldstone 1998; Haydu 1998); and fifth, the

implications of path dependency for the building of general social theory (Kiser and Hechter 1991).

In order to address these issues two further sets of concepts are being developed: first that of 'punctuated equilibria'; second, that of 'catalytic' and 'dampening' institutions.   First, the concept of 'punctuated equilibria' is introduced into social theory from complexity theory, drawing on the work of Eldredge (1985, 1986). This allows for both periods of time that are first, steady, in equilibrium, or with gradual development, and second, moments of sudden change, rupture, and the creation of new paths of development. Rather than having to choose between economic development or modernisation theory on the one hand and path dependency notions of critical junctions on the other hand, it is argued here that we need a conceptual framework that encompasses both. Second, the institutions that lock-in paths of development need to be differentiated as to whether they speed up, that is catalyse, processes of development, or whether they slow down, that is dampen, such iterative processes. Such a distinction is needed in order to be able to go beyond the rather static conception of lock-in institutions that has developed.

Wave

The concept of wave is developed in order to capture the simultaneous temporal and spatial dimensions of social change in a global era. The development of globalisation puts a premium on developing concepts that capture the nature of how an event and patterns of social relations in one point in time and space impact on an event or social relations in another point in time and space. The concept of wave is an attempt to catch the way that a critical event can have repercussions on social formations elsewhere.   A wave starts in one spatial location, builds rapidly through endogenous processes, then spreads out though space and time to affect social relations in other locations. These events are connected, but not rigidly, passing through networks and social institutions.

These global waves carry new social and political projects. They entail new or re-worked visions of the social order. They have carried a wide range of diverse projects including those that are environmentalist (Mies and Shiva 1993); feminist (Peters and Wolper 1995); anti-capitalist (Klein 1999); fundamentalist (Marty and Scott 1993); and human rights oriented (Woodiwiss 1998). While some of these current waves are of projects that seek to limit certain aspects of globalisation, nevertheless, as they sweep around the world they are implicated in the generation of new global social processes. For example, the rise of a renewed discourse of universal human rights has become a global wave. While it involves a project to contest perceived excesses of global forces, it flourishes in emergent global fora and institutions. It is facilitated by time-space compression (Harvey 1989). This wave of interest in human rights is becoming institutionalised, especially in legal and political institutions, and in so straddling the boundary between polity and civil society is beginning to create both a global civil society and a global political discourse. This elides the distinction between the global and the universal in its claim for legitimacy as a political doctrine (Walby 2001).

This development of the concept of 'wave' draws on various types of intellectual heritage. First, the concept of 'rounds of restructuring' that articulates spatial and temporal elements (Massey and Meagan 1982; Bagguley et al, 1990). Second, a focus on process not just structure, as in the contrasting concepts of wave and particle.   Third, the concept of a social movement. Fourth, the concept of first and second (and possibly third) waves of feminism

(Dahlerup, 1986; Spender, 1983). Fifth, non-linearity from chaos and complexity theory (Biggs, 2001; Capra, 1997).

First, the concept of rounds of restructuring has been used to capture the effects of a widespread change in the economic environment upon a pre-existing institutional structure that is spatially varied (Bagguley et al 1990; Massey and Meagan 1982). The concept was used to theorise aspects of spatial unevenness in social processes. The outcome of any given round of economic restructuring varied between different localities because of pre-existing differences in the social, economic and political institutions of different places. The interaction of the round of restructuring with these varied institutions produced different outcomes, rather than simply producing conformity around a new principle of social and economic organisation. It embedded historical and spatial dimensions into the analysis of political and economic change (Bagguley et al 1990). The concept of wave is also designed to capture the notion that a common factor may have different local impacts as a result of variations in the pre-existing institutional structure, although it goes beyond the concept of restructuring because of its implied non-linearity.

Second, a wave captures a different kind of social process than those of institutional development. A wave is not an institution or a system. Instead it is a form of social energy, a process, a social force. It may pass through institutions and systems, disturbing them, but is not itself organised as an institution or system. In this way the concept of wave draws upon our already existing understanding of the distinction between wave and particle.   Light is energy that is without mass and takes the form of a wave; while particles have mass and organisation. The concept of wave is likewise concerned with the transmission of energy, this time social energy, in a form and process that is not heavy with institutions.

Third, the concept of wave draws on the heritage of social movement theory. As in social movements, the focus of an analysis of waves is on the process of development of new (or re-worked, revived) social, political and cultural projects. Social movement theory has built a sophisticated range of concepts and explanatory practices to capture the rise, impact and fall of social movements. They typically rise out of civil society and seek to impact on and change established institutions, being themselves changed in the process. The concept of wave draws on this, but goes beyond it with the added dimension of spatiality, which is rarely a key element in social movement theory.

Fourth, the concept of wave has been used in the analysis of the history of feminist movements. Its particular use has been to capture the temporal, rather than spatial, dimension of feminist movements. There was a powerful feminist movement in the latter part of the nineteenth and early twentieth centuries, which succeeded in winning the vote for women as well as reforming laws on marriage and practices in employment and education (Banks, 1981; Spender, 1983). There was a further powerful feminist movement starting in the late 1960s in the US, in the 1970s in the UK and spreading around the world. In between these two movements there was not a total cessation of feminist activity, but it was less public, less confrontationist, less visible and less powerful. The concept of wave is used in order to capture the notion that while feminism did not go away completely, neither was it sustained at the same level of visibility and activity. Like an ocean, feminism is with us always as long as there is gender inequality, but there are waves of publicly visible activism only some of the time.

Fifth, the concept of wave captures a social process marked by an absence of linearity in the relationship between events and in the temporality of the process itself. An initial event may build suddenly to large proportions, or it may fade away with little impact. The classic, metaphorical, example of the former is the flapping of the butterfly's wings that disturbs the air

in a way that indirectly leads to a storm elsewhere in the world. This is the terrain of chaos theory. It draws on the way that many social and 'natural' systems are not in stable equilibrium so that a small event can create a feedback mechanism, which builds into a large event. This is an account of the world in which the simple abstractions of linear analysis, in which an event has a direct and proportionate response do not apply (Capra, 1997). The non-linear dimension of time and impact are elements pertinent to the understanding of some social phenomena. Biggs (2001) demonstrates that the dynamics of social movements, such as strikes, especially in their very rapid, non-linear, rate of development, have parallels in nature with phenomena such as forest fires. They share a form of endogenous development with a positive feedback loop speeding the process of 'contagion'. These events are governed by a power law whatever the scale, that is, they take a power fractal form. This is because any one agent can affect a set ratio of other agents, provoking them to either action or combustion. My concept of wave will draw on these arguments. They will be used to capture those elements of a wave of transformative social action which are dynamic and which have significant endogeneity. It is the endogeneity, the positive feedback loops, which are crucial to the explanation of the suddenness of waves of social movements and of the rapidity of the generation of their intensity and power.

I am using a concept of wave here that integrates these notions of the spatial, temporal, non-linearity, and transformative social energy. A wave of political activity may be initiated at one point in time and space, but it may travel to other places, probably at later times, and probably have somewhat different impacts, depending on the prior institutional structure at those locations. Its starting point will depend on particular contradictions in social relations at a structural level and the resources available to participants. The rate of increase in the intensity of the wave depends not only on the resources available to participants but on the nature of the endogenous feedback processes within the movement and between the movement and potential participants. The extent of the spread of the wave depends on external circumstances, the connectedness of its networks, resources available to participants, and the energy generated by endogenous processes. In the contemporary world such waves can become global, while a century ago the horizon of activity might have been more restricted. The level of impact will depend on the conjuncture of circumstances, which affects whether it is a mere ripple or a tidal wave of tremendous proportions. The effect of the wave will be significantly affected by the nature of the local circumstances with which it interacts. The impact may be one of simple change in the direction of the flow, or it may be one in which it is absorbed via a complex process of hybridisation with prior local practices, or it may result in fierce resistance which can have a backwash effect towards the point of origin. The notion of wave bears some resemblances to the concept of network, in that it is an attempt to conceptualise linkages which are not simple, direct and linear, and in which there are loose connections between individuals that make more than the sum of those individuals. But it is more specific in the nature of these linkages, with its specification of a beginning, of its stimulation of a concatenation of events, intensification through endogenous processes and of the primary direction of its momentum.

Waves today can be global although, historically, regional waves were more common. Indeed the phenomena of waves becomes more important in the context of an unevenly spatialised set of social relations that are loosely, but not too tightly, connected. A key example pursued in the book is that of feminist movements, both generally, in the spread of such ideas and practices of women's human rights, and specifically, such as the demand to regulate men's violence against women which is newly constructed as a violation of women's human rights. Other examples include the environmental movement, and the human rights movement. A century ago waves tended to have a more restricted arena. Examples include the women's suffrage movement, which was restricted to the developed West, with a regional sub-wave associated with the North Atlantic rim, and later regional sub-waves.

Waves can contain relatively small, specific projects, or they can articulate large projects of societalisation. The former may be more easily absorbed or hybridised, the latter are more likely to provoke resistance or backlash. The former may merely speed a process of development already begun by some social forces, and its ideas championed within that social formation. Alternatively waves may challenge the foundations of the social order, bearing projects that imply societalisation around different principles. The potential implications of the project contained by the wave for key elite groups in the host country is likely to be of particular importance in determining the nature of the response.

While many, especially of the better documented, waves may be constituted as pro-modernist, seeking to speed the modernisation of social relations with a justice and egalitarian oriented perspective, this is not their only content. There have been a series of anti-modernist waves, including the fascist wave of the 1930s that spread outward from Nazi Germany to dominate, partly through political and cultural means, partly through military means, a considerable portion of West Europe, with further ripples in most other West European countries (e.g. Moseley in the UK). In some ways the fundamentalist element and moment in Islam takes on some of the characteristics of a wave, having a loose centre in Islamic heartlands, and spreading to most corners of the world.

Global waves cross-cut paths of national development. As would-be nation-states try to societalise around their selected principles, they are subject to waves of influence of different kinds from other lands. In the interaction of the wave and the nation-state project there are several options. The wave may be absorbed readily, perhaps by a key group that uses it as a support for its own agenda, perhaps pushing forward a modernist or ant-modernist agenda. Or it may be rejected, involving hostility against the source of the wave and those who propound its values. Or it may be hybridised into something new.

National Pathways and Waves: An example of a feminist wave

Global waves intersect with path dependent forms of national development, with complex effects. The significance of these waves is that they are forms of political intervention that do not derive from the specificities of national development.   They are global and regional. The waves depend upon the development of global communications, and, especially in the more recent wave, the emergence of institutions, conferences, and other fora at a global level. They disembed sets of social relations from one spatial location in such a way that it may have an effect on social relations in another spatial location, which has a different form and level of development.

Examples of such waves are those of human rights and of feminism. These waves can engender processes that speed the transition from the domestic to public gender regime (Walby 1997), under certain circumstances. While these waves of feminism and human rights have tended to originate in more developed countries, they have hybridised as they have developed, so as to include concerns articulated by those in different situations in less developed countries. The spread and impact of the waves is not uniform but depends upon the extent to which a country is engaged in relevant global, or regional, networks, as well as upon local circumstances.   The significance of regional clustering should not be underestimated.

Contemporary feminism is increasingly being articulated through a global discourse on human rights and is using global and regional fora. The means that a feminist interpretation of human rights as women's rights is increasingly being utilised in countries that are at different levels of economic development.   Two examples illustrate this: first, equal treatment in

educational and economic matters; second, campaigns to stop men's violence against women.

Since the 1970s and 1980s there have developed many transnational feminist networks related to economic, employment and other matters, for example, Development Alternatives with Women for a New Era; Network Women in Development Europe; and the Association of Women of the Mediterranean Region. These developments were facilitated by the development of new communications technologies and by the emergence and increasing importance of global institutions, conferences, and fora. The UN played a key role in facilitating interaction and cooperation among feminist organizations, by such practices as world conferences on women, where transnational feminist networks were formed and women's organizations came into contact with each other, as at the 1985 Nairobi conference and the 1995 Beijing Fourth World Conference on women (Moghadam, 1998, 2000). In 1979 the UN adopted a Convention on the Elimination of all Forms of Discrimination Against Women at the General Assembly in 1979, which has been ratified by most members of the UN (Nelson and Chowdhury, 1994). While in itself this convention has little binding force, nonetheless, it was important as a form of legitimation of this demand when made by local activists in particular countries (UNIFEM, 2000d). For example, it was important in the campaign by Japanese women who were demanding equal opportunities legislation. They successfully used this convention by threatening to embarrass their government if it had not passed suitable legislation before an international meeting (Yoko, Mitsuko and Kimiko, 1994).

During the 1960s and 1970s, feminist activists in the US and UK were prominent in the development of national, yet mutually informed, movements around domestic violence and rape (Dobash and Dobash, 1992). The ideas and practices spread rapidly to many countries and local campaigns were established in both Western nations (Hanmer, Radford and Stanko, 1989) and the developing world (Counts, Brown and Campbell, 1992; Davies, 1993), from Canada (Johnson, 1996) to Malaysia (Ariffin, 1997) and India (Sen, 1998). This was partly due to feminist networking, travelling, global media, development aid, and the global publishing industry. By the early 1990s this demand to stop men's violence against women was articulated in international fora, including those of the UN (Friedman, 1995). This was translated into language and concepts more appropriate for the predominantly male forum of the UN, that is the language of human rights rather than men's oppression of women (Bunch, 1995; Stamatopolou, 1995). In 1993 a UN conference in Vienna resolved that 'Violence against women constitutes a violation of the rights and fundamental freedoms of women' (UNIFEM, 2000a). This development was the result of actions by a set of alliances, networks and coalitions at both grassroots and international levels (Toro, 1995). While this Declaration was not legally binding on member states, nonetheless it recommended a series of specific legislative, educational and administrative measures to be taken by states, and provided an important source of legitimation to feminist activists in putting pressure on 'their' states. These actions were reiterated and developed in the 1995 UN Beijing Platform for Action and further UN institutions and conferences have been used to further these actions (UNIFEM, 2000b, 2000c).

These transnational feminist movements have played a significant role in the revision of laws related to the regulation of employment and the regulation of inter-personal violence. As such they constitute an intervention into national trajectories of development of gender regimes. The development of women's education to the same level as that of men has taken place only recently in the older industrial countries, but at a much earlier stage of economic development in more newly industrialising countries. Policy and legislation for equal pay and equal treatment in employment and related matters has likewise taken place only recently in older industrial countries and at a much earlier stage of economic development in more newly industrialising countries. Similarly, policy and legislation to regulate more effectively men's violence against women is taking place recently in older industrial countries and at a much earlier stage of economic development in newly industrialising countries. These

developments are a result of globalisation. Globalisation produces an impetus to the development of equal rights for women at lower levels of economic development than was the case in the history of older industrial countries.

The implications of this political development for the trajectory of the gender regime are several and are likely to vary according to context. In some instances globalisation may speed up the transition of the gender regime from a domestic to public form. This is especially the case where for contingent reasons there had been a dampening effect of the polity on the transition in the gender regime. This may be seen in the case of Ireland, discussed above, where the impact of globalisation, significantly mediated via the European Union (Walby 1999), had been to remove barriers to increased women's employment. In other instances, the transition in the gender regime may be highly uneven, for example, between the rural and urban sectors of the economy, or between different domains of the gender regime, for example, modernisation of employment relations but not family relations. This unevenness may under certain circumstances be associated with a political backlash to changes in the gender regime (Marty and Scott, 1993; Moghadam, 1994), which may or may not be influential.

The impact of globalisation on the transition in the gender regime thus cannot be understood outside of an understanding of processes with a temporal and sequential character.

Conclusions

The process of increased global inter-linkages is not unique to the last 20 years, but has occurred before.   While capital is a driving force behind the expansion of the market economy, this by itself does not explain the timing or nature of the current wave of globalisation. The current wave of globalization is facilitated by several conditions, of which two relate specifically to the conditions of capitalist expansion. First, there is the development of a hegemon which is able to create the conditions for an era of safe trading on widely accepted rules, similar to that produced by previous hegemons (Chase-Dunn et al, 2000). Second, the development of the new information and communication technologies facilitates the drive for capital expansion (Castells, 1996, 1997, 1998). These two conditions have facilitated the further expansion of capital and the increase in the proportion of the economic activity around the world that is integrated into global capital flows. However, they have also affected other social relations, particularly those of gender, and of ethnicity, nation and religion. Further, while in some locations modernisation and globalisation go hand in hand, in others they are divergent processes. It is important not to reduce modernisation, capital expansion and globalisation to each other.

The early vision of globalization, which either lauded or abhorred its postulated impact as newly invigorating a neo-liberal version of capitalism, has correctly given way to more complex accounts of the restructuring social relations. These complexities can be better understood if our vocabulary of concepts is extended and developed using insights from complexity theory, including, in particular, concepts of 'co-evolution', 'complex adaptive systems', 'fitness landscapes', 'path dependency' and 'waves'.

Global conflicts cannot be understood without an understanding of the deep social fractures related to ethnicity, nation, religion and gender, as well as class. Globalisation leads variously to new forms of universalism or the maintenance or invention of new particularisms. There is neither simple homogenisation nor simple maintenance of differences, but rather the forming and re-forming of social differences and inequalities. The theorisation of difference and inequalities is a key issue behind this debate.

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