PART ONE
THE SHIFTING CONTOURS OF THE GLOBAL ECONOMY
One
Questioning ‘Globalization’

Globalization is a fact … Not just in finance, but in communication, in technology, increasingly in culture, in recreation. In the world of the Internet, information technology and TV, there will be globalization. And in trade, the problem is not there’s too much of it; on the contrary there’s too little of it … The issue is not how to stop globalization. The issue is how we use the power of community to combine it with justice … the alternative to globalization is isolation.

Tony Blair, UK Prime Minister, 2001

Globalization – as announced, promised and asserted to be inevitable in the 1970s,’80s and much of the ’90s – has now petered out. Bits and pieces continue. Other bits have collapsed or are collapsing. Some are blocked. And a flood of other forces have come into play, dragging us in a multitude of directions … The desire of people to organize their lives around the reality of where they live is central to the return of nationalism.

John Rawlston Saul, 2005

What in the world is going on?

‘Globalization’ is one of the most used, but also one of the most misused and one of the most confused, words around today. It’s virtually everywhere. Hardly a day goes by without its being invoked by politicians, by academics, by business or labour union leaders, by journalists. In fact, there is an interesting geography of the awareness of, and attitudes towards, globalization, as a recent ILO survey shows.¹ In the last 25 years or so it has entered the popular imagination in a big way, although it is a concept – if not a term – whose roots go back at least to the nineteenth century. The current explosion of interest in ‘globalization’ reflects the pervasive feeling that something fundamental is happening in the world; that there are lots of ‘big issues’ that are somehow interconnected under the broad umbrella term ‘globalization’. In the words of one contemporary commentator,
We live in an era in which everything has changed and most things are still changing. The ice has melted on the familiar landscape of the second half of the 20th century. Power in all its forms is shifting rapidly and unpredictably. You might even say that we are at the beginning of history.²

Such feelings of uncertainty are intensified by an increased awareness that what is happening in one part of the world is deeply – and often very immediately – affected by events happening in other parts of the world. Part of this is simply the result of the revolution in electronic communications that has transformed the speed with which information spreads. But part of it is also to do with the fact that many of the things we use in our daily lives are derived more and more from an increasingly complex geography of production, distribution and consumption, whose scale has become, if not totally global, at least vastly more extensive, and whose choreography has become increasingly intricate. Many products, indeed, have such a complex geography – with parts being made in different countries and then assembled somewhere else – that labels of origin rarely have meaning any more. To the individual citizen the most obvious indicators of change are those which impinge most directly on her/his daily activities – making a living, acquiring the necessities of life, providing for their children to sustain their future.

In the industrialized countries, there is fear that the dual (and connected) forces of technological change and global shifts in the location of economic activities are adversely transforming employment prospects. The current waves of concern about the outsourcing and offshoring of jobs in the IT service industries (notably, though not exclusively, to India), or the more general fear that many manufacturing jobs are being sucked into a newly emergent China, suddenly growing at breakneck speed, are only the most recent examples of such fears. But the problems of the industrialized countries pale into insignificance when set against those of the poorest countries in what used to be called the ‘Third World’. Although there are indeed losers in the developed and affluent countries their magnitude is totally dwarfed by the poverty and deprivation of much of Africa and of many parts of South Asia and of Latin America. The development gap continues to widen: the disparity between rich and poor continues to grow.

It is, of course, totally naïve to explain all such problems in terms of a single causal mechanism called ‘globalization’,

\[\text{a term ... [too often] used by a lot of woolly thinkers who lump together all sorts of superficially converging trends ... and call it globalization without trying to distinguish what is important from what is trivial, either in causes or in consequences.}^3\]

‘Globalization’, in fact, has become a convenient ‘catch-all’ term, used by many to bundle together virtually all the ‘goods’ and ‘bads’ facing contemporary societies. Not surprisingly, then, it generates heated and polarized argument across the entire political and ideological spectrum. Most dramatic of all, since the turn of the
millennium, has been the proliferation of global protest movements: the explosion of street demonstrations at major international political meetings. These have involved a remarkable \textit{mélange} of pressure groups, ranging from long-established civil society organizations (CSOs) to totally new groups with either very specific, or very general, foci for their protest, together with anarchist and revolutionary elements with a broad anti-capitalist agenda.

First coming to real prominence at the meeting of the World Trade Organization in Seattle in November 1999, the global protest movements immediately became a permanent feature of every subsequent international meeting of governmental organizations. In some cases, they have manifested themselves in such globally generated events as the ‘Live8’ concerts in 2005, organized to coincide with the meeting of the world’s largest economies (G8) and the ‘Make Poverty History’ campaign. At the other political extreme, the leaders of big business have their own ‘tribal’ meetings, most notably the World Economic Forum held every year at Davos in Switzerland.

**Conflicting perspectives on ‘globalization’**

Because ‘globalization’ is such a highly contested term, it is important to be clear about the position taken in this book. Its primary focus is the global economy. There are, of course, other forms of ‘globalization’—political, cultural and social—and these are often difficult to separate. Indeed, the ‘economy’ itself is not some kind of isolated entity. Not only is it deeply embedded in social, cultural and political processes and institutions but also these are, themselves, often substantially imbued with economic values. This is especially so in the kind of capitalist market economy that now prevails throughout most of the world.

**‘Hyper-globalists’ to the right and to the left**

Probably the largest body of opinion—and one that spans the entire politico-ideological spectrum—consists of what might be called the \textit{hyper-globalists}, who argue that we live in a borderless world in which the ‘national’ is no longer relevant. In such a world, ‘globalization’ is the new economic (as well as political and cultural) order. It is a world where nation-states are no longer significant actors or meaningful economic units and in which consumer tastes and cultures are homogenized and satisfied through the provision of standardized global products created by global corporations with no allegiance to place or community. Thus, the ‘global’ is claimed to be the \textit{natural} order, an inevitable state of affairs, in which time–space has been compressed, the ‘end of geography’ has arrived and everywhere is becoming the same. Such a hyper-globalist view is shown in Figure 1.1 as an inexorable process of increasing geographical spread and increasing functional integration between economic activities.
This hyper-globalist view of the world is a myth. It does not — and is unlikely to — exist. Nevertheless, its rhetoric retains a powerful influence on politicians, business leaders and many other interest groups. It is a world-view shared by many writers, on both the right and the left. Where they differ is in their evaluation of the situation and in their policy positions. To the ‘neo-liberals’ on the right — the pro-globalizers — globalization is a political-economic project, one which, it is argued, will bring the greatest benefit for the greatest number. Simply let free markets (whether in trade or finance) rule and all will be well. The ‘rising tide’ of globalization will ‘lift all boats’; human material well-being will be enhanced. Although the neo-liberal pro-globalizers recognize that such a state of perfection hasn’t yet been achieved, the major problem, in their view, is that there is too little, rather than too much, globalization.

To the hyper-globalizers of the left — the anti-globalizers — the problem is globalization itself. The very operation of those market forces claimed to be beneficent by the right are regarded as the crux of the problem: a malign and destructive force. Markets, it is argued, inevitably create inequalities. By extension, the globalization of markets increases the scale and extent of such inequalities. Unregulated markets inevitably lead to a reduction in well-being for all but a small minority in the world, as well as creating massive environmental problems. Markets, therefore, must be regulated in the wider interest. To some anti-globalists, in fact, the only logical solution is a complete rejection of globalization processes and a return to the ‘local’.

Figure 1.1  The hyper-globalist view

Today’s global economy is genuinely borderless. Information, capital and innovation flow all over the world at top speed, enabled by technology and fuelled by consumers’ desires for access to the best and least expensive products.

(Ohmae, 1995: inside front cover)

Country of origin does not matter. Location of headquarters does not matter. The products for which you are responsible and the company you serve have become denationalized.

(Ohmae, 1990: 94)
‘Sceptical internationalists’

Although the notion of a globalized economic world has become widely accepted, some adopt a more sceptical position, arguing that the ‘newness’ of the current situation has been grossly exaggerated. The world economy, it is claimed, was actually more open and more integrated in the half century prior to World War I (1870–1913) than it is today.\(^7\) The empirical evidence used to justify this position is quantitative and aggregative, based on national states as statistical units. Such data reveal a world in which trade, investment and, especially, population migration flowed in increasingly large volumes between countries. Those levels of international trade and investment were not reached again (after the world depression of the 1930s and the Second World War) until the later decades of the twentieth century. Indeed, international population migration has not returned to those earlier levels, at least in terms of the proportion of the world population involved in cross-border movement. On the basis of such quantitative evidence Hirst and Thompson assert that ‘we do not have a fully globalized economy, we do have an international economy’.\(^8\)

‘Grounding globalization’

Such national-level quantitative data need to be taken seriously. But they are only part of the story. They do not tell us what kinds of qualitative changes have been occurring in the global economy. Most important have been the changes in both the where and the how of the material production, distribution and consumption of goods and services (including, in particular, finance). Old geographies of production, distribution and consumption are continuously being disrupted; new geographies of production, distribution and consumption are continuously being created. There has been a huge transformation in the nature and the degree of interconnection in the world economy and, especially, in the speed with which such connectivity occurs, involving both a stretching and an intensification of economic relationships.\(^9\)

International economic integration before 1914 – and even until only about four decades ago – was essentially shallow integration, manifested largely through arm’s-length trade in goods and services between independent firms and through international movements of portfolio capital and relatively simple direct investment. Today, we live in a world in which deep integration, organized primarily within and between geographically extensive and complex transnational production networks, and through a diversity of mechanisms, is increasingly the norm.

Such qualitative changes are simply not captured in aggregative trade or investment data of the kind used by the sceptics. For example, in the case of international trade, what matters are not so much changes in volume – although these are important – as changes in composition. There has been a huge increase in both intra-industry and intra-firm trade, both of which are clear indicators of more
functionally fragmented and geographically dispersed production processes. There have been, too, dramatic changes in the operation of financial markets, with ‘money’ moving round the world at unprecedented speeds, generating enormous repercussions for national and local economies.

The position taken in this book is that although there are undoubtedly globalizing forces at work, we do not have a fully globalized world economy as depicted in Figure 1.1. Indeed, what we have is ‘not a single, unified phenomenon, but a syndrome of processes and activities’.

Globalization is a... supercomplex series of multicentric, multiscalar, multitemporal, multiform and multicausal processes.

Globalizing processes, therefore, are reflected in, and influenced by, multiple geographies, rather than a single global geography: the ‘local and the global intermesh, running into one another in all manner of ways’. In fact, as Figure 1.2 shows, several tendencies can be identified, reflecting different combinations of geographical spread and functional integration or interconnection:

- **localizing** processes: geographically concentrated economic activities with varying degrees of functional integration
- **internationalizing** processes: simple geographical spread of economic activities across national boundaries with low levels of functional integration
- **globalizing** processes: both extensive geographical spread and also a high degree of functional integration
- **regionalizing** processes: the operation of ‘globalizing’ processes at a more geographically limited (but supranational) scale, ranging from the highly integrated and expanding European Union to much smaller regional economic agreements.

**Unravelling the complexity of the new geo-economy: economies as networks**

Even allowing for the hype of much of the globalization debate, there is no doubt that we are witnessing the emergence of a new geo-economy that is qualitatively different from the past. To understand what is going on, however, we need to adopt an approach that is firmly grounded in the uneven geographical reality of globalizing structures, processes and outcomes and not submerged in the hype and inflated language that characterizes so much of the globalization debates. The question is: how can we begin to unravel its dynamic, kaleidoscopic complexity?

Figure 1.3 represents one point of entry. It seeks to provide both a structural perspective on globalization processes and outcomes and also a sense of how the
key ‘actors’ behave. In particular, it emphasizes the complex ways in which they are interconnected and governed through highly unequal power relationships. Of course, a simplified diagram like Figure 1.3 attempts the impossible: to capture and represent the multidimensionality of the global economy in just two dimensions. Inevitably, it both grossly oversimplifies, and also distorts, relationships and causalities. We need to bear in mind that it is an idealized representation of a world that is infinitely more complex.

We can choose to cut into the highly interconnected system of Figure 1.3 at many different points, according to our specific interest. In this book, I choose to focus primarily (though not exclusively) on the ‘central slice’ of Figure 1.3: the major actors in the global economy and the webs of networked relationships between them.

Figure 1.2 Processes and scales of global economic transformation
Economic processes must be conceptualized in terms of a complex circuitry with a multiplicity of linkages and feedback loops rather than just ‘simple’ circuits or, even worse, linear flows.15

Here lies the key: to think of economic processes (production, distribution, consumption) in terms of connections of activities, linked through flows of both material and non-material phenomena (like services) into circuits and networks. Such circuits and networks constitute relational structures and processes in which the power relationships between the key ‘actors – firms, states, individuals, social groups – are uneven.

Figure 1.3  A simplified framework of the global economy
Source: Based on Dicken 2004: Figure 2

Economic processes must be conceptualized in terms of a complex circuitry with a multiplicity of linkages and feedback loops rather than just ‘simple’ circuits or, even worse, linear flows.15
The critical point about networks is that they involve relational thinking. What links people together across time and space? How are things and people connected and embedded economically, politically, and culturally? In what ways do goods and information and capital flow and why are they channelled down particular vertices and nodes? … Thinking in terms of networks forces us to theorize socioeconomic processes as intertwined and mutually constitutive.16

Networks are always in flux; they are always in a process of becoming. They also, of course, do not exist in isolation. In particular, they are embedded within the broader macro-structures of the global economy as well as grounded in the prevailing geographical structures of the real world. In that sense, what is being adopted here is a situated network approach.

**Macro-structures of the global economy**

The macro-structures of the global economy are essentially the institutions, conventions and rules of the capitalist market system. These are not naturally given but socially constructed – in their present form predominantly as a neo-liberal political-economic ideology. The rules and conventions of the capitalist market economy relate to, for example, private property, profit-making, resource allocation on the basis of market signals, and the consequent commodification of production inputs (including labour).

The International Monetary Fund (IMF), the World Trade Organization (WTO) and the World Bank, together with the various ‘G’ meetings (such as the G8), are the most obvious manifestations of global institutions (see Chapter 19), although there is, of course, a myriad of other, more specific, bodies. These institutions are only a part of the broader socio-cultural matrix of practices, rules and conventions that shape how the world works. Such institutions and conventions continue to be manifested in specific configurations in specific places (notably within national states, but not only at that scale). In other words, they, too, are territorially embedded. There are varieties of capitalism, not one single universal form.

**Actor-centred networks**

Within this geographically differentiated macro-structural framework, it is primarily the actions of, and especially the interactions between, the five actor-centred networks shown in the central section of Figure 1.3 that shape the changing geographical configuration of the global economy at different spatial scales. Despite the suggestion sometimes made that we should not ‘privilege’ one set of actors over others, there is no doubt that some actors are more significant than others. It is for this reason that, throughout this book, I place particular emphasis on transnational corporations (TNCs) and states. More generally, however, the entire system is one of asymmetric power relations.
Significant variables in determining relative power are, first, control over key assets (such as capital, technology, knowledge, labour skills, natural resources, consumer markets) and, second, the spatial and territorial range and flexibility of each of the actors. The two are not unconnected. Ability to control access to specific assets is a major bargaining strength. Where such assets are available virtually everywhere, then the power gradient is shallow or even non-existent. But where assets are ‘localized’, whether geographically, organizationally, or even personally, then the power gradient may be very steep. However, actors able to tap into localized assets across geographical space have a significant advantage over those without such spatial flexibility.

This leads to a more general observation. Each of the major sets of actors shown in the central part of Figure 1.3 is involved in both cooperation and collaboration on the one hand and conflict and competition on the other. Such apparently paradoxical behaviour warns us against assuming that relationships between certain actors are always of one kind: for example, that those between TNCs, or between TNCs and states, or between TNCs and labour are always conflictual or competitive. Or, conversely, that relationships between groups of workers or labour organizations are always cooperative (in the name of class solidarity). Not so. These various actor networks are imbued with an ever-changing mixture of both conflict and collaboration.

So, for example, TNCs in the same industry are fierce competitors but also, invariably, enmeshed in a complex web of collaborative relationships (see Chapter 5). States compete in cut-throat fashion with other states to entice internationally mobile investment by TNCs (see Chapter 8) or to find ways to keep out certain types of imports whilst, at the same time, increasingly engaging in preferential trading arrangements, including bilateral and multilateral agreements, often within broader regional groupings (see Chapters 6 and 7). Labour unions in one country engage in competition with labour unions in other countries in the scramble for new, or to protect existing, jobs whilst, at the same time, unions strive to create international alliances with unions in other countries, especially those involved in the geographically dispersed operations of major TNCs. Civil Society Organisations (CSOs), likewise, are not immune from these conflicting actions. In the context of the anti-globalization protests, for example, CSOs have developed collaborations across national boundaries but, at the same time, the goals and values of individual CSOs are not always compatible, to say the least.

Mapping outcomes of globalization

Globalization is, then, a complex syndrome of processes, in which actor networks and macro-structures interconnect in extremely intricate and dynamic ways. We need to map, and to analyse, the concrete outcomes of these processes. We do this in general terms in Chapter 2 and, more specifically, for individual industries (garments, automobiles, semiconductors, agro-food, financial services, and the logistics and distribution industries) in the case study chapters of Part III. Such
processes not only are geographically grounded and embedded (in the sense of deriving some of their characteristics and resources from place-specific contexts) but also generate geographically specific, highly uneven, concrete outcomes (Figure 1.3). Of course, the geography of outcomes at one point in time constitutes the context within which subsequent processes operate. The whole process is circuitous and highly path dependent.

The processes of production, distribution and consumption may generate either ‘good’ or ‘bad’ outcomes. They produce ‘goods’ in the form of employment opportunities, incomes, and access to an increasing variety of consumer products, services and cultural artefacts. They produce ‘bads’ in the form of unemployment, poverty, resource depletion, environmental pollution and cultural damage. The extent to which the ‘goods’ exceed the ‘bads’ is a contested issue, as is the issue of who are the ‘winners’ and who are the ‘losers’, because such goods and bads are, themselves, highly unequally distributed both geographically and socially. These are the issues we address in the chapters of Part IV.

**Production circuits; production networks**

The conventional unit of analysis of the global economy is the country. Virtually all the statistical data on production, trade, investment and the like are aggregated into national ‘boxes’. Indeed, the word ‘statistics’ originally denoted facts collected about the ‘state’. However, such a level of statistical aggregation is less and less useful in light of the changes occurring in the organization of economic activity. Unfortunately, we have to rely heavily on national-level data to explore the changing maps of production, trade and investment. But, because national boundaries no longer ‘contain’ production processes in the way they once did, we need to find ways of getting both below and above the national scale – to break out of the constraints of the ‘national boxes’ – in order to understand what is really going on in the world. One way is to think in terms of production circuits and networks. These cut through, and across, all geographical scales, including the bounded territory of the state.

**Production chains or production circuits?**

It has become common to conceive of the production of any good or service as a production chain, that is, as a transactionally linked sequence of functions in which each stage adds value to the process of production of goods or services. In the global context, the idea of the global commodity chain (GCC) or, more recently, the global value chain (GVC) has been extensively developed by Gary Gereffi and his colleagues.17 As its name suggests, a production chain is essentially linear. It represents the sequence of operations required to produce and distribute a good or service (services, like any other item of consumption, have to be ‘produced’). But, as we have seen, economic processes are circuitous, rather than linear. There is a
circularity involved in connecting the major stages of the production process, such circularity consisting of the feedback loops connecting consumption – a fundamental, though often neglected, component of the production process – with the processes of production and distribution.

Figure 1.4  Basic components of a production circuit
Figure 1.4a shows a 'stripped-down' version of a hypothetical production circuit. At the core is a set of four basic operations, connected by a series of transactions between one element and the next. Inputs are transformed into products which are distributed and consumed. But note that the processes are two-way:

- flows of materials, semi-finished goods and final products in one direction
- flows of information (the demands of customers – tastes, preferences etc.) and money (payments for goods and services) in the other direction.

But there is much more to it than this, as Figures 1.4b and 1.4c show. Each individual element in the production circuit depends upon:

- technological inputs
- service inputs
- logistical (movement) systems
- financial systems
- coordination and control systems.

Hence, each of the individual elements in a production circuit depends upon many other kinds of input, both those directly related to production and also those related to circulation. In particular,

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\text{service activities not only provide linkages between the segments of production within a [production circuit] and linkages between overlapping [production circuits], but they also bind together the spheres of production and circulation. Services have come to play a critical role ... because they not only provide geographical and transactional connections, but they integrate and coordinate the atomized and globalized production process.}^{18}
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Financial systems are especially important. The decisions of financiers have an extraordinarily powerful role not only in ‘lubricating’ production circuits but also in shaping them through their evaluative decisions on what (and where) to invest in order to gain the highest (and sometimes the quickest) return.

**Production networks**

Individual production circuits are, themselves, enmeshed in broader production networks of inter- and intra-firm relationships.\(^{19}\) Such networks are, in reality, extremely complex structures with intricate links – horizontal, vertical, diagonal – forming multidimensional, multilayered lattices of economic activity. They vary considerably both within, and between, different industries, as we shall see in the case study chapters of Part III. The complex nature of production networks will be discussed in detail in Chapter 5. At this stage, we simply need to note that three dimensions of production networks are especially important:
Governance of production networks

In market economies, production networks are coordinated and regulated primarily by business firms, through the multifarious forms of intra- and inter-organizational relationships that constitute an economic system. As Figure 1.5 shows, economies are made up of many different types of business organization — transnational and domestic, large and small, public and private — in varying combinations and interrelationships. The firms in each of the segments shown in Figure 1.5 operate over widely varying geographical ranges and perform rather different roles in the economic system.

A major theme of this book is that the transnational corporation plays the key role in coordinating production networks and, therefore, in shaping the new geo-economy (see Chapters 4 and 5). A broad definition of the TNC — one that goes beyond the conventional definition based upon levels of ownership of internationally based assets — is used here to capture the diversity and complexity of transnational networks.

A transnational corporation is a firm that has the power to coordinate and control operations in more than one country, even if it does not own them.

In fact, TNCs generally do own such assets but they are also, as we will see in Chapter 5, typically involved in intricate and multiple spiders’ webs of collaborative relationships with other legally independent firms across the globe.

The nature of the coordination process within a TNC’s production network depends, in part, on where the firm draws the boundary between those functions.
it internalizes (i.e. performs ‘in-house’) and those it externalizes (i.e. outsources to other firms). Theoretically, at one extreme, the whole TNC production network may be internalized within the firm as a vertically integrated system crossing national boundaries. In this case, the links consist of a series of internalized transactions, organized ‘hierarchically’ through the firm’s internal organizational structure. At the other extreme, each function may be performed by separate firms. In this case, the links consist of a series of externalized transactions, organized either through ‘the market’ or in collaboration with other firms in a kind of ‘virtual’ network.

This dichotomy – between externalized, market-governed transactions and internalized, hierarchically governed transactions – grossly simplifies the richness and diversity of the governance mechanisms in the contemporary economy. In fact, there is a spectrum of different forms of coordination, consisting of networks of interrelationships within and between firms. Such networks increasingly consist of a mix of intra-firm and inter-firm structures. These networks are dynamic and in a continuous state of flux; the boundary between internalization and externalization is continually shifting. Precisely how they are coordinated depends, to a considerable degree, on the precise nature of the production, distribution and consumption processes involved. We look at this in some detail in Chapter 5 and in the industry cases of Part III. Suffice it to note at this stage that the governance of production networks reflects the particular configuration of power within them. In some cases, one dominant actor calls all the shots; in other cases, power may be more widely dispersed with a greater degree of collaboration involved.

Spatiality of production networks
Every production network has spatiality: the particular geographical configuration and extent of its component elements and the links between them. At the most basic level, production within a network may be organized along a spectrum from geographically concentrated to geographically dispersed. But such terms are relative and beg the important question of geographical scale. In one sense, we may simply think of geographical scale as a continuum and, therefore, of production networks as being ‘more or less long and more or less connected’. Today, virtually all production networks have become geographically more extensive: they are increasingly long and increasingly more connected.

We are witnessing, therefore, the emergence of global production networks (GPNs) or, as some would prefer to call them, transnational production networks (TPNs). One, although not the only, reason for such increased geographical spread has been the ‘revolutions’ in transportation and communications technologies. Such transformations of time–space relationships have led some to claim ‘the end of geography’ or ‘the death of distance’. These two phrases resonate, either explicitly or implicitly, throughout much of the globalization literature. But although developments in transportation and communications have, indeed, ‘shrunk the world’, they have not done so in the simplistic way often envisaged (see Chapter 3).
Global/transnational production networks span global, regional, national and local scales. Thinking of the world in terms of such discrete spatial scales is helpful in many ways. But it can too easily imply that each scale is a self-contained ‘box’. For example, it has become very common to separate the global scale from the local (or the national) scale and to imply that the processes operating at these two scales are separate and distinct: in particular that the ‘global’ determines what happens at the local scale. That is not the case, as we saw earlier. The spatiality of production networks is far more complex than is often claimed.

**Territorial embeddedness of production networks**

Capital, it is often argued, has become ‘hyper-mobile’, freed from the ‘tyranny of distance’ and no longer tied to ‘place’. In other words, economic activity is becoming ‘deterritorialized’ or ‘disembedded’. The sociologist Manuel Castells argues that the forces of globalization, especially those driven by the new information technologies, are replacing this ‘space of places’ with a ‘space of flows’. Anything can be located anywhere and, if that does not work out, can be moved somewhere else with ease.

Seductive as such ideas might seem, they are highly misleading. The world is both a ‘space of places’ and a ‘place of flows’. Production networks don’t just float freely in a spaceless/placeless world. Although transportation and communications technologies have, indeed, been revolutionized, both geographical distance and, especially, place are fundamental. Every component in a production network – every firm, every economic function – is, quite literally, ‘grounded’ in specific locations. Such grounding is both physical (in the form of the built environment) and also less tangible (in the form of localized social relationships and in distinctive institutions and cultural practices). Hence, the precise nature and articulation of firm-centred production networks are deeply influenced by the concrete socio-political, institutional and cultural contexts within which they are embedded, produced and reproduced.

The national state continues to be the most important bounded territorial form in which production networks are embedded. All the elements in a production network are regulated within some kind of political structure, whose basic unit is the national state, but which also includes such supranational institutions as the International Monetary Fund and the World Trade Organization, regional economic groupings such as the European Union or the North American Free Trade Agreement, and ‘local’ states at the subnational scale.

All transnational production networks, by definition, have to operate within multiscalar regulatory systems. They are, therefore, subject to a multiplicity of geographically variable political, social and cultural influences. On the one hand, TNCs attempt to take advantage of national differences in regulatory regimes whilst, on the other hand, states attempt to minimize such ‘regulatory arbitrage’. The result is a very complex situation in which firms and states are engaged in various kinds of power play: a triangular nexus of interactions comprising...
firm–firm, state–state and firm–state relationships (Figure 1.6). In other words, the new geo-economy is essentially being structured and restructured not simply by the actions of either firms or states alone but also by complex, dynamic interactions between the two sets of institutions. Of course, relationships with states are not the only ones involved. As we saw in Figure 1.3, TNCs are continuously engaged in relationships (sometimes conflictual, sometimes collaborative) with other major actors – labour, consumers, CSOs – all of which have strong territorial bases.

![Figure 1.6](image-url)

**Figure 1.6  The triangular nexus of relationships between firms and states**

*Source: based on Stopford and Strange, 1991: Figure 1.6*

**Consumption as a driving force**

Production circuits and production networks involve more than just ‘production’: they are driven, ultimately, by the necessity, the willingness and the ability of customers to acquire and consume the products themselves, and to continue doing so (see Figure 1.4). And yet, despite its central importance, consumption rarely figures in the script. It is important to redress this imbalance. Each of the case study chapters of Part III shows how the nature of consumption varies according to the specific sector involved. Here, we need simply to emphasize some basic aspects of consumption processes.

First, we need to distinguish between the consumption of ‘producer’ goods or services (sometimes called intermediate products because they are purchased by firms within a production circuit for further transformation) and ‘consumer’ goods or services (‘final demand’ goods: those purchased by individuals and households). Consumption is very much more than the economic process of ‘demand’. Obviously, it is greatly influenced by levels of income. But it is also a complex set of social and cultural processes, in which all kinds of personal motivations are involved. People buy (or aspire to buy) particular goods for a bewildering
variety of reasons, ranging from the satisfaction of basic needs (food, shelter, clothing) through to ever more sophisticated wants (discretionary goods, such as fashionable clothing, particular kinds of car, exotic or organic foods and the like). The social psychologist Abraham Maslow saw these needs/wants as forming a hierarchy, with ‘lower’ needs being satisfied before those of ‘higher’ needs (or wants). But that is a little too simplistic.

Consumption may be driven by the desire to acquire particular kinds of products (even specific varieties or brands) either because they are regarded as desirable in themselves or because they send out social messages signifying the particular lifestyles, attitudes, social positions or self-evaluations of the consumer. ‘Positional’ goods have become increasingly important. However, they lose their value as more and more people have access to them. New positional goods have to be sought.

‘The material object being sold is never enough’ … Commodities meet both the functional and symbolic needs of consumers. Even commodities providing for the most mundane necessities of daily life must be imbued with symbolic qualities and culturally endowed meanings.

It is, of course, precisely these symbolic qualities of consumption that the advertising, retailing and media industries attempt to manipulate.

How far consumption is, or can be, manipulated in such ways is open to question. Some argue that consumption (and consumers) is becoming increasingly more important in the global economy than production (and producers). In Miller’s view, the consumer has become the ‘global dictator’ and he describes consumption as the ‘vanguard of history’. Some support for such a view is provided by the increasing significance of retailers in many production circuits. Gereffi, for example, has argued that buyer-driven (rather than ‘producer-driven’) production networks are becoming increasingly important in ‘those industries in which large retailers, brand-named merchandisers, and trading companies play the pivotal role in setting up decentralized production networks in a variety of exporting countries’.

The bewildering proliferation of choice within many product areas is a direct reflection of producers’ perceived need to meet the increasingly fragmented demands of consumers. The days when Henry Ford could dictate to his potential customers by telling them that they could have any colour Model T, as long as it was black, are long gone. Of course, in many cases the variety on offer is more apparent than real (heavily advertised ‘newness’ often being little more than superficial modification). But, in some cases, there is no doubt that consumer demands directly drive production circuits. It is also clear that the emergence of the Internet (Chapter 3) is transforming the abilities of consumers to make informed choices:

Consumers select what they want from a far greater variety of sources – especially with a few clicks of a computer mouse. Thanks to the internet, the consumer is finally seizing power ... consumer power has profound
implications for companies, because it is changing the way the world shops. Many firms already claim to be ‘customer-driven’ or ‘consumer-centric’. Now their claims will be tested as never before … it is also intensifying competition. Today, window-shopping takes place online. People can compare products, prices and reputations.\textsuperscript{31}

It is extremely important, therefore, to integrate consumption into our analysis of the global economy. However, whether or not the consumer or the producer is the dominant player is not really the point. What matters is that we must see the entire circuit of production, distribution and consumption as a dynamically interconnected whole (as in Figure 1.4). In some circumstances, power will lie at different positions within the circuit and different circuits may have different configurations of power. The question is an empirical one.

**Even in a globalizing world, economic activities are geographically localized**

The view of the ‘hyper-globalizers’ is that increasing geographical dispersal at a global scale is now the norm. But, if that is the case, why do geographical concentrations of economic activity not only still exist but also represent the normal state of affairs? Why do ‘sticky places’ continue to exist in ‘slippery space’?\textsuperscript{32} When we look at the geo-economic map we find tendencies of both concentration and dispersal – but with a very strong propensity for economic activities to agglomerate into localized geographical clusters.\textsuperscript{33}

**The bases of geographical clusters**

Figure 1.7 identifies two types of geographical cluster: generalized and specialized. Both are based on the notion of externalities, the positive ‘spillovers’ created when activities in a particular place are connected with one another, either directly (through specific transactions) or indirectly. Both are based on the idea that the ‘whole’ (the cluster) is greater than the sum of the parts because of the benefits that spatial proximity provides.

- **Generalized clusters** simply reflect the fact that human activities tend to agglomerate to form urban areas. Hence, such benefits have traditionally been labelled urbanization economies. General clustering of activities creates the basis for sharing the costs of a whole range of services. Larger aggregate demand in, say, a large city encourages the emergence and growth of a variety of infrastructural, economic, social and cultural facilities that cannot be provided where their customers are geographically dispersed. The larger the city, quite obviously, the greater the variety of available facilities and vice versa.
• Specialized clusters, on the other hand, reflect the tendency for firms in the same, or closely related, industries to locate in the same places to form what are sometimes termed ‘industrial districts’ or ‘industrial spaces’. Such benefits have been called localization economies. The bases of specialized clusters arise from the geographical proximity of firms performing different – but linked – functions in particular production networks.

**Figure 1.7  The bases of geographical clusters**

Clusters generate two types of interdependency:

• *Traded interdependencies* are direct transactions between firms in the cluster (e.g. the supply of specialized inputs of intermediate products and services). In such circumstances, spatial proximity is a means of reducing transaction costs either through minimizing transportation costs or by reducing some of the uncertainties of customer–supplier relationships.

• *Untraded interdependencies* are the less tangible benefits, ranging from the development of an appropriate pool of labour, to particular kinds of institutions (such as universities, business associations, government institutions and the like), to broader socio-cultural phenomena. In particular, geographical agglomeration or clustering facilitates three important processes: face-to-face contact; social and cultural interaction; and enhancement of knowledge and innovation.

**Why do clusters develop in the first place?**

But why do clusters form in the first place? Why do they arise in one place rather than another? And how do they develop over time? These are difficult questions
to answer. The reasons for the origins of specific geographical clusters are highly contingent and often shrouded in the mists of history.

Within broad limits the power of attraction today of a center has its origin mainly in the historical accident that something once started there, and not in a number of other places where it could equally well or better have started, and that the start met with success.34

Once established, a cluster tends to grow through a process of cumulative, self-reinforcing development involving:

- attraction of linked activities
- stimulation of entrepreneurship and innovation
- deepening and widening of the local labour market
- economic diversification
- enrichment of the ‘industrial atmosphere’
- ‘thickening’ of local institutions
- intensification of the socio-cultural milieu
- enhanced physical infrastructures.

The cumulative nature of these processes of localized economic development suggests that the process is path dependent. In other words, an economy becomes ‘locked into’ a pattern that is strongly influenced by its particular history. This may be either a source of continued strength or, if it embodies too much organizational or technological rigidity, a source of weakness. However, even for ‘successful’ regions, such path dependency does not imply the absolute inevitability of continued success. Rigidity of local practices may reduce the capacity to adapt to external changes.

Networks of networks

The global economy, therefore, can be envisaged as the linking together of two sets of networks:

- the organizational (in the form of production circuits and networks)
- the geographical (in the form of localized clusters of economic activity).

The major advantage of adopting such a grounded network approach to understanding the global economy is that it helps us to appreciate the interconnectedness of economic activities across different geographical scales and within and across territorially bounded spaces. The production of any commodity, whether it is a manufactured product or a service, involves an intricate articulation of individual activities and transactions across space and time. Such production networks – the
nexus of interconnected functions and operations through which goods and services are produced and distributed – have become both organizationally and geographically more complex. Global and regional production networks not only integrate firms (and parts of firms) into structures which blur traditional organizational boundaries (for example, through the development of diverse forms of equity and non-equity relationships) but also integrate national and local economies (or parts of such economies) in ways which have enormous implications for their economic development and well-being. At the same time, the specific characteristics of national and local economies influence and ‘refract’ the operation and form of larger-scale processes. In that sense, ‘geography matters’ a lot.

The process is especially complex because, while states and local economies are essentially territorially specific, production networks themselves are not. Production networks ‘slice through’ boundaries in highly differentiated ways, influenced in part by regulatory and non-regulatory barriers and by local socio-cultural conditions, to create structures which are ‘discontinuously territorial’. This has major implications for the relative bargaining powers of the actors involved. The geo-economy, therefore, can be pictured as a geographically uneven, highly complex and dynamic web of production networks, economic spaces and places connected together through threads of flows.

Figure 1.8 captures the major dimensions of these relationships. Individual production networks can be regarded as vertically organized structures configured across increasingly extensive geographical scales. Cutting across these vertical structures are the territorially defined political-economic systems which, again, are manifested at different geographical scales. It is at the points of intersection of these dimensions in ‘real’ geographical space where specific outcomes occur, where the problems of existing within a globalizing economy – whether as a business firm, a government, a local community or an individual – have to be resolved.

Figure 1.8 Interconnecting dimensions in a globalizing economy

Source: Based, in part, on Humbert, 1994: Figure 1
The geo-economy and the environment

Economy and nature

In our earlier description of the production process as a circuit, in which inputs are transformed into products which are then consumed (Figure 1.4), we ignored the fact that the inputs have to come from somewhere and that the consumption of products is not the end of the story. Ultimately, the ‘somewhere’ from which all inputs of materials and energy derive, and to which what is left over after production, distribution and consumption have taken place must go, is the natural environment. In the final analysis, ‘all production depends on, and is grounded in, the natural environment’. Although the primary purpose of the production process shown in Figure 1.4 is the production of ‘goods’ for consumption (driven, in a capitalist market system, of course, by profits), the process itself – in a way unintentionally – also produces ‘bads’ in the form of environmental degradation. There are, in other words, unintended external effects (negative externalities or spillovers) involved in all economic activities.

Three aspects of such environmental damage are especially important:

- over-use of non-renewable and renewable resources (including exploitation of fossil fuels, depletion of water resources, clearance of forests)
- over-burdening of natural environmental ‘sinks’ (for example, the increasing concentration of greenhouse gases in the earth’s atmosphere and of heavy metals in the soil)
- destruction of increasing numbers of ecosystems to create space for urban and industrial development.

Production as a system of materials flows and balances

The bases of such environmental damage can be understood most easily if we produce a diagram parallel to that of the production circuit discussed earlier. Figure 1.9 depicts the production circuit of Figure 1.4 in terms of materials flows and materials balances. The key point of the process is that what goes in has to come out again, albeit transformed, but without being reduced. In Figure 1.9, the materials used in the production process are dispersed and chemically transformed. In particular, they enter in a state of low entropy (as ‘useful’ materials) and leave in a state of high entropy (as ‘useless’ materials, such as low temperature heat emissions, mixed municipal wastes, etc.) ... No material recycling processes can therefore ever be 100 per cent efficient.
In effect, economic systems in general, and production circuits in particular, place demands on the natural environment in two ways:

- in terms of inputs to the process of production which are derived from the natural environment as resources
- in terms of outputs to the natural environment in the form of pollution of various kinds.

Let’s look briefly at each of these in turn.

**The resources issue**

Natural resources are not ‘naturally’ resources. An element or a material occurring in nature is only a ‘resource’ if it is defined as such by potential users. In other words, there must be an effective demand, there must be an appropriate technology with which to exploit it, and there must be some means of ensuring ‘property rights’ over its use: ‘if any of these conditions ceases to hold, resources could “unbecome”’. Resources, once defined as such, are of two broad kinds:

- **Renewable resources** – those which, over time and with good management, can be replenished. Nevertheless, most so-called renewable resources may become exhausted if they are not managed in a sustainable manner.
- **Non-renewable resources** – those which are fixed in overall quantity, at least under known technological conditions. The more we use today, the less will be available for tomorrow.
One of the major current debates, therefore, is the extent to which non-renewable resources, in particular, are becoming increasingly scarce through excessive exploitation and, therefore, facing imminent exhaustion. Here, as in all areas of the environmental debate, views become polarized. On the one hand there is the ‘Malthusian’ view that resource exhaustion is inevitable; the only question is the time-scale over which such exhaustion will occur. On the other hand, there is the view that new technologies of exploration leading to discoveries of new reserves, better means of exploitation leading to more efficient use of the resource (including recycling), and the development of appropriate substitutes will put off the dreadful day. So far, at least, all of these have happened. The dire predictions of imminent resource exhaustion have not been borne out (yet). Nevertheless, there is a real danger of resource exhaustion in specific areas and of continuing localized environmental damage. There is the additional geopolitical complication that access to a localized resource (like oil, for example) may be restricted from time to time by the states within whose territory it is located.

**Unintended effects of production**

As Figure 1.9 shows, after all efforts are made to recycle the unused energy and materials involved in production, there will still be ‘things’ left over in the form of residual waste and environmental damage. This is simply because the fundamental laws of thermodynamics cannot be overruled:

\[
\text{the total mass of inputs to a transformation process is equal to the total mass of outputs. If inputs do not emerge as desired products, they must therefore appear as unwanted by-products or wastes.}^{42}
\]

Such negative externalities are of various kinds and of varying spatial extent. For example, the negative externalities from a factory or from an airport are, at one level, geographically localized. The impact is greatest at the location of the facility itself and its immediate neighbourhood but then declines with increasing distance away from that location. On the other hand, the smoke pollution from the factory or the effect of aircraft fuel combustion may have much more extensive geographical effects, particularly on the atmosphere. The problem is that many adverse environmental effects cannot be contained within geographical boundaries.

By far the most contentious aspect of negative environmental externalities relates to potential atmospheric damage, that is, damage to the gaseous membrane that sustains all life on earth. The processes of material transformation involve the use of massive quantities of energy, especially of fossil fuels whose combustion products are the major source of damage to the earth’s atmosphere. The problems arise because some of the key gaseous components of the earth’s atmosphere — notably carbon dioxide, methane and ozone — are becoming excessively
concentrated. The issue is one of balance. Without these, and other, gases the earth would have a surface temperature like that of the planet Mars; that is, it would be uninhabitable. The earth’s surface remains habitable precisely because of their presence in the atmosphere. In combination, they act like a ‘greenhouse’, preventing both excessive solar heating and excessive cooling. But it is a very delicate balance.

Most scientists believe that this balance is dangerously disturbed by human action. In the case of the main greenhouse gas, carbon dioxide, for example, there is clear evidence of a significant acceleration after around 1800. Before that time, carbon dioxide levels in the atmosphere remained fairly stable at between 270 and 290 parts per million (ppm). Since then, the following escalation in levels has occurred:

- 1900: 295 ppm
- 1950: between 310 and 315 ppm
- 1995: 360 ppm

These progressive increases were closely associated with the processes of industrialization and urbanization, through the burning of fossil fuels and through deforestation. At the same time, levels of methane have increased dramatically, partly through the same fossil fuel usage and partly through agricultural practices like rice irrigation, livestock production and garbage decomposition. As a result, the atmosphere has become more efficient at trapping heat from the sun.

So, the overwhelming scientific consensus is that human-induced global warming is occurring, although there are some scientists – and some politicians, notably in the George W. Bush US administration (2000–2008) – who dispute its nature, its rate and its causes. However, if current trends continue then they will generate potentially enormous social and economic damage in many parts of the world, notably: major dislocation of climatic zones around the world, causing flooding of many coastal and low-lying areas, altering agricultural economies; changing patterns of disease; and increasing volatility of atmospheric systems (for example, an increase in severe storms). But how much, and how fast, such warming will be – and the precise role of human activity – is unclear.

The other aspect of atmospheric – or, rather, stratospheric – damage concerns the earth’s ozone layer. Ozone is formed in the stratosphere through the chemical reaction of oxygen and sunlight. At this level, ozone is vital to the sustainability of human life on earth because it absorbs almost all the ultra-violet radiation from the sun, which would otherwise make human life impossible. Any damage to this vital protective shield poses a serious problem. Just such thinning of – or even holes in – the ozone layer (beyond natural occurrences) began to be identified in certain parts of the world in the early 1970s. One of the major effects of ozone
depletion is an increase in the incidence of skin cancer. A primary cause was believed to be chlorofluorocarbons (CFCs), which had become extensively used in refrigeration and aerosols. Although CFCs are now heavily restricted, the fact that these chemicals are immensely stable means that the amount already in the stratosphere will still be affecting the ozone layer until about 2087.\textsuperscript{45}

Hence, the environmental problems that are inherent in all aspects of production, distribution and consumption raise serious questions about the future sustainability of economy and society as we know them. They raise big issues relating to the future of the world’s economic and trading system and, indeed, to most aspects of contemporary economic life. As such, they have come to form a major element in the globalization debates and in the anti-globalization movements. This raises a major problem of global governance, which we will address in the final chapter of this book.

**Conclusion**

The purpose of this chapter has been to interrogate the concept of ‘globalization’ and to refute the popular view that it is some kind of all-embracing, inexorable, irreversible, homogenizing force. Rather, the world in which we live is constituted through, and transformed by, a complex of interrelated processes rather than by some single force called ‘globalization’. The processes that are transforming the geo-economy are highly uneven in their operation and in their effects. Without doubt the world is a qualitatively different place from that of only 60 or 70 years ago, although it is not so much more open as increasingly interconnected in rather different ways.

One way of understanding the nature of this change is to think in terms of production circuits and networks, configured at a multiplicity of geographical scales, from the local through to the global. These are the structures through which different parts of the world are connected together through flows of material and non-material phenomena in a system of differential power relationships, in which consumers, as well as producers, can exert significant influence. Production networks are intrinsically geographical in terms of their differentiated spatial configurations and their territorial embeddedness in specific places. In particular, economic activities tend to cluster or agglomerate in particular kinds of location. Such clusters, once formed, have a strong tendency to develop in path-dependent ways, which influence – although they do not totally determine – future geographies. Seeing production circuits as systems of materials flows and balances, subject to the inexorable laws of thermodynamics, helps us to appreciate the ultimate dependence of production on the natural environment, both as a source of materials inputs in the form of renewable and non-renewable resources and as a receptor of the waste products of production.
NOTES

2 Stephens (2005). The reference to the ‘beginning of history’ seems to be a deliberate contrast to Fukuyama’s (1992) prediction of the ‘end of history’ following the collapse of the Soviet system.
4 Held et al. (1999: 1–28) provide a useful discussion of some of the major strands in the globalization debates. See also Cameron and Palan (2004).
6 For an example of this position, see Friedman (1999; 2005). More nuanced writers within this general framework include Bhagwati (2004) and Wolf (2004).
9 Held et al. (1999: 15).
14 The material in this section is based on Dicken (2004).
17 See, for example, Gereffi and Korzeniewicz (1994), Gereffi et al. (2005).
19 Recent literature on global, or transnational, production networks includes Coe et al. (2004), Dicken (2005), Ernst and Kim (2002), Henderson et al. (2002).
21 See, for example, O’Brien (1992), Cairncross (1997).
22 Castells (1996).
23 Granovetter (1985) pioneered the concept of ‘embeddedness’ within the field of economic sociology. It has become a ubiquitous (though contested) term since then. See Hess (2004) for a recent discussion of the concept in a spatial/territorial context.
25 This distinction is made for analytical convenience. In fact, the boundary between them is generally very blurred.
31 The Economist (2 April 2005: 9).
33 ‘Clustering’ has recently become a hot topic in policy debates in different parts of the world (Krugman, 1998; Porter, 1990; 1998; 2000). However, the concept has a long history: (see, for example, Amin and Thrift (1992), Bathelt et al. (2004), Dicken and Lloyd...
34 Myrdal (1958: 26).
37 Hudson (2001: 300).
40 Turner et al. (1994: 17).