Spatial circuits of value

Ray Hudson

Introduction

Economic activity involves the production, circulation and consumption of value, typically embodied in material artefacts or in services. Such activity is inherently geographical, in two senses: first, it involves interactions between people and elements of the natural world to transform materials into socially useful objects; second, it involves flows of these objects, their constituent components and the value embodied in them between the various sites of production, exchange and consumption in which economic activities take place (Hudson, 2005). Value is a slippery concept, however, and it can be defined in different ways depending on the particular social relations in which economic activity is embedded and the places in which it occurs. In mainstream capitalist economic activities and discourses about them value is typically defined as the market price that a commodity can command. In other sorts of economies value is defined differently, for example, in terms of scarcity or the intrinsic worth of materials and things.

Definitions of value also depend upon theoretical perspective, however. While a mainstream economist would define the value of a commodity in a capitalist economy as given by market price, a Marxian political economist would argue that it is necessary to distinguish between the use value and exchange value aspects of a commodity and penetrate below the surface appearance of price relations to uncover the real basis of value and so define value in terms of the socially necessary labour time required to produce a commodity. However, the value of commodities produced by workers typically exceeds the value of their labour-power, their capacity to work that they sell on the labour market. The surplus labour that workers undertake forms the basis for the creation of surplus value which in turn becomes the source of profits, rents and wages and as such underlies the formation of market prices (Hudson, 2001). However, capitalist economies also encompass other definitions of value as activities are grounded in different value systems to those of the dominant mainstream – for example, in the ‘Third Sector’ value may be defined by the quantity of embodied labour time, by an allocated price or by what is seen as the intrinsic worth of activities and things while within the family it may be defined in terms of love and respect. Capitalist economies therefore are made up
of a heterogeneous mixture of contested forms and flows of value, linked by complex relationships and transfers between them.

Value flows around circuits and networks of varying spatial reaches, and in the course of such flows values are transferred between firms and places (Hadjimichalis, 1987). In the mainstream capitalist economies the dominant flows of value are expressed in circuits of capital of varying complexity and extent. Moreover, capital seeks to penetrate the spaces of other value systems, so that it becomes dominant over increasingly extensive areas. It does so in two ways. First, through processes of primitive accumulation and accumulation by dispossession. This involves the appropriation of elements of nature by capital and of value produced under non-capitalist relations of production and their translation into capitalist forms of value. Second, it does so through the extension of the spaces of surplus value production and the intensification of capitalist relations of production within them. Flows and transfers of value are therefore intimately related to the production of spatially uneven development and the political recognition of regional and local development problems. While it has long been recognised that capital accumulation involves the growing reach of capitalist relations of production and the expansion of circuits of capital (for example, see Lenin, 1960, originally 1917), in recent years there has been a burgeoning literature of global commodity chains, value chains and production networks, signifying the emergence of new forms of combined and uneven development in an era of neo-liberal globalisation.

What I want to do in this chapter is summarise and reflect on these issues, on the relationships between these new and older geographies of value transfer, on the changing geographies of spatial transfers of value, and on the implications of these spatial circuits of value for local and regional development. The remainder of the chapter is organised as follows. First, I briefly discuss the way in which Marxian Political Economy (MPE) conceptualises value and circuits of capital. The next section discusses the ways in which these circuits are shaped spatially, especially as a result of corporate structures for organising the production process. One consequence of this is the production of uneven development and regional problems. Next, therefore, I discuss the ways in which state policies seek to respond to regionally uneven development and their necessarily limited success in this endeavour. The following two sections discuss counter-tendencies and actions that seek to create a greater degree of regional closure, in part via developing activities grounded in different concepts of value and value systems and in part by seeking to confine value flows within the boundaries of the region. The final section seeks to draw some conclusions.

Producing value: Marxian Political Economy (MPE) and circuits of capital

Drawing on MPE, capitalist production can be usefully thought of in terms of continuous and repeated circuits, enabling the production of value and the creation of surplus value to be located within them. In fact the primary circuit of capital can be seen as encompassing three analytically distinct yet integrally linked circuits: commodity capital; money capital; productive industrial capital (see Hudson, 2005: 21–37). Although at this level of abstraction it is implicit, it is also clear that such circuits have definite geographies, with different locations forming sites of production and exchange, linked by flows of value and capital in the forms of money, commodities and labour-power. However, here I want to focus on the circuit of productive industrial capital (Figure 9.1) as it provides key insights to understanding the creation and realisation of surplus value, of profits, and transfers of value and the dynamism of geographies of production within the social relations of capital. This circuit requires that
capital be first laid out in money form to purchase the necessary means of production (elements of constant and fixed capital in the forms of factories and buildings, tools, machinery, manufactured inputs and raw materials) and labour-power. The reproduction of labour-power – and so the successful reproduction of circuits of capital – is critically dependent upon unwaged work in families and community organisations, work that is informed by different value systems to those of mainstream markets. This is also indicative of a more general point – that there are limits to commodification within a capitalist economy and that the reproduction of commodity relations depends upon the reproduction of other forms of social relations.

Labour-power and the means of production are then brought together in the production process, in the workplace, under the supervision of the owners of capital or their managers and representatives. Two things happen in the moment of production. First, existing use values, in the form of raw materials, machinery and manufactured components, suitably revalued according to their current cost of production, are transferred to new commodities. Second, surplus value is created. This augmentation of value is possible precisely because labour-power is the unique fictitious commodity. For capital purchases not a fixed quantity of labour but rather the workers’ capacity to work for a given period of time. In this time, workers create commodities that embody more value than was contained in the money capital used as wages to purchase their labour time. This difference in value is the surplus value, the additional new value created in production, which, along with existing values transferred

Figure 9.1 The circuit of industrial capital.
Source: Adapted from Hudson (2005)
in the production process, is realised in money form as profits on successful sale of the commodity.

It is, however, critical to note that the exchange value of commodities is defined not by the absolute amount of labour time that they embody but by the socially necessary labour time required to produce them. Socially necessary labour time is defined as the amount of undifferentiated abstract labour needed to produce a commodity under average social and technical conditions of production. Since commodities sell in markets at a given price, the process of competition via markets has important implications for the transfer of value between companies. Companies deploying production technologies that require less labour time than the socially necessary average and so yield better-than-average productivity thus benefit from a transfer of value from those companies that use technologies that give a lower-than-average productivity. This continuous intercorporate transfer of value is a critical source of dynamism reshaping the corporate landscapes of capitalist production and an ever-present stimulus to individual companies to engage in R&D activity in search of more effective ways of organising production and creating new products (Hudson, 2001: 147–185).

To summarise so far, capitalist production can be thought of as simultaneously a labour process, producing material use values, and a valorisation process, reproducing value and producing surplus value, which is embodied in commodities and, having been realised, flows through the economy. It is also a process of materials transformation, although I do not have space to elaborate upon this here (but see Hudson, 2001, 2005, 2008). The smooth flow of capital around the circuit is thus necessarily interrupted as capital is fixed and materialised in specific commodified forms (aircraft, automobiles, power stations, shoes and so on). In some cases the value and surplus value that these commodities embody can be realised quite quickly and capital then thrown back into circulation. In others, however, the process of amortisation following sale can take years, even decades, as capital is fixed in built and manufactured forms of great durability and duration. Moreover, realisation is by no means guaranteed for any commodity. Capitalist production is an inherently speculative and risky process, with a constant danger that the circuit might be broken or interrupted in non-renewable ways.

Assuming that sale is successful, however, the difference between the amount of money capital advanced at the start of the round of production and that realised at the end of it is equivalent to the difference in the value of commodities at the beginning and the end of the round. This is critical in understanding the rationale and dynamism of capitalist production. It also emphasises that the totality of production involves more than simply the transformation of materials to produce goods or services. It also involves a myriad other service activities associated with transportation, distribution and sale, since the determination of socially necessary labour time is contingent upon “socially necessary turnover time”, the speed with which commodities can be distributed through and across space (Harvey, 1985). Furthermore, the meanings with which goods and services are endowed, the identities that they help create and form, are of central importance as consumers purchase commodities in the belief that they will be useful to them, materially and symbolically.

In summary, the circuit of productive industrial capital conceptualises commodity production and consumption in terms of the creation, realisation and flows of value. To the extent that realised surplus value is advanced as capital, then the scale of accumulation expands. Thinking in terms of the circuit of industrial capital also emphasises that commodity production is inherently geographical in a double sense. First, material transformations are predicated on relationships between people and nature: that is, upon
a social-natural dialectic. Second, space is integral to the biography of commodities, which move between varied sites of production and consumption around the circuit: that is, a socio-spatial dialectic as value embodied in commodities flows between sites and nodes distributed over space. The circuit of productive capital thus involves complex relationships between people, companies, nature and space in processes of value creation and realisation and in flows of value through time/space. Conceptualising the production process in terms of successive journeys around the circuit of industrial capital aids understanding of developmental trajectories within capitalism. In particular, it helps reveal what happens to the money equivalent of the newly produced surplus value and the ways in which value flows through time as an integral part of the circuit of industrial capital. However, analysis at this high level of abstraction reveals nothing about the spatiality of flows of capital and surplus value, the locations from which and to which value flows. Seeking to understand these issues requires a different approach.

The spatiality of flows of value: geographies of capitalism, accumulation by dispossession and the spatial extension of circuits of capital

Flows of money, commodities and value are always flows over space as well as through time. Moreover, with the passage of time the spatial reach of circuits of capital has expanded, albeit unevenly, increasingly becoming global. In part, this spatial extension has been effected through processes of accumulation by dispossession (Harvey, 2003). This form of accumulation refers to an ongoing process of the appropriation of value created under non-capitalist relations of production and its translation into capitalist concepts of value and not simply to the initial early phase of global capitalist development, a phase of primitive accumulation now consigned to the pages of history. Crucially it involves the replacement of non-capitalist modes of production with the capitalist mode of production as the dominant organisational force in the economy and in this way the penetration of capitalist social relations into spaces from which they were previously excluded. Often this has been a violent process, especially, although by no means only, historically secured by military means and physical force linked to processes of (neo) colonialism but it is now more often pursued by more subtle means, such as Intellectual Property Rights legislation and the force of the rule of law (for example, see Prudham, 2007; Sneddon, 2007). In either case, however, the role of the (national) state in underwriting the political construction of accumulation by dispossession has typically been central.

At the same time, and often as a direct result of the effects of accumulation by dispossession, capitalist social relations of production and processes of proletarianisation (that is, the transformation of people into workers dependent upon selling their labour-power in order to live) have increasingly penetrated spaces from which they were formerly excluded. This spatial extension has been a critical formative moment in the development of uneven development, with transfers of value between locations, both within and between companies. Increasingly, this has been a process cast at the international rather than simply intra-regional scale (most recently and spectacularly into much of China), with the circuits of commodity, money and productive capital successively becoming internationalised (Palloix, 1977).

The spatiality of these flows of value has been decisively shaped by the changing configurations of geographies and systems of production and of exchange and trade. Unequal exchange results from the exchange of commodities produced under capitalist relations of production with products produced under non-capitalist production relations
(Emmanuel, 1972). Increasingly, however, geographies of production and the spatial extension of capitalist relations of production rather than those of exchange became decisive in shaping the spatialities of flows of value. This spatial expansion has also formed an important strategy through which capital has sought to counter tendencies to over-production and for the rate of profit to fall (Harvey, 1982). Initially capital reorganised production on an intra-national scale (see, for example, Lipietz, 1977; Massey, 1984). Subsequently, the reach of flows of value was further extended as divisions of labour in production became organised on an international scale (see, for example, Frobel et al., 1980; Lipietz, 1987) and intra- and international divisions of labour became linked in complex ways. More recently, the growing significance of strategies of outsourcing and offshoring as supply chains became both more complicated and distanced with the incorporation of a greater range of functions such as back-office activities and places into globalised production systems. This has been registered in the burgeoning literatures on global commodity chains, global value chains and global production networks and their relationship to regional development trajectories (see, for example, Gereffi and Korzeniewicz, 2004; Gereffi et al., 2005; Hudson, 2008; Smith et al., 2002; Wai-chung Yeung, 2009).

The growth of distanced supply chains, spatially stretched over great distances, and the growing blurring of the boundaries between manufacturing and services as a result of outsourcing back-office activities is an expression of important changes in the organisation of capitalist production. The development of modern capitalism and the practices of major capitalist enterprises have increasingly emphasised the significance of advertising, brand management and symbolic register of commodities and their socially ascribed meanings (see, for example, Williams, 1980; Pike, 2009). Many major companies have in effect become brand managers, out-sourcing the production of non-core services, components and final products to other companies – some of whom themselves are major brand owners – within hierarchically tiered supply chains. These chains are characterised by sharp inequalities in power among their constituent firms which shape the intra-chain magnitude and direction of flows of value. The organisation of global supply chains involves complex transfers of value between both companies and locations, with the dominant companies siphoning off monopoly rents as a consequence of brand ownership and with the dominant direction of net flows being to the lead companies and key centres of control and finance.

**State policies, territorial development and global value flows: tensions between corporate and territorial development logics**

Given that uneven development is inherent to capitalist economies as a result of capital’s need to create surplus value and transfer value between locations according to the dictates of dominant corporate imperatives and priorities, there are clearly unavoidable tensions between the logics of territorial development and corporate profitability and growth, between the logics of place and space, since companies wish to move value to maximise corporate advantage while those with responsibility for the development of cities and regions wish to capture value and hold down value-creating activities in their place. This frequently leads to the apparently paradoxical outcome that factories and workplaces are closed in one place not because they are unprofitable but because they are less profitable than in another place.

In terms of mainstream state logic, those responsible for seeking to manage the contradictions of uneven development and for promoting local and regional development
seek to position places more favourably within the spatial circuits of capital, accepting its concept of value. They employ a variety of tactics in pursuit of this objective – attracting inward investment, encouraging the growth of endogenous enterprise and local small firms and so on. In recent years there has been a growing emphasis on a neo-liberal conception of development, based on maximising global flows into and out of regions. This has further exacerbated the tensions between a corporate logic that seeks to maximise profits by globalising value flows and a territorial development logic that seeks to maximise intra-regional flows and connections and the volume of activity within a given region. Companies seek to minimise employment levels and wage costs per unit output and maximise surplus value production whereas those responsible for regional development seek to maximise the quantity and/or quality of jobs and the wage incomes that they bring. Nonetheless, those responsible for regional development strategies typically see themselves as having no alternative to seeking to work within the constraints arising from this clash of logics. Thus they seek to create, enhance and capture value “in ways that are not easily replicable elsewhere” (Rutherford and Holmes, 2007: 202). However, as the history of capitalist development makes abundantly clear, even if regions succeed in enticng companies to locate and create value within their boundaries, there is no guarantee that capital will be invested where surplus value is produced or indeed where it is collected.

There are also tensions within those parts of the administrative apparatus of the state concerned with local and regional development as to whether the priority is enhancing the strength and international competitiveness of the national economy through the use of local and regional development policies or developing localities and regions per se. While the administration of such policies was typically devolved to the regional level within the structures of central government ministries, decisions about their content and the criteria to be used in administering them remained firmly at central level within national states. Such policies often seem more concerned with reshaping the contours of profitable production spaces, or addressing national economic policy objectives, than meeting the developmental needs and concerns of particular places. Furthermore, implementation of such policies was often seen to create vulnerable urban and regional economies, ensembles of ‘global outposts’ at the extremities of corporate chains of command and control (Austrin and Beynon, 1979) and dependent upon decisions within distant national political capitals and the offices of transnational corporations (Firn, 1975). Despite attempts to encourage endogenous development and claims as to the emergence of new forms of qualitatively different embedded branch plants, such fears remain (Hudson, 1994, 1995). For example, in 1998 Fujitsu and Siemens closed brand-new state-of-the-art integrated circuit plants in North East England, facilities that had been heavily subsidised via state regional policy grants, as world market prices for these products collapsed.

**Counter-tendencies, I: Seeking greater closure of local and regional economies within the mainstream**

There are clearly limits to the degree to which any local or regional economy can and, arguably, ought to be closed off from the wider world economy and a key policy issue is to optimise the balance between intra-regional and extra-regional production, trade and value flows. In certain circumstances increasing intra-regional transactions is perfectly compatible with the mainstream logic of capital as it can cut both production and transport costs and enhance profits. Recognition of this underlay the creation of major integrated chemicals and steel
complexes, for example, as by-products from one process became inputs to another process rather than valueless wastes. The same logic underpins the concept of eco-industrial development (EID), predicated on companies collaborating for mutual economic benefit, closing material loops via recycling, recovering or reusing wastes and enhancing eco-efficiency via exchanging different kinds of by-product, based on bilateral commercial agreements, driven by concerns to minimise risks and wastes and maximise profits, and retain flows of value within the local or regional economy (Scharb, 2001; Stone, 2002). It is, however, important to remember that there are limits to EID and similar attempts to increase regional closure as at least some raw materials and components are typically imported into the region and some finished products exported so that flows of value into and out of the region are unavoidable.

There are also limits as to what can be produced for sale regionally because of the size of regional markets and regional consumption preferences. Nonetheless there is considerable scope in many regions to enhance intra-regional transactions and the resilience of economies via public procurement policies. Consider, for example, the regionalisation of food supply chains over much of the European Union for schools, hospitals and other public sector activities (Hadjimichalis and Hudson, 2007). Such developments create markets to sustain regional agriculture and food-processing industries and increase the intra-regional retention of value.

Counter-tendencies, II: Creating alternative concepts and localised circuits of value

The chronic failure of state territorial development policies to manage the mainstream capitalist economy so as to deliver their claimed and intended effects has led to attempts to explore alternative conceptions of paths to local and regional development (see, for example, Pike et al., 2007). This involves moving beyond that which follows from the logic of capital and redefining what counts as ‘the economy’, admitting the validity of differing concepts of value and processes of valuation and the outputs of goods and services that arise from them. While goods and services produced within the social economy may be exchanged for money in markets, they do so at market prices that reflect an ethical and moral commitment and as such undercut prices in mainstream markets. Nonetheless there is competition within markets in the social economy and uneven development among and flows of value between social economy organisations as a result (Hudson, 2009). In addition, however, social economy activities may also be based upon different concepts and definitions of value that do not find monetary expression in the currencies of the mainstream (for example, Time Dollars defined in terms of the amount of time required to create a product or deliver a service). Such activities may also involve attempts to create localised flows of value (for example, via LETS – Local Exchange Trading Systems) detached from the dominant circuits of capital and the mainstream economy. More generally, these explorations of alternatives signal a more general concern with the developmental potential of the social economy and, more generally, of the ‘Third Sector’.

Much of the recent impetus for this revival of interest in the social economy derives from the perception in policy circles that a localised social economy could offer a more effective way of dealing with localised problems of social exclusion, poverty, unemployment and worklessness. Much socially useful and environmentally enhancing activity that was formerly disregarded or consigned to the margins is now being accorded much greater recognition and significance as part of the social economy or ‘Third Sector’ in many parts of the world (Amin et al., 2002; Amin, 2009; Leyshon et al., 2003). Because such
activity is often locally based, meeting local needs from locally produced products, based upon recycling and reuse of existing goods and materials, in a variety of ways it has a much lighter environmental footprint as well as creating socially useful work. Paradoxically, however, it is typically those places most ravaged by economic decline that lack the resources needed to develop a vibrant social economy and the developmental alternatives and alternative localised circuits of value that it could offer. Furthermore, as successful social economy organisations seek to extend their scale of operations and spatial reach, they typically move nearer to the logic of the mainstream economy and its definitions of value and criteria for exchange, blurring the line between the mainstream and alternatives to it as the bulwarks and shelters they provide are subject to strong convergence pressures from the mainstream (Hudson, 2009).

Conclusions

Capitalist development is driven by strong imperatives to maximise profits and this has led companies increasingly to organise their activities on an expanded spatial scale, seeking both to appropriate value from non-capitalist activities and extend capitalist relations of production into previously forbidden territory. Flows of value between companies and places are an integral part of the competitive imperatives that lie at the heart of capitalist social relations. A corollary of this is that companies are engaged in an ongoing process of reorganising their activities over space, transferring value between locations while investing in some places and disinvesting from others. Devalorisation is always place specific and, combined with the transfer of value from places because of their particular location in wider circuits of capital, is central to the creation of local and regional development problems. Equally, the search for new sources of surplus value and the intensification of capitalist social relations erodes the space in which alternative concepts of value and more localised circuits of value could flourish. This poses a political challenge for national states and other social forces that seek to combat these problems of uneven development and as such the logics of corporate profitability and territorial development, of capitalist and non-capitalist social relations, come into sharp conflict. However, the production of uneven development is a necessary feature of the expansion of capitalist social relations and capital accumulation so that there are definite limits as to the extent to which value flows can be regionalised and local and regional economies insulated from the effects of wider and dominant circuits of capital.

Acknowledgement

Thanks to the editors for their helpful comments on an earlier draft of this chapter; the usual disclaimers apply.

References


Hudson, R. (2009) ‘Life on the edge: navigating the competitive tensions between the “social” and the “economic” in the social economy and in its relations to the mainstream’, *Journal of Economic Geography*: 1–18.


Further reading


