

## Rethinking Capitalism from a Geographical Perspective

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### Abstract

Anglophone research in economic geography can be characterized by two separate, contested paradigms: Geographical economics (building on the work of the economists Krugman, Venables and Fujita), and geographical political economy (prevalent within geography). Elaborating on the latter, this paper explores what it means to think geographically about the (capitalist) economy. Focusing on geographies of commodity production as the driving force (even as markets are important emergent features in their own right), thinking geographically about the economy challenges many of the core claims of geographical economists. Beyond this, it raises deep questions about the capacity of globalizing capitalism, however it is governed, to overcome social and geographical inequality.

Key words: Geographical political economy, spatio-temporality, capitalism, geographical thought, nature-society

I have been thinking and writing about geography and the economy for my entire career, seeking to understand what it means to take seriously the geography of capitalism. In this paper, my contribution to the Japanese Association of Economic Geographers discussions on the future of economic geography on the occasion of its 60th anniversary, I summarize the state of research among contemporary Anglophone economic geographers, from my perspective.

Anglophone scholarship discussing economic geography has experienced two broad strands. One emerged in mainstream Economics, catalyzed by Paul Krugman's writing from more than twenty years ago, and it is now quite common for mainstream economists to include geography in their analysis. This scholarship, which I call geographical economics, treats geography as a factor that is external to the economy, and describes the geography of capitalism as approximating the equilibrium outcome(s) of exchange based in the rational actions of autonomous, equally empowered individuals, with consumers having given utility functions

and production governed by production functions. I have written much about geographical economics elsewhere (Sheppard, 2000; 2001; 2011a; 2011b). Suffice it to say that the assumptions on which this theory is built are deeply unrealistic, and generate a misleading impression both of how geography matters to the economy, and how well capitalism functions.

The second approach emerged within Geography, and this is today's focus. In my view, this latter approach offers a more adequate basis for thinking geographically about capitalism. I begin with the geography of commodity production, including both capitalists' strategies and those of organized labor. Then I turn to geographies of consumption, where capitalists seek to realize profits on their investments in commodity production. Third, I examine geographies of governance. Fourth, I examine how economic processes shape, and are shaped by, biophysical, social and cultural processes. Finally, because thinking geographically about capitalism leads to the conclusion that capitalist economic processes are characterized by uneven geographical develop-

ment, I explain why alternatives to capitalist globalization, in all its variants, are inevitable and necessary.

## I Commodity production, time and space

When it comes to understanding the functioning of capitalism, geographers begin in places of *production* rather than in the markets prioritized in geographical economics. Mainstream economics treats production as a quasi-exchange, in which goods demanded (purchased inputs) are converted into goods supplied (outputs, for sale), by means of a production function. But places of production are not simply a technical conversion, where inputs magically become outputs. They are socio-political spaces, where owners, managers and workers are gathered together under unequal political relations. Entering places of production (factories, offices, farms, etc.):

“the money-owner now strides in front as capitalist; the possessor of labor-power follows as his laborer. The one with an air of importance, smirking, intent on business; the other, timid and holding back, like one who is bringing his own hide to market and has nothing to expect but—a hiding” (Marx, 1967 [1867]: 176).

Marx’ language is provocative, but his point is vital: Places of production are where the economic interests of owners conflict with those of their employees, with the former exerting greater power. Thus the technological relationship connecting humans, materials and production facilities is embedded within unequal and often conflictual power relations linking capitalist owners (advancing capital to finance production) with employees (hired to undertake production). Thus labor relations are as influential as technology in shaping productivity (e.g., through the pace of production or the length of the working week), and are shaped by workplace politics.

Thinking geographically means taking seriously how commodity production necessarily extends across time and space. In terms of temporality, there is always a time lag: Capital is advanced ahead of production to purchase inputs (although labor often is paid only after the work has been done), in the expectation of realizing a profit once the commodity has been manufactured, distributed and sold, and the revenues returned to the firm. In measuring their economic gain from advancing capital, capitalists think in terms of the inter-temporal rate of profit (typically per annum), not instantaneous total profits (Lee, 1998). This rate must be generally positive in a going capitalist concern, and depends not only on the difference between costs and revenues but also on the time it takes to realize revenues. Production also extends across *space*: Commodities (and inputs) have to be moved from where they are produced where they are to be sold. Transcending space takes time and effort, and often entails enhanced risk: capitalists are uncertain about how to successfully market their goods in distant markets.

Thinking geographically implies an interdependent and *relational* approach to understanding commodity production (as originally argued by Walter Isard, 1951), rather than the siloed approach favored in mainstream economics. Firms don’t simply buy inputs of capital, labor and technology, produce a commodity, and sell that to a consumer: They sell a great deal of their output to one another as capital goods, as represented in a multi-sectoral, multi-regional input-output model. The many commodities produced in a capitalist economy are loosely organized (at least by theorists) into sectors (textiles, housing, and the like). They are also organizationally connected, via horizontally integrated corporations.

There is geographical differentiation: Each regional/territorial economy possesses a distinctive mix of firms and sectors. Some sectors are present

in virtually all regions (e.g., housing); others are located in just a few (e.g., textiles). Each sector in any region is composed of a variegated population of firms, with distinct sizes, technologies, product characteristics, business plans, capital-labor relations, routines, financial and entrepreneurial capacities, and profit rates. Within this variability certain norms emerge, against which firms' performance and profitability are judged. Firms of above average profitability experience windfall profits, with the potential to turn their competitive advantage into an increased market share. Less profitable firms seek to overcome their competitive disadvantage by innovating or (more commonly) imitating more profitable firms, or to relocate. Through processes of innovation, imitation and the birth/death of firms, the distribution of firms evolves, altering the aggregate characteristics of a sector in a region. Thus the same economic sector will take on different characteristics in different regions, following its own path dependent trajectory (Metcalfe, 1988; Webber, Sheppard and Rigby, 1992; Rigby and Essletzbichler, 2006).

Evolutionary economic geography has built on this insight to develop a powerful out-of-equilibrium conceptualization of the evolution of firms and sectors in a region, albeit typically confining itself to modeling the routines of individual firms within a single sector and region, in Darwinian competition for survival (Boschma and Martin, 2010). Firms cannot be treated as such quasi-independent agents, however, since their suppliers and customers often include other firms (and branches of the same corporation). In purchasing inputs to undertake production, each firm must take into account, *inter alia*, suppliers' cost (from their own or another sector), costs that partially depend on transport costs (and delivery speed).

Yet transportation and communications are not simply transactions costs. They are an economic sector, grouping together, *inter alia*, transportation/

communications equipment, infrastructure and services. The production of transportation/communications equipment (automobiles, computers) is located only in some regions, but infrastructure and services must be present in (and between) every region. Three aspects of the production of accessibility are important. First, since higher accessibility is a collective benefit for the economy, accelerating turnover time and thus profitability, there is a considerable incentive to raise productivity in these sectors (Sheppard, 1990).<sup>1)</sup> Second, the accessibility commodity occupies a unique position within the inter-sectoral economy, consumed with every other input (to ensure their delivery) and hour of labor (the journey to work). Consequentially, third, whenever firms seek to enhance their productivity and profitability, reducing material or labor inputs per unit of output or relocating, such changes always entail increased transportation requirements for some regional sectors along with decreased requirements for others (Sheppard and Barnes, 1990).

Thinking geographically, the prices and outputs of transportation/communications commodities are endogenously determined, as for any commodity. As these sectors evolve, they produce geographies of connectivity that also shape the nature and evolution of territorial economies. Their prices affect capitalists' decisions about where to buy inputs, where to sell, and where to locate, ultimately shaping inter-regional economic interdependencies and spatial divisions of labor (i.e., which sectors concentrate in which regions).<sup>2)</sup>

The effects of these changes on overall profitability in a capitalist space-economy are unpredictable, but vital. It has been influentially argued that any cost-reducing technical change enhances the average profit rate, for constant real wage rates (Okishio, 1961; Roemer, 1981). Thinking geographically, however, this is no longer guaranteed; cost-reducing strategies may have the unintended consequence of *lowering* overall profit rates (Sheppard

and Barnes, 1990). This is one example of a broader conclusion from thinking geographically about capitalism: Capitalism's spatiality increases the likelihood that individual capitalists' profit-enhancing strategies can backfire, reducing the likelihood that capitalists' rational, self-interested actions result in a market-clearing equilibrium (Fowler, 2007; Fowler, 2010).<sup>3)</sup>

Thinking geographically also leads us to question even the possibility of a stable general equilibrium. One challenge is that of coordinating economic activities across sectors, space and time (Sayer, 1995): Static equilibrium is no longer relevant. The question is whether individuals actions generate a dynamic equilibrium where the commodities produced in one time period exactly match the (growing) demand for them in the next one, enabling markets to clear across time and space (cf. Morishima, 1973). This 'golden age' (Harrod, 1948; Robinson, 1962: 52) trajectory, if retained, promises unlimited accumulation, but is unlikely in practice. Duménil and Lévy (1987; 1991) construct a dynamic model of price-quantity dynamics that converges on golden age accumulation, but only under the unrealistic assumption, bordering on the myth of rational expectations, that participants know the desired equilibrium outcome in advance. When people simply do the best they can under the circumstances they may find themselves in all kinds of persistent, even chaotic, out-of-equilibrium spatial dynamics (Bergmann, Sheppard and Plummer, 2009; Bergmann, 2010).

Finally, even were such a golden age dynamical equilibrium to be reached, it is unstable with respect to the *politics* of production. It has long been established that the average profit rate and the real wage are inversely related in a multi-sectoral capitalist economy (Sraffa, 1960; Harcourt, 1972; Marx, 1972 [1867-96]; Morishima, 1973; Roemer, 1981), generating a wage-profit frontier (Figure 1). Wages cannot be so high that profit rates are zero, with

average profit rates rising as wages decrease from there.<sup>4)</sup> Thus the surplus produced annually under capitalism is a pie to be divided between workers and capitalists (but also landlords and resource owners).<sup>5)</sup> This distribution of income is not defined by the marginal product of labor and capital, nor is such a definition optimal: It reflects the relative political power of owners of capital and of labor power.

In principle, it is always in the collective interest of workers, or capitalists, to increase their share of the surplus pie. Thus, any dynamical golden age equilibrium is an unstable, 'knife-edge' (Solow, 1956) equilibrium, continually destabilized by socio-political action. Some argue that it was precisely such a destabilizing action that brought about the neoliberal revolution: The successful profit-enhancing political strategies of capitalists whose profit margins in the first world had been hurt by organized labor's political-economic gains under Fordism/Keynesianism (Duménil and Lévy, 2004; Harvey, 2006a).

## 1.2 Emergent geographies of commodity production

In traditional location theory, commodity producers are conceptualized as making profit-maximizing

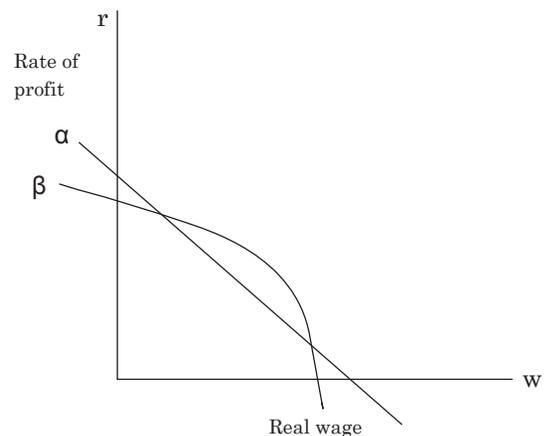


Figure 1 The wage-profit frontier

decisions about what to produce and where, guided by local conditions (including accessibility) and mediated through the market. Yet, thinking geographically, such equilibrium-oriented and individualistic approaches are inadequate. Economic actors are neither autonomous nor fully rational in their decision-making. Their interests, perspectives, power and preferences are shaped by their socio-spatial positionality, their knowledge and cognitive abilities are imperfect, and they may engage in collective action (building on shared positionalities of those belonging to a particular socio-economic collectivity). Their actions shape, but also are shaped by, the social structures and cultural context in which they find themselves; they make the world, but not one of their own choosing.

Geographies of production are continually shifting, shaping and shaped by multiple spatialities (e.g., territory/place, distance/connectivity, scale, and socio-spatial positionality). Thinking geographically, such geographies are not exogenous to the economy, but are produced alongside economic activities, feeding back to shape ongoing trajectories. In short, production and space are co-implicated through what Ed Soja dubbed a socio-spatial dialectic (Soja, 1980):

[S]patial structures shape spatial interdependencies, but in turn are shaped by those same interdependencies. Human agency shapes structure, but broader structural changes may undermine the efficacy of agency. Individuals share interests across class and space lines (not to mention gender, race, etc.) that can result in collective action and social conflict. Markets cannot automatically arbitrate these, and market-based outcomes need not be socially beneficial. [The capitalist] space economy may be a complex, non-linear system; one in which space is no longer Newtonian and time is an emergent property. (Plummer and Sheppard, 2006: 625)

### 1.2.1 Territory: Spatial divisions of labor

At the local scale of land use patterns, it is conventional to conclude that land is allocated to production activities, allocating economic activities to territories according to the ‘highest and best use’ criterion. In this view, the efficient operation of land markets (absent externalities) will ensure that the rent-maximizing activity is also the most profitable use for each land plot (Von Thünen, 1910 [1966]; Alonso, 1964). Thinking geographically, this need not be the case. Focusing on differential land rent (cf. Ricardo, 1821; Marx, 1972 [1896]), land use patterns that maximize the mean profit rate for capitalists are not identical with those that maximize rents for land owners (Sheppard and Barnes, 1990: chaps 6 & 7). This is because rents are calculated spatially, per unit of land area, whereas profit rates are calculated temporally, per unit of time. This implies a tripartite tradeoff envelope of profits, rents and wages (Figure 2) whereby increases in any one of these compensations undermines the others. When and where land (and resource) owners are able to exert collective pressure that increases the average rent, they also can extract mo-

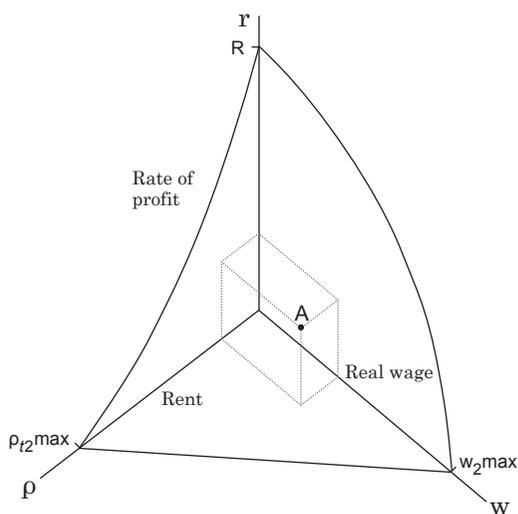


Figure 2 The wage-profit-rent frontier

nopoly rents that cut into wages and/or profits, affecting commodity prices (Sheppard and Barnes, 1990: 133-135).<sup>6)</sup>

At larger, regional scales (also nation-states), geographical specialization is generally analyzed through theories of international and interregional trade (Ohlin, 1933; Krugman, 1991). According to mainstream and post-Keynesian trade theory, comparative advantages can be identified for each region, determining an optimal pattern of specialization (i.e. a regional/national division of labor). The interests of individual capitalists also coincide with these optimal patterns, creating the necessary micro-foundational justification for specialization and trade. Thinking geographically, however, these neat principles — foundational for the free trade doctrine — do not readily apply. First, the possibility of reswitching (footnote 4) implies that there is no rule of thumb for determining comparative advantage from regional capital, labor and technology endowments. Thus a labor-abundant region need not specialize in labor-intensive production. Some nevertheless derive comparative advantages, for a given distribution of income between workers and capitalists (Steedman, 1979; Steedman and Metcalfe, 1979). Thinking geographically, however, undermines even this possibility.<sup>7)</sup> In other words, thinking geographically implies an enhanced possibility that capitalists' profit-maximizing choices, of what to produce in a region, may be irrational: lowering rather than raising mean profit rates (Sheppard and Barnes, 1986).

### 1.2.2 Place: 'new' industrial districts

Thinking geographically, trade theories entail what Brenner (2004) calls methodological territorialism: regions are assumed to be spatially homogeneous units of analysis. Yet production facilities characteristically cluster within sub-areas of any such region. One way to determine such intra-regional patterns is to apply trade theory at a smaller

scale, subdividing each territory into smaller regions and calculating comparative advantages for these sub-regions.<sup>8)</sup> Yet this replicates all the difficulties identified above. A second approach would be to calculate which spatial organization of production would maximize mean profit rates — optimal from capitalists' perspectives. This is possible in principle (Sheppard and Barnes, 1986; Sheppard and Barnes, 1990), but there is no reason to believe that the profit-maximizing strategies of capitalists would result in this pattern. Further, any such 'optima' would be continually subject to disruption as a result of the shifting politics of production and related technological changes. In short, neither bottom up methodological individualism nor top-down methodological territorialism suffices to account for spatial divisions of labor: geographies of production are shaped by how individual actions and broader spatial structures co-evolve (also with the shifting spatial politics of production, and technological change).

The Anglophone research into industrial districts and city-regions, beginning in the 1980s, exemplifies such co-evolutionary thinking. Seeking to account for how spatial agglomerations prosper in face of the centrifugal tendencies of globalizing capital, three kinds of forces were identified that support geographical agglomeration: Transactions costs, tacit knowledge and the socio-cultural context. *Transactions costs* derived from the new institutional economics, whose theorists conceptualize the organization of production and exchange as a rational choice: firms adopt the organizational structure (decentralized market transactions, corporate hierarchies or networks) that minimizes transactions costs (Coase, 1937; Williamson, 1985). Allen Scott (1988) applied this to explain the emergence of post-Fordist 'new industrial spaces', arguing that flexible specialization and accumulation reduced the transactions costs for inter-firm networks relative to corporate hierarchies and atomized market ex-

change, encouraging the formation of dynamic spatial clusters of inter-related firms.<sup>9)</sup> *Tacit knowledge* refers to the exchange of uncodifiable information between participants in a cluster (Polanyi, 1966). Such ‘buzz’, particularly effective through face-to-face communication (due to its cultural and performative aspects), also enhances the profitability of agglomerating (Leyshon and Thrift, 1997; Storper and Venables, 2003). The *socio-cultural milieu* characterizing the place where firms have clustered is seen as capable of reinforcing, or blocking, economic dynamism, depending on its assemblage of cultural and governance norms (Signorini, 1994). Taken together, these overlapping and interdependent factors constitute a complex set of *relational assets*, whose presence or absence in a place is argued to facilitate or inhibit local competitiveness and economic dynamism (Storper, 1997; Scott and Storper, 2003; Scott, 2006a). This approach also has been generalized to the concept of global city-regions, a worldwide set of metropolitan regions argued to prosper through a generative combination of such assets, envisaged as the nodes around which a new global geography of production may be precipitating (Scott, 2006b).<sup>10)</sup>

This mode of geographical thinking is *place-based*, because it seeks to account for economic growth on the basis of the local presence/absence of key attributes.<sup>11)</sup> But it neglects how connectivities stretching beyond place, linking agents and activities in different places, co-evolve with what happens within places (Massey, 1991; Sheppard, 2002).<sup>12)</sup>

### 1.2.3 Connectivity: Global production networks

Particularly in this current era of neoliberal globalization, geographies of production are increasingly networked across space. These include the multi-facility networks created and organized by trans-local corporations, whose intra-corporate transactions account for about a third of global trade. Yet there is more to networking than intra-

corporate transactions. In what Baldwin (2006) has dubbed “the great unbundling”, production is increasingly disintegrated across space: Global commodity chains and production networks are assemblages of corporate branch plants, franchises, original equipment manufacturers and sub-contractors (Hopkins and Wallerstein, 1994; Gereffi, 1996; Kaplinsky, 2000; Dicken et al., 2001; Coe et al., 2004; Hess and Yeung, 2006). These networks also are maintained, and shaped, by the emergent but uneven geographical infrastructures through which accessibility is produced: Logistics networks moving physical objects through material space, and geo-technological communications networks facilitating the movement of information and finance (the Internet, intra-nets, GPS, RFID codes, etc.). Indeed, Yeung (2012) argues that such corporate networks are characteristic of Asian capitalism, where territorial economies are particularly affected by exogeneity (i.e., processes emanating from outside a territory).

Geographical research has by now established the vital importance of such connectivities in shaping: (i) the fortunes of the various enterprises that they connect together; (ii) the location, technical change, production and marketing decisions taken by their owners and managers; and (iii) the places where these activities gather. These are profoundly *relational* processes: The various nodes in these networks (places, firms, etc.) depend vitally on their connectivity and positionality within such networks. Thinking geographically, places, firms, scales and connectivities co-evolve.

Anglophone geographers have tended to stress the emergent, flexible and flattened nature of networks, particularly under the influence of actor-network theory (Latour, 2005; Murdoch, 2005). Humans, animals, resources and machines, etc. are all ‘actants’ within the network, whose participation is essential to its success. “[I]ntentionally oxymoronic” (Law, 1999: 5), seeking to by-pass the duality of

structure vs. agency in social theory (cf. Giddens, 1984), actants are theorized as deriving their intentionality, identity and morality from the network, rather than as independent agents (Latour 1999: 17). Further, all actants are seen as having broadly equivalent potential to shape such emergent order, implying that unequal power is an outcome rather than a pre-existing condition.

Thinking geographically, however, the bulk of really existing networks already exhibit socio-spatial structure, through which centrally located nodes may greatly influence peripheral ones (Dicken et al., 2001). This is true within the social space of networks, but also translates into marked regularities in geographic space. Even the telecommunications networks that Castells (1996) envisions as catalyzing an all-embracing space of flows retain a strong internal socio-spatial differentiation, reminiscent of those associated with pre-existing methods of communication and transportation (Dodge and Kitchen, 2001; Graham and Marvin, 2001). Networks span geographical space without covering it (Leitner, 2004), in ways that may have little to do with geographical proximity (the physical distance between places), making for complex geographies. Such intra-network power structures also are not simply an unpredictable emergent feature of flat actor-networks. While occasionally dramatically reshaped, pre-existing power hierarchies act to reproduce themselves.

### 1.3 Labor geographies

Thinking geographically about labor, geographers have invested much effort in understanding how work is organized in place, and to what effect. They have examined cultural aspects: How workers' predispositions are shaped by their subjectivities; how gender norms affect, and are shaped through, the micro-geographies of labor relations in the place of production; the role of race; and cultural norms shaping the actions of management (Massey, 1994;

McDowell, 1997; Schoenberger, 1997; Wright, 1999; McDowell, 2003; Wright, 2006).

Thinking geographically also means taking seriously the ways in which workers/employees shape the economic geographical landscape: For all their power and influence, capitalists are not the only economic actors invested with agency. This entails understanding how inevitable political struggles over profits vs. wages (and rents) play out across various inter-related scales, ranging from places of production to regional- and national-scale organizing movements and labor markets, to global struggles (Martin, Sunley and Wills, 1996; Mitchell, 1996; Peck, 1996; Herod, 1998; Herod, 2001; Mann, 2007). These more specific struggles themselves reflect and are shaped by the complex, co-evolving, geographies of social class — geographies that immensely complicate Marx's 'workers vs. capitalists' narrative (Sheppard and Barnes, 1990; Gibson-Graham, Resnick and Wolff, 2000; Sadler, 2000; Sheppard and Glassman, 2010).

## II Geographies of consumption

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Although economic geographers characteristically begin with geographies of production, consumption also matters, and indeed has received increasing attention since 2000.<sup>13</sup> Consumer markets traditionally were studied in terms of the location of retailers, consumers' behavior and spatial price gradients. Beginning with central place theory, this body of research has moved to a more general consideration of the monopolistic nature of competition in markets, of pricing strategies, and of resulting spatial price equilibria (Lösch, 1954 [1940]; Denike and Parr, 1970; Curry and Sheppard, 1982; Norman, 1986; Nagurney, 1987; Mulligan and Fik, 1989; *Mulligan*, 1995; Plummer, 1996). Even within this relatively narrow domain of geographic research on markets, it turns out that thinking geographically challenges

conventional economic wisdom. Rather than maximizing total profits, as is presumed in microeconomics, spatial differentiation implies that it is more beneficial for retailers to maximize their rate of profit on capital advanced (the measure of profitability favored in post-Keynesian and Marxian thinking) (Sheppard, Haining and Plummer, 1992). Further, spatial competition need not result in spatial price equilibrium: Equilibria are at best locally stable; individual retailers can disrupt them to take advantage of spatial price wars (Plummer, Sheppard and Haining, 2012).

Other aspects of markets and consumption, however, rarely considered in geographical economics, have received the bulk of attention from economic geographers. These include: institutional questions about the impact of corporations on retailing, and their capacity to drive small retailers out of business and dramatically reshape geographies of consumption (Coe and Wrigley, 2009); the role of geodemographic marketing in shaping consumption patterns and norms, segmenting markets, and customizing marketing to where consumers find themselves at any point in time (location-based services) (Goss, 1995); the emergence of ecommerce and its material as well as virtual geographies; and cultural questions about the relationship between retailers, consumption and subjectivity/identity (with particular attention to issues of social difference: gender, class, race, sexuality, etc.) (Jackson and Holbrook, 1995; Cook and Woodyear, 2012; Mansvelt, 2012). The role of citizens as consumers, and its relationship to the emergence of neoliberal norms about the expectation placed on consumers as economic agents also has received attention.

Most recently, geographers have taken up the question of marketization. In mainstream/geographical economics, markets are described in terms of their structure (monopoly, monopolistic and perfect competition) and their relationship to the organization of production (hierarchies, net-

works and markets). Theories explaining which form exists in a particular context focus on its rationality (the structure that minimizes transaction costs). By contrast, geographers have found approaches in economic sociology more compatible with their sense of how capitalism works. This includes attention to how information networks unequally shape participants' ability to take advantage of markets ('the strength of weak ties') (Granovetter, 1973; 1985; White, 1988; Grabher, 2006); and how markets are produced (Callon, 1986, 1998; Mackenzie, Muniesa and Siu, 2008).

In the latter view, rather than beginning with an exogenous menu of market structures, from which one is chosen in a particular context, market structures are regarded as emergent features, shaped by theoretical predispositions, ideology (e.g., neoliberalism), interests, technologies and geographies (Rose, 1999; Aune, 2001; Mackenzie et al., 2008; Mackenzie, 2009; Mirowski and Plehwe, 2009; Peck, 2010a). If perfect markets do emerge, this is because the participants believe in their desirability and/or actively create them (Garcia-Perpet, 2007). The technologies used to trade securities in financial markets do not reflect the nature of those markets; rather, the technologies used (and the economic theories behind them) produce certain kinds of financial markets (Mackenzie and Millo, 2003). Turning to the uneven geographies of marketization, geographers have examined the construction and elimination of boundaries, both those between markets and those separating what is sold in markets as a commodity and what is not (Berndt and Boeckler, 2009; Berndt and Boeckler, 2012; Gidwani, 2012; Parry, 2012).

### III Geographies of governance and regulation: Producing scale

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The conception of capitalism developed above

implies that capitalist markets are not the self-regulating institutions, enabling a socially beneficial and harmonious equilibrium outcome, that Adam Smith's invisible hand parable suggests.<sup>140</sup> In short, the state has a formative role to play in shaping capitalism: A role that varies across space, time and scale (Brenner et al., 2003; Jessop and Sum, 2006). Given the inability of capitalism to regulate itself, governance of the economy is a constant struggle between conflicting objectives, with different resolutions of the relationship between the nation-state and the capitalist economy emerging in different contexts. Geographers seeking to understand how Keynesianism ruled for as long as it did in the west, took different forms in different countries, was substituted for by developmental states in Asia and Latin America, only to enter a terminal crisis in the late 1970s, turned to regulation theory in economic sociology for answers (Aglietta, 1979; Dunford, 1990).

Regulation theorists argue that nation-states face options as to how to organize the necessary relationship between the public and private sectors under capitalism, by combining a regime of accumulation (how commodity production is undertaken) with a mode of regulation (how the state regulates the market to manage imbalances between supply and demand) (Lipietz, 1986). These may vary over time (as when neoliberalism's "supply-side economics" replaced Keynesian strategies of stimulating demand), but also across space (Brenner, 2004). Further, they may also vary between local territories and states (an issue neglected by regulation theorists), depending also on the central-local state relations in a given national context (Tickell and Peck, 1992; Painter, 1997). Geographical thinking about the politics and production of scale has been central to scholarship on globalization, regulation and governance, because state institutions are organized territorially, at different scales.

Over the past fifteen years, geographical thinking

has turned to seeking to understand how neoliberalism so suddenly and ubiquitously came to replace state-led development (Keynesian, developmental and socialist states), beginning in the 1980s. Summarizing these debates would take a separate paper, but suffice to say that neoliberalism has become a leitmotif of Anglophone economic (indeed, human) geography since 2000. This research includes analyses of the nature and diffusion of neoliberal governance, debates about how neoliberalism came to replace seemingly impregnable state-led modes of regulation, and explanations of why neoliberalism 'in the wild' is persistently variegated and never converges on a pure, ideal-typical neoliberal model (Rose, 1996; Rose, 1999; Larner, 2000; Brenner and Theodore, 2002; Peck and Tickell, 2002; Harvey, 2006a; England and Ward, 2007; Harvey, 2007; Leitner, Peck and Sheppard, 2007a; Hart, 2008; Brenner, Peck and Theodore, 2010; Peck, 2010b; Peck, 2010a; Peck, Theodore and Brenner, 2012). Geographers find neoliberalization to be far more ubiquitous in practice than neoliberalism. Departing from economic sociologists' theories of "varieties of capitalism", geographers conceptualize persistent geographical differentiation as "variegated capitalism" (Peck and Theodore, 2007).

Thinking geographically, such changes cannot simply be studied using nation-states as isolated cases, to be classified, for example, in terms of their similarity to US/UK free market capitalism or German/Japanese "coordinated" capitalism. Theorizing scale, geographers have examined how supra-national scale processes, institutions, norms and policies (e.g., Structural Adjustment Programs and post-Soviet "shock therapy") helped propagate neoliberalization to most nation-states. They also examine how, within nation-states, such principles have been downloaded from the national scale to local states, cities, and even neighborhoods. Theorizing networks and connectivities, they also study "policy mobilities": how neoliberal principles be-

come “best practice” policies that take flight, mutating as they do so, rapidly moving between localities (Peck, 2009; Peck and Theodore, 2010). Important debates remain, particularly about whether neoliberalism has become ubiquitous, whether political economic accounts suffice, and whether and how it can be contested (Barnett, 2005; Leitner et al., 2007b; Ong, 2007; Barnett et al., 2008), but the uneven geographies of this shift, from state regulation to neoliberal governance, are now quite well understood. There also have been many case studies documenting its impact — enhancing inequality in cities, regions, nation-states and between world regions.

#### IV Nature, culture, society

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Thinking geographically about capitalism is about more than considering its spatio-temporalities; it is also about engaging across the questions and concerns of various social and earth science disciplines. Thus geographers ask how economic processes are dialectically constituted through their relations with biophysical, cultural and societal processes.<sup>15)</sup> With respect to biophysical processes, geographers study how capitalist socio-spatial dynamics shape, and are shaped by, ‘nature’ (Smith, 1984; Castree, 1995; Castree, 2005). Although it is accepted that ‘nature’ is produced through capitalist development (Smith, 1984; Harvey, 1996), at the same time, biophysical processes have their own dynamics that continually exceed humans’ attempts to align them with our priorities (as the struggles to contain the Fukushima nuclear melt-down certainly illustrate). Indeed, the very question of whether nature and human society can be separated as two quasi-independent fields of analysis has been answered in the negative: Humans are an intimate part of nature, meaning that geographers studying capitalism approach biophysical processes through

such concepts as socationature, and the more-than-human world (Castree and Braun, 2001; Whatmore, 2001).

Notwithstanding the impossibility of separating nature from society, capitalist processes certainly presuppose such a separation. Thinking geographically means asking a number of key questions about this relationship. How is the more-than-human world commodified and incorporated into commodity production, and to which effects? Key, here, have been the ways that commodification privatizes the more-than-human commons, dispossessing those who had communal access: accumulation by dispossession (Harvey, 2003). Second, how are economic relations in the more-than-human world imbricated with the power relations and inequalities associated with globalizing capitalism, at scales ranging from the local to the global? The sub-field of political ecology has compiled a rich set of studies of how local struggles over access to the commons connect household and community-scale political and gendered struggles to the broader processes of global capitalist development (Watts, 1983; Robbins, 2004; Swyngedouw, 2004). From a focus on rural post-colonial societies, political ecology has progressively brought these questions ‘back’ to first world and to urban environments, linking them with studies, there, of environmental justice and environmental racism (Pulido, 1996; Heynen, Kaika and Swyngedouw, 2006). These two questions are connected by scholarship studying the relation between capitalism and the more-than-human world (McCarthy and Prudham, 2004; Robertson, 2004; Bakker, 2009; Moore, 2009). A third core question examines resource geographies: The particularly visible and direct role played by resources, as they emerge and are managed, in the production of primary commodities (Rees, 1990; Auty, 1993; Bakker and Bridge, 2006; Bridge, 2008). How do resource industries and the regions where they are concentrated emerge, with which implications for the peoples and places en-

tangled in these sectors?

If these three questions focus more on how capitalism exploits nature, other principal lines of research ask about how nature shapes capitalist processes. Perhaps the most vital question, still under-researched by economic geographers, is the relationship between geographies of commodity production and consumption, and those of environmental and climate change. O'Connor (1998) has influentially argued that 'nature' is the source of capitalism's second fundamental crisis (the first being that of conflicting class interests). If he is right, and there has been significant debate among geographers about the adequacy of Malthusian scarcity-based interpretations of human-nature relations, then it is almost certain that thinking geographically will profoundly complicate such analyses and predictions (as for social class, discussed above). Research is examining the adequacy and implications of various strategies for mitigating capitalism's environmental impact, which are typically couched in capitalist market-oriented terms: Carbon trading, carbon taxes, and REDD+ and related carbon offset programs. Research is also underway into tracking how spatial commodity flows can be examined in terms of more-than-human systems of value (such as embedded carbon and virtual water) (Bergmann, 2013). But there is much more to do. A second set of questions has to do with the waste produced by capitalism, and how what counts as waste moves out of commodity but also back into production (de-commodified as waste, and re-commodified as recycled inputs) (Gidwani, 2012). A third set of questions has to do with the materiality of more-than-human phenomena, i.e., their physical properties and associated capacities and blockages, and how this materiality matters to capitalist spatial dynamics (over and above its economic value).

With respect to culture, there has been considerable work on what has come to be known as the cultural economy, through which the agendas of

cultural and feminist geographers have come to overlap significantly, albeit with considerable tensions, with those of economic geographers. One body of scholarship examines cultural industries. Beginning with work on Hollywood movie studios and industrial clusters, this has broadened into a much larger research agenda into what it means for cultural activities to be commodified, produced and traded, and their potential for facilitating economic growth in the cities and other places where such activities gather (Scott and Power, 2004; Markusen and Shrock, 2006). This scholarship simply extends the concerns of economic geographers to a new economic sector where culture and creativity matter.

Beyond this, economic geographers have shown that cultural processes have deep effects on (capitalist) economic processes; a phenomenon dubbed 'the cultural turn' (Barnes, 1995). Drawing from feminist and post-prefixed approaches to economic geography, there is a broad consensus that culture and economy are co-implicated, in ways that are neither reducible to, nor necessarily dominated by, the economy. Roughly speaking, three phases of cultural political economy can be identified, paralleling shifts in cultural geography. First, has been attention to discourses about capitalism, arguing that participants' actions within capitalism are shaped not only by their economic position and endowments/resources, but by how they think about the world. Drawing on the ideas of such post-structural thinkers as Derrida, Said and particularly Foucault (who coined the idea that knowledge and power are intimately linked), economic geographers have traced complex spatio-temporal shifts in discourses; shifts that shape what we take for granted about the world (Schoenberger, 1998; Thrift, 2000; Sum, 2009). For example, the shift from Keynesian to neoliberal economic theories and policies was accompanied by a shift in discourse: from taking for granted that the state is a vital actor in capitalism to taking for granted that markets function most ef-

fectively with a minimal, 'nightwatchman' state. Second, drawing closely on feminist theory, economic geographers have sought to trace how individuals' identities and subjectivities are produced — and how these subjectivities shape their behavior and expectations within capitalism (*Jackson and Holbrook, 1995; McDowell, 1999; McDowell, 2004; Wright, 2006; Werner, 2010*). Discourses and subject formation are intimately linked. For example, the onset of neoliberal discourses has been accompanied by the emergence of a neoliberal subjectivity: The expectation that participants in capitalism should see themselves as autonomous, self-interested, responsible and risk aware individuals.

Third, drawing on Deleuze and Guattari, has been a turn away from discourse and representation within cultural geography toward an emphasis on practice, materiality and performativity (*Thrift, 2008*). In this view, what matters is what people *do* in the economy, not how they think about it. Under the influence of actor-network and assemblage theory, this theoretical framework stresses how agency in capitalism is not simply in the hands of individuals. All kinds of more-than-human 'actants' (materials, animals, machines, reports, etc.) shape economic processes, with their capacity to do so profoundly affected by their uneven relations with other heterogeneous agents (a relational theory of agency). In this view, sometimes presented as profoundly opposed to geographical political economy, micro-scale studies of actions and the cobbling together of networks and assemblages are the key to understanding economic processes; everything is in flux, structures are an emergent feature of practices rather than pre-given by theory or global processes, and any structures that do emerge are constantly in danger of dissipating to become something quite different (*Murdoch, 2005; DeLanda, 2006; Sheppard, 2008; Anderson and McFarlane, 2011*).<sup>16)</sup>

With respect to society (beyond the obvious point that politics and culture are aspects of soci-

ety), economic geographers have taken up the question of collective action, social movements and contested politics (e.g., *Glassman, 2001; Featherstone, 2003; Wright, 2004; Wainwright, 2007*). Thinking geographically, the complex, contested experiences and interests associated with geographies of production, but also consumption, require an understanding of how similarly (and differently) positioned actors come together, to collude, to defend place, their collective interests and identities, to resist, and to pursue alternatives. Geographical thinking about capitalism concludes that capitalist dynamics tendentially reproduce, at least as much as they may seek to overcome, socio-spatial inequality (uneven geographical development). This necessitates the consideration of alternatives, which has been very much the domain of contested politics.

#### V Socio-spatial positionality: Uneven geographical development

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Thinking geographically about capitalism, there has emerged a broad consensus that capitalist spatial dynamics are generative of uneven geographical development. In short, capitalism (whether Keynesian, neoliberal or some other variegation) does not have the capacity, in and of itself, to overcome economic and geographical inequality. Rather, it reproduces these, at all geographical scales. Some such inequalities may dissipate, and even be reversed, but the result is never a 'level playing field' where all have the same opportunity (and responsibility) to succeed, or fail (*Amin, 1974; Wallerstein, 1979; Harvey, 1982; Smith, 1984; Sheppard and Barnes, 1990; Castree, 1999; Harvey, 2006b; Arrighi, 2010*). With respect to place and region, the socio-spatial positionality of a territorial economy influences its future possibilities (*Sheppard, 2002; 2006*).<sup>17)</sup>

Regions positioned within the core are advantaged relative to peripheral ones: The uneven economic geographies of connectivity that reflect such power hierarchies tend to reproduce them. At the same time, however, and notwithstanding the persistence of positional differences, globalizing capitalism is littered with examples where long-standing patterns of uneven development give rise to key moments when positional hierarchies are dramatically restructured, reflecting emergent contradictions of uneven geographical development. Our understanding of the exact conditions under which such restructuring occurs is imperfect, and must be improved in order to better explain the out-of-equilibrium dynamics of globalizing capitalism. An important conclusion derives from this analysis: Explanations of territorial development must take into account the uneven connectivities between territories, and not just their place-based characteristics and inter-scalar dynamics.

If the impoverishment and underdevelopment of certain people and places coevolves with globalizing capitalism, rather than being an original condition that immanent capitalist development can overcome, then prosperity does not diffuse down the hierarchy from 'advanced' wealthy nations to their impoverished 'laggards' (Chakrabarty, 2000). As a consequence, it would be unwise for the latter to duplicate the capitalist development strategies of the former, even if encouraged and allowed to do so.<sup>18</sup> Thinking geographically about capitalist development, even when confined to the same conventions of economic success and failure as in economics, acknowledges the significance and potential benefits of a variety of alternative development paths. This is more like how development is conceptualized in biology: as a set of branching paths of immanent development but with no expectation that these should converge on a common teleological path (Gould, 1996).

As the problems of globalizing capitalism have

become particularly trenchant since 2008, multivalent contestations are increasingly visible at a variety of sites and scales. These alternative imaginaries and practices, located in and across civil society and political institutions and entailing various spatialities, exceed the logics and processes driving capitalism. Some that preceded globalizing capitalism persist, such as tropical subsistence livelihood systems. Others have emerged as alternatives. National scale alternatives include the state socialism that many post-colonial societies experimented with after 1950, 'the visible hand' in contemporary east Asia, explicitly anti-capitalist and Islamist initiatives (Venezuela, Bolivia, Iran), as well as regional (Kerala) and local territorial alternatives (Moore, 1998; Escobar, 2008). Alternatives also include state agencies pursuing non-capitalist agendas, as well as alternative social movements stretched across space (an issue studied in Anglophone economic geography as community/diverse economies). Of course, different contestations reflect distinct socio-spatial positionalities and are unequally empowered. There remain vital questions about their relative efficacy and capacity to realize particular developmental imaginaries, and about how to engage critically across such alternatives (Sheppard, 2011b). Nevertheless, when mainstream and critical theorists dismiss contestations, they cede ground to the imaginaries and practices of globalizing capitalism, notwithstanding its proponents' persistent failure to deliver on its promise (Rose, 2002; Featherstone, 2003; Gibson-Graham, 2006; Leitner et al., 2007b).

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## VI Conclusion

I have covered a great deal of ground in this paper, so I want to keep the conclusions brief. Thinking geographically about capitalism implies that:

1. The spatialities of capitalism co-evolve with processes of commodity production, exchange

and consumption

2. The self-interested actions of commodity producers and consumers are more likely to result in 'irrational' unintended consequences that undermine those interests
3. Fundamental claims about the nature of capitalism (from proponents and critics) are called into question
4. Economic processes are co-implicated with political, cultural, social and biophysical processes, in geographically differentiated and often unexpected ways
5. Capitalism exhibits conflictual, out-of-equilibrium and evolutionary characteristics, including periodic crises and uneven socio-spatial development
6. Capitalism tends to (re)produce the inequalities that its proponents claim it can overcome
7. More-than-capitalist economic experiments are necessary, because of uneven geographical development
8. More-than-capitalist experiments are legitimate, and indeed vital if we are to create a better world than the one we inhabit at present — one that can be emancipatory and sustainable.

#### Acknowledgement

I am grateful for the invitation to address Japanese Association of Economic Geographers at their 2013 meeting in Tokyo, was honored by members' presence at my talk, and grateful for the suggestions I received from the audience. I bring greetings from the Association of American Geographers: Congratulations on your 60th Anniversary, and good luck for the future.

(University of California, Los Angeles)

#### "Footnotes"

- 1) The state is heavily involved, even in roundly neoliberal economies, because of the collective

nature of the benefits of enhanced accessibility; at the same time, the private sector is keen to take over this sector because of the profitability associated with control over accessibility.

- 2) A crucial process in all of this, often neglected by political economists and geographical economists alike, is the circulation of monetary value — and financialization more generally. This has become an active area of research for economic geographers, who have demonstrated that uneven geographies of money, financial institutions and financialization belie the claim that today's financial markets operate at "the end of geography" (O'Brien, 1992). There is no space in today's presentation, however, to examine this literature in any detail.
- 3) Marx famously identified a tendency for the average rate of profit to fall that stems from technical change substituting capital for labor (the source of the surplus that is the basis for profit). Okishio was arguing against this proposition. If we generalize Marx' argument to incorporate any situation where profit-enhancing intentions have the opposite effect (Harvey, 1982), then the spatiality of capitalism potentially is a contributing cause to profit rate decline (alongside changes in the wage rate, which also undermine the generality of Okishio's and Roemer's claim: Shaikh, 1978; Rigby, 1990).
- 4) Morishima's 'fundamental Marxian theorem' shows that monetary profit rate is positive if and only if there is exploitation of workers in labor value terms (Morishima, 1973). Although Marx' claim that labor values frame prices of production, his transformation problem runs into difficulties in a multi-sectoral economy, generating debate to the present day (Foley, 2000; Cockshott, 2005; Kliman, 2006; Garegnani, 2012), and is further compounded by space (Sheppard, 1984). The neoclassical theory of aggregate production functions, concluding that labor, capital and land/resources must be compensated on the basis of their marginal productivity, is equally problematic under these conditions (Harcourt, 1972). In a multi-sectoral economy 'reswitching' is possible: a capital

intensive technology may be the best choice when wages are *low*, as well as when they are high — compare the frontiers for technology  $\alpha$  and  $\beta$  in Figure 1 (Garegnani, 1966; Pasinetti, 1966; Pavlik, 1990; Sheppard and Barnes, 1990).

- 5) Including land, it is possible to extend this kind of analysis to three economic classes, owners of capital, labor and land, and three returns to these possessions: profits, wages and rents (Fig 2). This implies tripartite political struggles that can destabilize any putative equilibrium (Sheppard and Barnes, 1984; 1990).
- 6) Importantly, there is no reason that profit rates will equalize to a common value across location and economic sector (notwithstanding extensive rationales offered to justify this expectation), since convergence to equilibrium is far from guaranteed. By the same token, workers and different firms, sectors and locations will not all earn the same wage, and rents also vary by location. Thus a point such as A on the wage-profit-rent envelope in Fig 2 expresses nothing more than the mean profit rate ( $r_A$ ), real wage ( $w_A$ ) and rent ( $\rho_A$ ) across a geographically differentiated economy, with individual capitalists, workers and landlords continually seeking to improve their relative position.
- 7) Every shift in regional specialization increases some transportation/communication coefficients even as it reduces others.
- 8) Krugman's (1991) 'new' trade theory, the foundation of geographical economics, extends international economics to theorize such clusters as specialization patterns that maximize product variety.
- 9) Flexible specialization stresses the impact of computer-aided design and manufacturing production technologies (making small batch production more efficient), more discerning consumers (demanding more choice and higher quality) and less rigid labor markets (Schoenberger, 1988; Amin, 1989; Harvey and Scott, 1989; Scott, 1992).
- 10) More controversially, it was asserted that spaces with the right mix of such assets constituted the locales for a possible post-Fordist 'second industrial divide', where manufacturing would also create high quality and well paid work (Piore and Sabel, 1986; Amin, 1989; McDowell, 1991). One such potential asset that recently has received considerable attention, but also criticism, is the so-called 'creative class', which cities worldwide are developing strategies for attract or locally develop (Florida, 2002; Peck, 2005).
- 11) Further, notwithstanding the wealth of studies arguing that successful places have these, there has been no systematic analysis of whether they are absent in unsuccessful places, a selection bias favoring the relational assets thesis. Indeed, geographical decline has received little attention since economic geographers turned their attention from regional restructuring to new industrial districts during the 1980s.
- 12) Even 'buzz' also is non-local, flowing through 'global pipelines' (Oinas, 2002; Bathelt and Glückler, 2003).
- 13) To date, far too little attention has been paid to inter-firm consumption of capital goods, focusing instead on consumers purchasing of wage and luxury commodities.
- 14) This also is much debated within Economics, where equilibrium is hard to realize without such heroic assumptions as a Walrasian auctioneer or rational expectations.
- 15) It should be clear by now that political and economic processes are intimately linked.
- 16) This is very closely related to the scholarship on materiality mentioned above.
- 17) In feminist theory, positionality was coined to make sense of the social situatedness of subjects "in terms of gender, race, class, sexuality and other axes of social difference" (Nagar and Geiger, 2007: 267). In this view, differently positioned subjects have distinct identities, experiences and perspectives, shaping their understanding of and engagement with the world, also framing their ontological and epistemological stance and thereby their actions. As Mohanty (2003) notes, positionality is socio-*spatial* because the social and

the spatial are mutually constitutive. As in network thinking, socio-spatial positionality is a relational concept attending to the connections and interactions between differently positioned, but also unequally empowered subjects. Positionality thus addresses both difference and inequality, but importantly also questions the generality and normative status of any particular positionality. Finally, socio-spatial positionality is continually re-enacted through these connectivities, practices that routinely reproduce pre-existing positionalities, giving them a durability that seemingly naturalizes them. Through subjects' practices and imaginaries, relations of power and situated understandings are also contested and re-negotiated, occasionally radically reshaping pre-existing power relations.

- 18) Many have noted that the wealthy countries often push poorer ones to “not do as I did but do as I say”, as with parents advising their children (Chang, 2002). For example, the United States prospered on the basis of trade and infant industry protectionism from the days of Alexander Hamilton until 1945, only to then tell others to pursue free trade and market-led policies.

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資本主義の地理学的再考察

エリック・シェパード

英語圏における経済地理学研究は、独自かつ競合的な2つのパラダイムによって特徴づけられる。一つはクルーグマン、ベナブルズ、藤田昌久らの経済学者の業績を土台とした地理経済学 (geographical economics) であり、もう一つは地理学において主要な位置を占める地理的政治経済学 (geographical political economy) である。本稿では後者のアプローチの解説を通じて、資本主義経済を地理学的に考察するとはいかなることか検討を試みる。経済に対する地理学的思考は、商品生産 (ただし市場もそれ自体重要な創発的機能であるが) を原動力とした多様な地理に注目することで、地理経済学者の中心的主張の多くに対して異議を唱えることになる。さらに地理学的思考はグローバル化の進む資本主義 (その統治形態に関わらず) の社会的・地理的不平等を克服する能力を、本質的に疑問視することになる。

キーワード：地理的政治経済学，空間・時間性，資本主義，地理学的思想，自然・社会