# Economic Geography

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Economic Geography

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Abstract
Anglophone economic geography has played a central role in the evolution of human geography, including its various philosophical and theoretical shifts, from neocolonial commercial geography, through regional economic geography, spatial science and location theory, to Marxism, feminism and post-structuralism. It is currently extremely diverse, reflecting the breadth of approaches in the discipline, including a variety of quantitative and qualitative methodologies. This diversity is a strength rather than a weakness, if approached in the spirit of engaged pluralism. Perhaps the discipline’s principal contemporary unifying theme is the commitment by the majority of its practitioners to some aspect of a geographical political economy—to the idea that capitalism is an unstable, conflict-ridden political economic system characterized by geographical uneven development, whose spatio-temporal evolution is shaped by reciprocal relations between political-economic, cultural and biophysical processes. Major current areas of research in Anglophone economic geography include geographies of production and consumption, labor relations and the body, governance and regulation, financialization, nature-economy relations, globalization and development, and diverse (more than capitalist) economies.

Keywords
Capitalism, political economy, cultural economy, globalization, engaged pluralism

Cross-references
Corporate geography, development studies, industrial geography, labor geography, producer services, regional development, resources, transport geography

The subfield of economic geography refers to research that examines how economic processes intersect with the geographical organization of society. It is now a large international field of study that can be traced back to the early years of the discipline in Europe, and is found in most countries. Over the last sixty years, at least in Anglo-American geography, some of the most important disciplinary debates about theory and method were played out within economic geography. The first attempts to construct a logical empiricist, quantitative human geography were undertaken by economic geographers beginning in the mid-1950s. Political economy as an approach, along with the emergence of radical/critical geography,
was principally worked out in economic geography from the late 1960s. More recently, economic geographers have played key roles in debates about realism, feminism, post-prefixed approaches, and the relative merits of qualitative and quantitative methodologies. Given our limited expertise, we confine ourselves in this entry to Anglophone economic geographical research. We anticipate future entries that move beyond only the Anglophone discipline, allowing a global understanding and appreciation of the field. For example, the sixty-year old Japanese Association of Economic Geographers has several hundred (mostly male) members and a rich tradition of indigenous theoretical concepts. Or again, a large cluster of economic geographers in the Chinese Academy of Sciences has played a key role in shaping the geographical development of post-Mao China.

In recent years, the term ‘economic geography’ has become widely used also outside geography as a discipline (e.g., World Bank, 2009). In particular, stimulated by the work of Paul Krugman, economists have developed a rich body of research dubbed the ‘new economic geography.’ This work has close affinities with the location theory tradition within economic geography, particularly influential in the 1960s. The economists’ ‘new’ economic geography (new for them), or more accurately labeled geographical economics (Overman, 2004), is closely aligned with contemporary mainstream economic theory; that is, it is grounded in the rational choice of individual self-interested economic agents, whose actions are coordinated by the market, and produce equilibrium outcomes.

While engagement between economic geography and geographical economics is important, in this entry we describe the former as it has evolved within geography (cf. Barnes, Peck and Sheppard, 2012). Economic geography’s considerable vitality is matched only by its variegation. Nevertheless, there are four features that hold it together as a distinctive subdiscipline. First, economic geographers conceptualize the spatialities of economic activities as co-evolving with those activities: Economic processes produce emergent spatialities that themselves shape the evolution of those processes. Economic geographers study how space, place, scale, connectivities and networks are produced, but also how these affect the evolving geographical organization of the economy. Second, economic geographers examine how economic processes coevolve with political, cultural and biophysical processes. Commodity production and market exchange do not operate in a vacuum, nor are they foundational to other processes; they are shaped by (even as they shape) political processes, discourses and identities, as well as by the material world (which economic activities seek to transform into forms that humans can use). Third, economic geographers argue that the seeming contemporary predominance of capitalist economic activities should not be mistaken for their ubiquity, inevitability or desirability. More-than-capitalist economic processes coexist with capitalism, and may be necessary, as well as preferable. Questions of morals and ethics are therefore placed front and center within economic geography. Finally, economic geography is a pluralist field, with space for all manner of philosophical assumptions, scales of inquiry (from the globe to the body), theoretical languages
and methods of investigation (from qualitative to quantitative and everything in between).

We have written elsewhere: “Economic geography has become a peculiarly open-ended subdiscipline, one that has tended to privilege the analysis of rapidly changing phenomena, studied in real time. It is an anti-canonical project; it is open-ended and will remain so, repeatedly breaking out of the boundaries created for itself” (Sheppard, Barnes and Peck, 2012: 18). In the remainder of this entry, we seek to summarize how such a discipline has come into being. We do so by providing: first, a genealogy of its Anglophone intellectual development (Section 1); and second, selected examples of research themes to illustrate the breadth of the field and its current predilections (section 2).

1. A Genealogy of Anglophone Economic Geography

In tracing the shifting mix of approaches that have been gathered into the big tent of Anglophone economic geography over more than a century, two points need to be born in mind. First, changes over time are not simply a succession of approaches, with new replacing old along a trajectory of progress toward the best possible approach. Instead, the disciplinary landscape is like a palimpsest, with past versions of the discipline still partially visible, not completely erased, continuing to contribute to the subject’s vitality and present form. It’s messy, with different approaches jostling and rubbing against one another, with no external criteria to determine whether which one is ‘best practice,’ but it makes for a lively subdiscipline (economic geography is always living in “interesting times”). Second, as geographers it is important to attend to the geography of this knowledge production: Within our self-imposed geographical restriction to the Anglophone world, different approaches have gained traction in different spatio-temporal contexts. An approach that makes sense in one context may not translate well to others, further undermining the possibility of any singular best practice.

From commercial to regional geography

Like the broader discipline, economic geography was historically tethered to nineteenth-century European imperialism. Initially called commercial geography, the subdiscipline’s charge was to provide practical geographical knowledge to the agents of Empire: the military, the colonial bureaucracy, and the business classes. Focused on the commodity, economic geography delivered meticulously detailed information about where different goods were produced, and could be produced, the necessary conditions of their production, types of regional specialization, trade patterns, and circuits of available transportation. While early economic geography might not have been intellectually exciting – one of its early exponents, George Chisholm, said, “if ... there is some drudgery [to it], I see no harm” (quoted in MacLean, 1988: 25) – it provided the commercial scaffolding of Empire. The first-ever English language textbook in economic geography was Chisholm’s (1889) *A Handbook of Commercial Geography* (earlier ones had been published in German).
Jammed with maps, tables, and economic geographical facts and figures, the Handbook was designed both to give Britain’s business classes an applied education and a competitive edge, and its imperial civil servants knowledge of the globe that they administered.

Chisholm’s book was also a volume of scientific knowledge. In 1882 the German geographer Wilhelm Götz (1882) distinguished between commercial geography, which "chiefly served practical ends", and economic geography defined by "the scientific task of dealing with the nature of world areas in their direct influence upon the production of commodities and the movement of goods" (Götz quoted in Sapper, 1931, 627). Chisholm took that scientific charge to mean positing “nature” as a central causative agent, arguing that the environment made each place in the world uniquely fitted to undertaking a particular type of economic geographical activity. This view became extreme, however, colored by racism, through the work of a number of environmental determinists working in economic geography at the beginning of the twentieth century. The Yale geographer Ellsworth Huntington (1915) was the most notorious, arguing that labor’s ‘mental’ and ‘physical efficiency’ peaked in temperate climatic regimes found in Western Europe, parts of North America, and white-settler colonies. In contrast, mental and physical efficiency fell to disastrously low levels in tropical regions, condemning them to “backwardness,” making them “The White Man’s Burden.”

By the end of World War I, economic geography had become well entrenched in both UK and American universities. It was human geography. During the interwar period, with a less rampant form of imperialism, and growing criticism of environmental determinism for its blatant racism and shoddy scholarship, economic geographers moved away from emphasizing global commodity production to stressing local economic interconnections, taking the form of unique regions.

The turn to the region was readily seen in economic geographical textbooks published in North America from the mid-1920s onwards. It involved characterizing regions using a common typological scheme made up of such categories as “leading industries,” “natural resources,” “modes of transportation,” and so on. Once all regions were classified, their differences, and thus their individual uniqueness, were immediately evident by reading along any given row of the typology. For example, Vernor Finch’s and Ray Whitbeck’s (1924) Economic Geography used a fourfold classification scheme for each of the regions the book covered: agriculture; minerals; manufacture; and commercial trade, transportation and communications. Another example was Clarence Jones’s (1935) textbook Economic Geography that deployed an eight-fold typology. In both cases, the typology functioned as a grid into which regional facts, variously mapped, drawn, photographed and exhaustively described, were slotted. By typologically comparing the facts of different regions, economic geographical difference became transparent, and regional uniqueness shone by its own light.
The intellectual justification for this regional approach wasn't articulated until just before the Second World War. The American geographer Richard Hartshorne argued that by its very nature each region was a collection of exceptional features, describable only in their own terms. Consequently, no generalizing theories, no scientific laws, were possible. As Hartshorne (1939: 44) wrote, "Regional geography, we conclude, is literally what its title expresses. .... [I]t is essentially a descriptive science concerned with the description and interpretation of unique cases."

**Spatial science and the turn to theory**

Hartshorne's book was published at exactly the wrong time. The regional descriptivism it proposed for geography, and economic geography in particular, was quickly out of step with a set of larger changes pointing in exactly the opposite direction. From the beginning of the Second World War, a number of social sciences, and even some humanities, were transformed from the type of descriptive approach championed by Hartshorne to one that instead emphasized scientific generalization and explanation, and designed to accomplish practical ends. In part because of Hartshorne's influence, economic geography initially resisted that impulse, but by the mid-1950s it began to join in. The resulting shift to spatial science, represented by geography's "quantitative revolution," profoundly altered economic geography (Burton, 1963). It swept away talk of ideographic regional uniqueness, replacing it with scientific forms of general theorizing and rigorous statistical techniques of description and analysis.

Spatial science was defined by five main features. First, and foremost, was its use of formal theories and explanatory models. Necessarily, these were imported from elsewhere: from economics (rational choice theory, general and partial equilibrium, and German location theory), and perhaps less likely, from physics (gravity and potential models, and later the entropy model). Second, was utilization of an increasingly sophisticated arsenal of quantitative methods. At first they were off-the-peg inferential statistical techniques. Later, specialized statistical measures and methods were designed in-house to meet the peculiar features of geographical data (e.g., techniques of spatial autocorrelation). Third, was the deployment of computers. At first they were very crude and limited, but within a decade they performed hitherto unimaginable calculations, e.g., the inversion of large urban and regional economic input-output matrices that would have taken a lifetime to calculate by hand. Fourth, a philosophical justification was made for spatial science based on positivism, the idea that only scientific knowledge is authentic knowledge. Fred K. Schaefer (1953) provided an early influential justification that was later broadened and deepened by David Harvey (1969). Finally, there was a focus on abstract spatialities. Regions remained part of the economic geographical lexicon, but conceived utterly differently. Regions were now explanatory, theoretical, and instrumental, spatial units to achieve policy and planning objectives (brilliantly realized in the parallel movement of regional science). Finch, Whitbeck and Fielden
Jones (and their respective textbooks) were simply no longer recognizable as part of economic geography.

Like most intellectual revolutions, spatial science began at only a few sites, from which it diffused. In Europe it was associated with Cambridge University, Bristol University, and Lund University; within North America, it started at the Universities of Iowa, Washington, Chicago, and Toronto, as well as Ohio State and Northwestern. In each of these places, groups of young, bright, ambitious, competitive, and almost exclusively white male students gathered to participate.

More than anything else the revolutionary act was the introduction of theory, making economic geography for the first time a social science. It was, as Kevin Cox (2014, 145) calls it, “the great hinge of 20th century geography.” While economic geography subsequently radically changed, the tie binding all subsequent versions was the generation of theory. While contemporary economic geographers might now reject the substance of spatial science, through their continuing theoretical sensibility they are heirs to that earlier tradition.

Letting many flowers bloom – post-spatial science
The first signs of trouble for spatial science came in the early 1970s when David Harvey (1973) disavowed his earlier support, declaring that the quantitative revolution had run its course, telling us less and less of any import. Harvey was the first of a series of high-profile defections. In retrospect, the problem was the mathematically abstract, and narrow conception of economic geography that spatial science proffered. It was not true to economic geography's own variegated disciplinary history; not true to the historical moment of the early 70s that was increasingly politicized and drawn to issues of social relevance; and not true even to its own scientific logic, as assorted logical contradictions, inconsistencies and gaps revealed.

The subsequent forty years has seen the ceaseless proliferation of theoretical alternatives to spatial science. For the most part these alternative theories are not couched in the scientific hypothetico-deductive form. Nonetheless they are used to explain, and in some cases to intervene, within a robustly drawn and variegated empirical world. They are not new Kuhnian paradigms that replace the old, constructed to cope with emerging anomalies. Indeed, there is no agreement in economic geography about what constitutes an anomaly.

In the early 1970s Harvey introduced classical Marxism as his theoretical alternative to spatial science, on which he continues to draw and find creative inspiration. Yet Marxist theory is only one component of a larger political economy tradition that has more or less dominated economic geography since that time. By political economy we mean the tradition that harkens back to Classical Economics (Adam Smith, David Ricardo and Karl Marx), emphasizing that economic processes cannot be understood without attention to politics and the state; that capitalist
commodity production and exchange are not simply the result of self-regulating efficient markets. To reference economic geography’s common ground of political economy is not saying a lot, though. Political economy’s strands are multifarious, and heterodox. In rough chronological order, after Harvey’s classical Marxism, political economy has been taken up in economic geography as Doreen Massey’s Althusserian inspired spatial divisions of labor thesis; as the locality approach; as regulation theory, taken primarily from French economists and influential in understanding both the decline of Fordist industry in the UK and northeastern US, and the rise of post-Fordist growth dynamics especially in California; and an institutional approach concerned with identifying formative mechanisms of industrial districts, applied particularly to high-tech agglomerations.

Yet this list takes us up only to the mid-1990s. Since then it has become only more complicated and variegated. Uneasily bolted on to political economy was a cultural approach (“the cultural turn”), influenced by poststructuralism, and focused on how both discourse and gendered, raced and sexualized identities shape economic processes. Examining gender became a disciplinary theme from the 1970s even within spatial science. Massey brought it to the fore in her work on spatial divisions of labour, but it became even more central in a series of works published in the second half of the 1990s emphasizing culture, and drawing on poststructural feminist theory (McDowell, 1999). Gibson-Graham’s (1996) *The End of Capitalism (As We Knew It)* was perhaps the most influential of those works, eclectically piecing together post-Marxism, feminism, and post-structuralism into a critique of political economy that proposed a new substantive disciplinary agenda of research on alternative or ‘diverse’ economies.

Even more recently, Asian and German geographers have advocated for a ‘relational turn’, stressing the increasingly networked nature of economic activities. German geographers originating in Frankfurt, drawing on science studies, have explored the performativity of markets. Dutch and other European geographers based at Utrecht have catalyzed Evolutionary Economic Geography, drawing on evolutionary economics to model how diverse populations of firms change, and the implications for the regions in which they are located. European and American geographers interested in questions of development and the global south have advocated for a post-colonial approach to economic geography—one that seeks to understand distinctive economic practices emerging from beyond the North Atlantic realm, such as Islamic finance (Yeung, 2005; Boschma and Martin, 2010; Pollard, McEwan and Hughes, 2011; Berndt and Boeckler, 2012).

Last but not least, European and North American scholars based (albeit sometimes intermittently) at the London School of Economics (LSE) have reconstructed a version of spatial science that is formal, resting on neoclassical micro-economic principles, deploying rigorous econometric testing, and aspiring to influence government policy. Its intellectual basis was the 1990s work of the Nobel-prize winning economist Paul Krugman that turned on his innovative theorization of the relation between spatial growth, trade and agglomeration economies. That work
catalyzed a “new economic geography” or “geographical economics” (Brakman, Garretsen and von Marrewijk, 2009) leading to attempts to strike up a disciplinary conversation between geographers and economists, including a new journal, The Journal of Economic Geography (launched in 2001). The reconfigured LSE Department of Geography and Environment was another such outcome. In terms of impact and unity of purpose, it is now likely the most successful grouping of economic geographers in the UK.

In short, in less than a hundred and fifty years Anglophone economic geography has moved from a handmaiden to Empire to ‘physics envy’ to an intellectually open, eclectic, pluralist and possibly chaotic discipline straddling the humanities and social sciences. Anything goes, and sometimes does. Its seeming lack of a theoretical core can be disconcerting. Critics complain that the result is anarchy, eclecticism in which nothing fits, producing flighty, sloppy and sometimes incomprehensible works. One result maybe is Balkanization, a discipline of solipsisms and solitudes. The counter response is that fragmented theorizing is necessary to understand the increasingly fragmented geographical economy in which we live and study. It is exciting, however, with no chance of contemporary economic geography “boring its audience to death” (Nigel Thrift’s 2000, 692, fear at the end of the 1990s). The unusual challenge for this sub-discipline will be less breaking new ground, which it seems to do on a daily basis without breaking sweat, than holding its existing ground. This diversity and flexibility can be a weakness as well as a strength. Economic geographers must be willing to make space for diverse perspectives, promoting a culture of constructive and rigorous engagement and mutual learning (Barnes and Sheppard, 2010).

From theoretical to methodological diversity
Underlying this efflorescence of variegated theoretical traditions are questions of method—of how to apply these perspectives to, and assess their validity against, ‘really existing’ economic geographies. We write ‘underlying’ because questions of method have not received the attention they deserve (Tickell et al., 2007). Issues of methodology have been subject to a “don’t ask, don’t tell” policy. Economic geographers of all stripes insist on the importance of empirical methods, concerned with representing an empirical object. But what counts as empirical information, the methods used to collect, assemble and interpret data, and rules for determining the validity and power of explanatory frameworks, all have significantly shifted and multiplied. Under commercial geography, the concern was the assiduous collection of information that was as precise as possible: Ideally numbers and statistics. Under spatial science the bar was raised to aspire to logical empiricism: The rigorous statistical testing of theory-driven hypotheses against the ‘facts’. The turn away from spatial science ushered in a ‘qualitative revolution’, however: a move to methods concerned with gathering and analyzing non-numerical data. This was motivated by trenchant criticisms of the so-called positivist philosophy underlying spatial science—criticisms that stressed the theory-laden nature of observation. It is not simply ‘just the facts’. Data are not out there, like apples, waiting to be picked;
what is available depends on the theories and agendas of those (including economic geographers) collecting, ordering and distributing data, and what economic geographers see depends on the interpretive and theoretical framework they bring to empirical work.

The “qualitative revolution” began with “intensive case-study research”, pioneered by proponents of critical realism in the early 1980s (Sayer, 1984). Qualitative methods have multiplied since, now including in-depth interviews, focus groups, oral histories, ethnographies, participant observation, discourse and textual analysis, following networks, action research, and more besides. In this new methodological environment, nothing is proscribed, everything is permitted, if not equally valued. Critics complain that the turn to qualitative methods in economic geography has induced slapdash and superficial research. In response, qualitative researchers stress the difficulty of, and care necessary to undertake, rigorous case study and qualitative research—that rigor means different things in different contexts. Methods must be appropriate to the necessary data, and if that is qualitative, reflecting what is important for understanding the object of inquiry.

The upside is diversity and rapid change. Most of the qualitative techniques listed above would have been viewed as beyond the pale, or at best, suspiciously avant garde, when first introduced. The downside has been the derogation of quantitative analysis and loss of associated skills. Lacking the training, economic geographers are increasingly unable to undertake, or knowledgably critique, statistical and numerical analysis. There is emergent interest in mixed methods approaches, combining different (qualitative but also quantitative) methodologies in the spirit of engaged pluralism. Doing this effectively is even more challenging than rigorous quantitative or qualitative methods, however. First, research teams are increasingly necessary because researchers too often specialize in qualitative or quantitative methods rather than learning both. Second, developing mixed methods research designs that rigorously tackle the questions at hand, rather than mixing approaches together haphazardly, is still very much in the experimental stage in the social sciences.

2. Current research foci

To illustrate the kinds of research currently receiving significant attention from economic geographers, and how this reflects the sub-discipline as we describe it here, we provide summaries of eight areas of focus, organized around aspects of the spatial economy. It is not a definitive list, however (no definitive list is possible). Rather, these are simply current major areas of research in contemporary Anglophone economic geography.

**Worlds of commodity production: Industry and services**

From its early days, economic geographers have been interested in what is produced where, and how. While industries and services have different kinds of locational requirements (e.g., access to resources vs. access to consumers),
contemporary research focuses on theories that apply, in different ways, to both meta-sectors (some question whether the distinction remains meaningful in today’s globalized world.) Within its current heterodox political economy phase, three major areas of work stand out, at the scales of the firm, the region and the globe.

At the scale of the firm, the emphasis has moved away from explaining the rationality of location decisions to understanding how firms make decisions about what to produce and how, and the role that space plays in these processes. A particularly rich area of contemporary research is known as evolutionary economic geography. Drawing analogies between competition and the survival of firms and Charles Darwin’s theory of evolution, the paradigm of Generalized Darwinism developed in evolutionary economics has been applied to explain why firms are founded, closed, and grow or decline in success relative to their competitors. Unlike Economics’ focus on an idealized representative agent making rational decisions, and equilibrium outcomes, it is recognized that any regional population of firms, also those producing the same commodity, will vary in terms of size, technology, strategy and labor relations. Hypothesizing that each firm has a production routine, analogous to genes in organisms, it is argued that the dynamics of a population of firms will depend on three processes: Variation (between firms), selection (of firms, through competition) and retention (the propagation of routines within and between firms). A key question has been how firm dynamics relate to regional economic dynamics: How do some regions experience lock-in, whereby their economic structures stagnate and decline, whereas others remain dynamic, or attract emergent growth sectors? This is argued to be related to a region’s related variety: The more similar firms are, the greater are localization economies and innovation, within a particular sector. When they are less similar (unrelated variety) there are fewer such advantages, but the region is more open to qualitative change rather than path dependence (Boschma and Lammarino, 2009; Boschma and Martin, 2010).

At the regional scale of metropolitan areas, catalyzed by research on industrial districts, scholars have identified what they believe are keys to the success or failure of territorial economies, particularly in a world where globalization is always a threat to regional economic cohesion. The key is agglomeration economies: The relational assets in a region that facilitate both economic growth and resilience to change. One potential asset is related variety, others include reduced transactions costs, tacit knowledge or local ‘buzz’, the socio-cultural milieu, and the presence of a ‘creative class’. Each of these has been identified as enhancing local economic dynamism and flexibility under the right conditions, and leading to regional decline under the wrong ones, fostering place-based explanations of regional economic growth. Key kinds of territorial economies identified include industrial districts, learning regions, and city-regions (Scott, 2006; Storper, 2013).

At the global scale, it has been recognized that many economic activities are increasingly spatially decentralized, with different locations around the world playing different roles in the production or assembly of a commodity. Multinational
corporations, surrounded by an ecosystem of sub-contractors and licensees, thus spread production around the world in what Richard Baldwin (2006) has dubbed 'the great unbundling' of production. If the regional scale research stresses the importance of local networking, geographers studying this unbundling seek to understand it in terms of global production networks (GPNs). They not only examine the economics and power relations constituting these networks, with some firms in a position to shape outcomes and others just bit players, but also trace how the territorial strategies of states, labor unions, and multilateral governance organizations each affect the structure and evolution of GPNs (Coe et al., 2004).

**Worlds of consumption**
Consumer markets traditionally were studied in terms of the location of retailers, consumers' behavior and spatial price gradients. Beginning with central place theory, this led to a more general theorization of the monopolistic nature of spatial markets. It was determined that geography challenges conventional economic wisdom. For example, spatial competition need not result in spatial price equilibrium and may not be socially beneficial (Sheppard and Curry, 1982). In the last two decades, geographers studying retailing have turned their attention to the spatial strategies of corporate retailers, including their roles within global production networks. This recent research aligns with how economic geographers characteristically begin with geographies of production, unlike mainstream economics' focus on markets and consumption, extending this to the production of services. Retail geographers now study: 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 wherever consumers find themselves (location-based services); and the emergence of ecommerce and its material as well as virtual geographies.

With the post-structural and feminist turns to issues of identity, however, considerable research has examined the relationship between retailers, consumption and identity, with particular attention to issues of social difference: the intersectionality of gender, class, race, sexuality, and geographical location (Jackson and Holbrook, 1995; Cook and Woodyear, 2012; Mansvelt, 2012). This examines how consumers' desires emerge from and intersect with their socio-spatial positionality; and how these issues relate to marketing strategies (branding, store location and spatial organization). The role of citizens as consumers also has received attention, examining how households are expected and induced to consume to foster economic growth, particularly in post-industrial territorial economies.

Most recently, geographers have taken up the question of marketization: How spatial markets emerge and the implications thereof. Geographers have found approaches in economic sociology more compatible with their sense of how capitalism works than economists' categorizations of ideal typical market
structures. They examine how information networks unequally shape participants’ ability to take advantage of markets (‘the strength of weak ties’), how trading technologies shape market structure and performance, and how markets themselves are produced. Market formations are regarded as emergent features, shaped by theoretical predispositions, ideology (e.g., neoliberalism), interests, technologies and geographies. If perfect markets emerge, this is because the participants believe in their desirability and/or actively create them. Turning to the uneven geographies of marketization, geographers have examined the construction and elimination of boundaries, both those separating markets and those separating what is sold as a commodity and what is not—such as markets in waste, genes and human organs (Grabher, 2006; Mackenzie, 2009; Berndt and Boeckler, 2012; Gidwani, 2012; Parry, 2012).

**Labor, work and bodies**

From the beginnings of the discipline, labor was considered an important economic geographical factor influencing the location of firms and industry. But there was no analysis of labor markets as such, and nothing on either the conditions defining work, or especially the kinds of bodies doing the work. That changed in the 1970s when radical economic geographers began emphasizing the centrality of labor within production and the role of a distinct social and political class, the working class (Lier 2007). The 1970s, though, was exactly the decade when old verities about labor, work, bodies and the working class changed. Hitherto labor in the Global North was conceived as expending brawn working in a factory (engaged in “execution” rather than “conception” to use Frederick Taylor’s famous pair of terms). The bodies were conceived predominantly as male bodies, and the social class to which they belonged, the working class, was taken by the Left as the vanguard of progressive politics. This became less and less true as the larger processes of deindustrialization, neoliberalism, and globalization gained purchase in the 1980s. Consequently, it became necessary to retheorize labor geography. While elements of radical geography’s approach were retained in that retheorization, many new elements were added, drawn from poststructuralism, especially feminist and postcolonial theory, and which emphasized identity, embodiment, and transnationalism.

From the 1970s, deindustrialization in the Global North decimated traditional male Fordist industrial jobs along with their privileges (e.g., the “family wage”). It was the end of “Old Father Ford,” provoking a crisis in masculine identity especially for young males (McDowell, 1991). Furthermore, with the roll-out of neoliberalism from 1980 onwards traditional unions were also undermined, along with their associated left-wing politics. Traditional manufacturing jobs in the Global North were moved offshore, often into the Global South, to sites now linked by unfolding Global Production Networks. Operating from Free Trade Zones, large multinational corporations drew on abundant, very cheap labor, including pools of young women, who labored excessive hours, and subjected both to work injuries and to extreme disciplinary measures both inside the factory and outside. They became the world’s disposable workforce (Wright, 2006).
Some in economic geography argued that labor should now be conceived as possessing agency, as having an ability to determine their geographical fate (a “labor geography” rather than a “geography of labor”, Herod, 2001). But much recent empirical work examining low-paid service workers in the Global North, especially women, international migrants and workers of color, shows the reverse. Employment is increasingly precarious, creating a “precariat,” with almost no opportunity to assert agency. This form of employment is defined by part-timeism, short term contracts, and the absence of benefits (Theodore and Peck). That's less true at the opposite end of the labor market, where highly paid knowledge workers make up Richard Florida's (2002) creative class. While they also may be on contract, carrying out project work, they are often well-paid, enabling them to assert some agency by choosing the country they live, the city, or the neighborhood. In both cases, though, the larger point is that labor and work are not neutral. Workers always are more than a technical input into production. The social, cultural and geographical contexts in which work is practiced leaves its mark (sometimes literally), shaping social identity, bodily comportment and the life led, including where it is led geographically.

**Governance**

Within the political economy tradition dominating Anglophone economic geography, there is consensus that markets cannot function effectively in isolation: Issues of state regulation and governance also must be addressed (bringing formal politics into economic geography). Regulation refers to actions taken by state and quasi-state agencies, at various scales, constraining the actions of both producers and consumers. Governance embraces the broader sense of how commodity production and consumption are (increasingly) governed also by and through all kinds of non-state institutions.

Much attention has been paid to how different forms of capitalism emerge in different territorial contexts, and how these change. Economic geographers have drawn extensively on French regulation theory, which argues that a functioning territorial capitalist economy must combine a regime of accumulation (how commodity production is undertaken) with a mode of regulation (how the state regulates the market to manage the national balance between supply and demand) (Dunford, 1990). Originally developed to explain the emergence and problems of Fordism as a national territorial economic system in the Atlantic realm after 1945, geographers have extended it to consider geographical scale and spatial variegation. They examine how regulatory regimes vary across space at the national scale, reflecting the persistence of national cultural and political traditions —variegated capitalisms (Peck and Theodore, 2007). They also argue that local governments within a national territory may develop regulatory norms that differ from those at the national level, depending also on the central-local state relations in a given national context (Tickell and Peck, 1992).
Particularly at the sub-national scale, much attention has been paid to how local states act to foster investment in their territory. Urban entrepreneurial strategies include both inward investment strategies—subsidies and improvements to the local 'business climate', designed to persuade firms (and knowledge workers) to move in (or stay), as well as incubator strategies—seeking to create conditions that foster local innovation, dynamism and agglomeration economies (Hall and Hubbard, 1998).

The rise and geographical differentiation of neoliberalism has received particularly close attention. Neoliberalism has become something of 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, notwithstanding the relatively ubiquitous presence of processes of neoliberalization (Larner, 2000; Harvey, 2006; England and Ward, 2007; Peck, 2010).

Turing to the question of how neoliberalization diffuses across space and time, they also study policy mobilities: how neoliberal principles become “best practice” policies that take flight, mutating as they do so, rapidly moving between localities (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 (Leitner, Peck and Sheppard, 2007; Barnett et al., 2008; Wray et al., 2013), but the uneven geographies of this shift from state regulation (e.g. Fordism) to market-centric governance, are now quite well understood. There also have been many case studies documenting its impact—enhancing inequality within cities, regions and nation-states, and between world regions.

In terms of governance more broadly, economic geographers have examined the role, influence and evolution of institutions on territorial economies. They have unraveled the conditions under which institutions may facilitate or block regional and urban economic dynamism, examining how institutions can channel regional economic development along certain paths (path dependence), some of which may be highly beneficial (with institutions helping put in place ‘relational assets’ that foster innovation and economic growth), and others of which may result in stagnation, when institutional lock-in prevents a region from rebounding from a negative shock. These are important issues to understanding the resilience of territorial economies (Martin, 2000).

**Finance**

Economic geographers have paid some attention to money and credit over the years, but recently particularly to financialization. Research into forms of money and credit explored how the geographical extension of trade and capitalist economic relations required the development of forms of money and credit that enable
exchange to occur across space as well as time. When non-geographers claimed that the globalization of finance markets, facilitated by cyberspace, is creating a world where geography no longer matters, geographers responded by studying why financial activities increasingly concentrate in a handful of centers of global finance (New York, London, Frankfurt, Tokyo, now supplemented by Hong Kong, Singapore and Shanghai). Face-to-face communication remains essential to trade on the tacit knowledge (e.g., insider information) essential to gaming the market; digital networks have resulted in an extreme spatial concentration of high frequency trading servers, to gain a millisecond advantage over competitors. They also examined the different spatial scope of different kinds of lending, uneven geographies of how finance is governed, and the role of such institutional actors as pension funds and real estate investment trusts (Leyshon and Thrift, 1997; Clark and Wojcik, 2007).

Turning to the relationship between financialization and globalization, geographers have examined the role of uneven national regulatory and governance structures, such as Asian and offshore banking systems; connections across scales, as supranational finance institutions shape lending possibilities, and conditionalities attached to lending, in nation-states and localities; the emergence novel financial practices in certain regions (e.g., Islamic finance, sovereign wealth funds) and at particular scales (e.g., microfinance, Ithaca dollars); and uneven geographies of credit, lending and indebtedness at every scale (from financial exclusion in neighborhoods to the lack of lending in sub-Saharan Africa). They study the financialization of nature, and the geography of finance crises—notably the patterns of uneven geographical development underlying the 2007 global financial crisis, and its spatially differentiated consequences. Echoing related scholarship in the humanities and Anthropology, arguing that financialization is as much a cultural as an economic phenomenon, economic geographers also examine how financialization and its emergent pro-market norms have become increasingly central to everyday cultural practices. They examine the increasingly pervasive nature of discourses and daily practices that reflect as they also disperse these norms, and the multiple ways in which investment and credit underwrite all kinds of activities (Pike and Pollard, 2010; French, Leyshon and Wainwright, 2011; Christophers, 2013; Clark, Dixon and Monk, 2013).

Material worlds
The material worlds of nature and resources have been the focus of animated disciplinary discussions from the beginning, and for good reason. Currently around 50 trillion tonnes of the earth’s material resources are annually appropriated for one human use or another, transformed into primary commodities by the “metabolic engine” of the economy (Bridge 2010, 1222).

When economic geography was first institutionalized in the late nineteenth century the discipline was primarily about material worlds, and codified as meticulous lists of natural resources, their geographical distribution, and corollary environmental conditions. Interest waned in the 1920s and 1930s, and under post-War spatial
science the topic of “natural resources” became an intellectual backwater. Drawing upon Marx, David Harvey (1974) reinvigorated the subject. His was not nature “red-in-claw” but social-nature, “the production of nature.” One of capitalism’s imperatives, Harvey argued, is to transform original “first” nature, to produce “second nature” (Smith, 1984). In the process nature is commodified, subject to the market, becoming hybrid: nature and society join, forming “socio-nature” (Castree and Braun, 2001). But to become a commodity conditions have to be just right. As Erich Zimmerman (1951, 814-5) famously put it: “resources are not: they become.” Coal is merely a rock that makes your hands dirty until capitalism invents the steam engine. But once capitalism emerges, pre-existing nature is transformed. Nature still exists, but how it is exploited, used, thought about and represented is irredeemably and sometimes cataclysmically altered.

With Harvey linking nature to political economy, economic geography overlapped with political ecology that similarly brought a political economic understanding to resource use and production within initially the Global South. The exemplar is Michael Watts’ work in Nigeria, showing how social relationships, first under imperialism then under independence, made the country’s natural resources neither natural nor even a resource, creating instead mal-development, inequality, and social mayhem (Watts 2004).

Another political economic approach, Immanuel Wallerstein’s world systems theory, provided a different, macro-framework connecting economic geography and material worlds: the global commodity chain. By following the “thing” – a papaya, a cut flower, a barrel of oil – as it moves and is transformed from first producer in one place to final consumer in another reveals: (i) the differential forms and effects of materiality; (ii) the diverse geographies inherent in all commodities; (iii) the asymmetrical socio-geographical relationships within the production process; and (iv) the uneven effects of state regulatory regimes (Cook et al, 2004).

The most recent body of work about resources elaborates precisely on this last point, focusing on how one regulatory regime in particular, the regime of the last thirty years, neoliberalism, has stamped nature in its likeness. For examples as different as water, fish, trees, ores, and CO₂, under neoliberalism nature becomes privatized, commodified, priced and marketed. Geography, though, remains vital. Each place does neoliberalism differently, creating not one seamless landscape of indistinguishable process but a patchwork quilt of variegated resource regimes (Heynen et al., 2007). Neoliberalism has also been the context for understanding the development of new markets of either goods or services ostensibly meant to improve environmental conditions. There are markets for carbon reduction, body parts, biodiversity enhancement, and more generally for the provision of environmental services.

**Globalization and development**

For many years, self-styled economic geographers in the Anglophone realm concentrated their effort on the parts of the world they inhabited, those of the first
world—Europe, Japan, and the white settler colonies of North America, Australia, South Africa and New Zealand. With the implosion of the Soviet sphere, attention turned to questions of ‘transition’ toward capitalism in the post-Soviet world. Yet the ‘third world’—those countries whose inhabitants suffered from colonialism and still struggle to overcome the economic disadvantages and global peripheralization they inherited from colonialism—was largely left to what was styled ‘development geography’. During this past decade, recognizing that problems of under-development in the post-colonial world differ in scale rather than kind from those of impoverished regions in the first world, economic geographers increasingly are turning to study the post-colony, integrating development with economic geography (Slater, 2004; Lawson, 2007).

In so doing, economic geographers have focused on development at scales ranging from the globe to the village, tracing out how these are inter-connected. They also are taking up the question of what is meant by development. What is at stake in the development discourses that circulate alongside global policymaking, in such forms as sustainable development and Millennial Development Goals.

At the global scale, geographers examine uneven geographies of economic globalization: Why is it that economic inequality remains so persistent notwithstanding the increasing interconnectedness of the global economy? Why has China prospered, India struggled, and sub-Saharan Africa stumbled? Does free trade, and the unrestricted movement of direct and portfolio investment level the global playing field, or does it reinforce pre-existing inequalities? Challenging the tendency in development economics to attribute success or failure to local, place-based characteristics (culture, physical geography, governance institutions), economic geographers argue that the uneven relation connecting places—the flows and mobilities of commodities, finance, ideas and people, not to mention water and climate—may be equally important in determining the wealth of territories (Sheppard, 2011). They examine not only how local possibilities are shaped by broader-scale processes, processes that localities seemingly have limited influence over, but also how local events can trigger significant broader-scale consequences. At regional and neighborhood scales, they examine why some localities prosper whereas others do not, and how these dynamics are shaped by both the colonial past and contemporary processes.

At the local scale, in fields, villages, factories and urban neighborhoods, economic and development geographers study the embodied practices of individuals working to improve their livelihood prospects, but also how these connect to the households and other collectivities to which they belong. They show that what others dismiss as ‘traditional’ practices, represented as being in need of development to modernize, are often better adjusted to the circumstances in which they emerged than are the practices of development that were introduced to replace them. Such analysis centers on the diversity of economic practices, their relation to the biophysical environment, and the role of power and constructed identities (race, age, class, caste, gender, etc.) in shaping these practices and their consequences for livelihood
chances. Substantive topics range from peasant farming and subsistence, to informal housing and economic practices, to formal employment in export processing zones, and connections between these places and practices (Rankin, 2004; Porter, 2006).

In terms of what is meant by development, research by economic geographers, documenting ways in which policy interventions informed by European notions of development undermine livelihood possibilities in post-colonial societies, raises questions about the ubiquity and universality of such notions of development. If the development trajectory that has brought prosperity to the global North also brought impoverishment and environmental destruction to the global South, then the problem may lie in this very notion of development, rather than in the failings of southern places and populations. Thus economic and development geographers have turned to interrogating northern definitions of development—as the product of globalizing capitalism—distinguishing between ‘development’, as the set of practices developed in a particular geographical context that have enabled its residents to live well in their own terms, and ‘Development’ as a universal definition, to be foisted on all people and places, and against which their progress should be judged (Hart, 2002). Geographers raising these questions draw on post-colonial theory, questioning whether northern theory (also in economic geography) and development principles are applicable across the global South (defined as those, everywhere, who find themselves living precariously).

**More-than-capitalist economies**

Dating back to commercial geography, economic geographers long have taken an interest in the different economic practices to be found in different parts of the world. As ideas of development spread from the North Atlantic realm to be applied everywhere, non-capitalist practices came to be looked at as traditional and backward, as in need to replacement by integration into globalizing capitalism. Even economic geographers critical of capitalism and its consequences, documenting how it creates accumulation by dispossession or increased socio-spatial inequality, have tended to accept capitalist practices (in some form or other), by now globally hegemonic, as the only kinds of economic activity worthy of their attention.

This default position has been influentially questioned over the past two decades, with economic geographers turning their attention to community and diverse economies. In their book, *The end of Capitalism (as we knew it)*, J. K. Gibson-Graham (1996) forcefully argued that many non-capitalist economic practices continue to co-exist with capitalism, and in its very geographical heart (e.g., New England). Connecting Marxism with feminist and post-structural theory, they argued that such ‘community economies’ practices, going on under our noses, deserve far more attention from economic geographers than they receive, as a locus for potential alternatives to globalizing capitalism.

While such practices may have seemed obvious to development geographers, working in societies where the informal economy and subsistence practices predominate, their presence in the global North proved something of a revelation.
The result is a branch of Anglophone economic geography now called the ‘diverse economies’ school, focusing on variegated non-economic practices, and ways that they are tangential to or simply separated from capitalism. These include: local economic and trading systems, barter systems, labor sharing, workers’ democracies, etc. Beyond the study of such practices, economic geographers have worked with communities. They have brought both an awareness about such practices, and fostered and expanded them using novel means bound to academic research. This work has been criticized for focusing on seemingly insignificant and marginal practices, and for presuming that they can exist outside capitalism (they are more-than-capitalist rather than non-capitalist). Nevertheless, these ideas have brought attention to the different forms both that the economy can take, and through which neoliberalism, and capitalism more generally, can be contested (Gibson-Graham, Cameron and Healy, 2013).

Conclusion
The ongoing vitality and diversity of Anglophone economic geography that circulates around geographical political economy promises a bright future. But its practitioners must be willing to engage constructively with one another and with scholars in cognate disciplines examining related questions. Geographers examine how economic processes shape, and are shaped by, geographical space (place, scale, connectivity, mobility); they examine how economic processes co-evolve with political, cultural and biophysical processes; they study how subject formation and identity at one end, and global political economic structures at the other, are interrelated; they take an interest in non-capitalist economic processes, critical of the proposition that regulated capitalist markets optimize societal wellbeing and ecological sustainability. Real world oriented, economic geographers study some of the major challenges facing contemporary human society and its relation to political economic processes: Global production networks, the politics and culture of consumption, work and labor, the role of state regulation and governance institutions, nature-economy relations, financialization, globalization and development, and diverse economic systems.

Nevertheless, looking forward, it is possible to identify priority areas for new research. Economic geographers have paid too little attention to the geography of logistics—the transportation and communications networks – which has co-evolved with globalizing capitalism, shaping its emergent geography at all scales. Notwithstanding the scholarship of material worlds, economic geographers have paid far too little attention to arguably the most urgent emergent aspect of the geographical economy: global environmental change, carbon economies and ecosystem services. The wealth of economic geographical research about firms, consumers and territories has yet to be complemented by systematic empirical analysis at the global scale (taking advantage of large historical databases).

It is our hope that these, and other, issues will be taken up in the spirit of engaged pluralism across different approaches within economic geography, and across different national communities of economic geographers. It is also our hope that,
through such engagement, economic geographers will continue to interrogate the
moral foundations and implications of their analysis for the more-than-human
world.

References
Baldwin R. (2006) *Globalisation: The great unbundling(s)*. Prime Minister’s Office:
Economic Council of Finland. Helsinki.
pluralism in Anglophone economic geography. *Progress in Human Geography*
Canadian Geographer* 7: 151-162.
Christophers B. (2013) *Banking across boundaries: placing finance in capitalism,*
New York City: John Wiley.
Clark GL, Dixon AD and Monk AHB. (2013) *Sovereign Wealth Funds: Legitimacy,
University Press.
global production networks perspective. *Transactions of the Institute of
British Geographers* NS29: 468-484.
Space* 8: 297-322.
Oxford: Blackwell.


