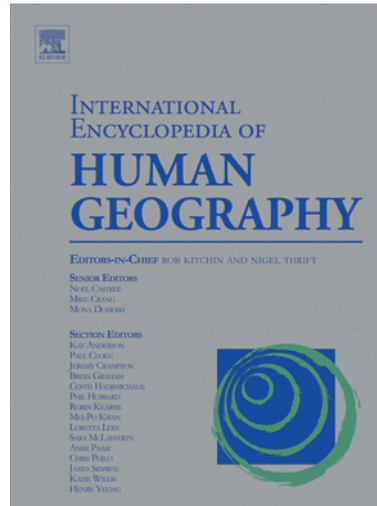


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Economic Geography

T. J. Barnes, University of British Columbia, Vancouver, BC, Canada

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Glossary

Commodity Chain Analysis A technique developed during the 1970s concerned with representing the entire trajectory of the life of a commodity and its associated geographies: from conception and design to consumption.

De-Industrialization A process beginning in many Western high-income, industrialized nations during the 1970s and involving the large-scale decline of manufacturing employment especially in old industrial regions as manufacturing firms moved offshore, went bankrupt, or were radically restructured.

Fordism/Post-Fordism Fordism was a particular form of industrial production originating in the early twentieth century, and characterized by the mass production of a standardized good, assembly-line techniques, use of dedicated machines, a large, de-skilled, and often unionized (male) labor force, and a centralized corporate industrial structure. Post-Fordism arose during the late 1970s as a replacement for Fordism, and characterized by batch production of specialized commodities, the use of flexible (computer driven) machines, flexible skilled labor, and a decentralized industrial organization.

Globalization The increasingly interconnected relation among places in the world brought about by cheapening transportation and improved communications, and reflected in increasing international investment, trade, and the movement of people and ideas.

Industrial District First discussed by the English economist Alfred Marshall in the early twentieth century, an industrial district is a tight-knit interlinkage of many highly specialized firms concerned with collectively producing a single product type such as clothing or furniture.

Location Theory A body of interlinked analysis that began in the early nineteenth century with writings by Johannes von Thünen and continues to the present, and concerned with the logically and empirically rigorous explanation of the spatial arrangements of economic phenomena and related flow patterns.

Multinational Corporation A large firm that owns facilities or carries out operations in at least two different countries.

Neoliberalism An idea developed during the inter-war period of the twentieth century averring that the most efficient form for organizing economic activities is the

free market, and if markets do not exist they require creation even under the auspices of the state.

Regional Science A hybrid discipline originating in 1954 as a result of the energetic efforts of its founder Walter Isard, and concerned with twinning formal economic theory and quantitative methods to analyze spatial issues in economics, geography, and planning.

Spatial Divisions of Labor An idea popularized by Doreen Massey in a book of the same name and concerned with the pattern and consequence of local geographical economic specialization.

Introduction

Economic geography is a subfield of human geography concerned with describing and explaining the varied places and spaces in which economic activities are carried out and circulate. The discipline was institutionalized in the late nineteenth century in both Western Europe and the US, and remains one of the core subfields within Anglo-American geography. There have been repeated attempts to forge links between economic geography and its seeming intellectual soul mate, economics, but none have held. Economic geography from the beginning was more empirically grounded, concerned with context, and conceptually open-minded, and at the same time less abstract and formally theoretical than economics. There were moments when the two disciplines became close, but mostly they held themselves apart at a distance (as they generally do now). Further, unlike economists, economic geographers never settled on a single methodology, set of techniques, list of venerated luminaries, disciplinary problematic, or definitive definition.

Change has been incessant, the field continually re-inventing itself. It makes for an exciting, dynamic, open subject, one that never looks back, and a frequent conduit for new ideas into the rest of human geography, but there is a nagging sense that before old promises are realized new ones are made. Economic geography sometimes seems like Penelope's shroud: spun during the day, and unraveled the same night.

Perhaps one of the reasons that economic geography has been subject to so much change is because of how closely the discipline is tethered to its empirical object of inquiry, and which over the subject's lifetime has undergone profound alteration, with concomitant shifts

in the discipline's analysis of space, place, and geographical circulation. This is perhaps no better illustrated than at present. The end of the late twentieth and early twenty-first centuries are witness to periods of rapid economic geographical change, and propelled by a combination of technological revolutions around transportation and communications, and a social revolution around the introduction of the market in places that had either not been exposed to it (such as in communist China and the Soviet Union), or experienced constrained versions of it (such as in India). The consequence has been speedy, and in some cases monumental transformation on the ground. Contemporary economic geographers are trying to represent and analyze the emerging geographical constellation, emphasizing the centrality of flows and spatial interconnection, as well as the continuing importance of place. As they do so, the discipline itself changes. Economic geography lives in exciting times, but it sometimes leaves the discipline breathless.

This article is divided into two main sections. The first presents the main phases of the discipline's historical development from the late nineteenth century when it was institutionalized within universities in Western Europe and North America to its present incarnation. Five main periods and associated approaches are recognized: commercial geography (late nineteenth/early twentieth century); regional economic geography (the inter-war period); spatial science (from the mid-1950s and continuing in attenuated form to the present); Marxism and radical economic geography (from the mid-1970s to the present); and the 'cultural turn' (from the mid-1990s to the present). The second section outlines the contemporary character of the discipline by reviewing some of the primary clusters of research and writing within the field. Eight areas are discussed: theory and methods; globalization and neoliberalism; firms, industry, agglomerations, and networks; innovation and high tech; labor, bodies, and work; retailing and consumption; producer services and finance; and nature and resources.

History and Approaches to Economic Geography

Commercial Geography

Existing in embryonic form as commercial geography, economic geography was formally defined as a discipline in 1882 by the German geographer Götz. Commercial geography had been less an academic discipline than a branch of the European imperial project. Commercial geography's charge was providing practical geographical knowledge to the military, the business class, and the colonial bureaucracy, including information about where places were located, the kinds of goods they produced,

and the networks of available transportation. In contrast, under Götz's conception the purpose of economic geography was to fulfil a scientific and not a geopolitical end. It was to address the causes and reasons of economic geographical specialization, and determining the production of commodities and the movement of goods.

By the 1890s, economic geography courses were appearing in US university calendars. In 1903, Lionel W Lyde was appointed professor of Economic Geography at University College London, and in 1908, the University of Edinburgh created a lectureship for the economic geographer, George Chisholm, author of the earliest English language economic geography text, *Handbook of Commercial Geography*. Economic geography was up and running.

Chisholm's case is an interesting one. Born in Scotland in 1850, he later worked in London making a living from writing and editing geographical textbooks, gazetteers, and atlases (he previously worked for the Edinburgh publisher W. G. Blaikie & Son on such projects as the *Imperial Dictionary*). From 1896, Chisholm supplemented his income by lecturing on commercial geography at the University of London's Birkbeck College using the *Handbook* as his textbook. In 1908, he came home, appointed as lecturer at the newly formed Department of Geography, University of Edinburgh.

Chisholm's *Handbook* was written mainly in the commercial geography style, jammed with maps, tables, and economic geographical facts. It was a book designed to give especially the English business class a practical education, to make them more competitive against Western European rivals, particularly the Germans. But Chisholm also wanted to practice an economic as opposed to a commercial geography by scientifically explaining rather than merely describing. He did so by positing 'nature' as the central causative agent, arguing that the environment made each place uniquely fitted to undertaking a particular type of economic activity.

This position became more extreme, one with clear racist overtones, in the hands of a number of environmental determinists later working in economic geography at the beginning of the twentieth century. The Harvard geographer Ellsworth Huntington was the most notorious arguing that the level of economic development in a region was a consequence of the climatic regime that held. Climate, he contended, determined physical and mental efficiency, which in turn established the level of economic development. In Huntington's famous phrase, climate was the "mainspring of civilization." Temperate climates found in Western and Northern Europe and parts of North America were conducive to high efficiency. While tropical and subtropical climates found in Africa, large parts of Asia, and Central and Southern America produced low energy, hampering economic development, ensuring such places remained 'backward'.

Regional Economic Geography

The intellectual backlash against environmental determinism, as well as a changed global economic context in which imperialism and empire were no longer drivers, generated a different economic geography during the inter-war period, a regional one. The focus was not as it was in Chisholm's work on global commodity production, trade, and transportation, but rather on local economic interconnections that produced unique and singular regions.

As a form of enquiry the regional approach was readily seen in the various economic geographical textbooks published in North America from the mid-1920s onward. It involved characterizing regions by a common typological scheme, one, for example, broken down by leading industries, natural resources, modes of transportation, and so on. Once all regions were so described, their differences, and thus their individual uniqueness, were immediately evident by reading across the typological grid.

For example, Vernor Finch's and Ray Whitbeck's *Economic Geography* is typical. The diverse body of detailed economic geographical facts they provide are ordered under an identical fourfold typology for each of the regions investigated: agriculture; minerals; manufacture; and commercial trade, transportation, and communications. Or, another example is Clarence Jones' textbook *Economic Geography* that deploys an eightfold typology. While more finely variegated than Whitbeck's and Finch's, Jones' typology performs the same role: classifying observations that are mapped, tabulated, photographed, and listed under the appropriate classificatory heading. By typologically comparing the facts of different regions, economic geographical differences are immediately seen, and regional uniqueness shines by its own light.

It was not until just before World War II that an intellectual justification was provided from the American geographer Richard Hartshorne. Arguing against any separation between economic and regional geography, Hartshorne asserted that unique regions were the natural units in which the world expressed itself. That uniqueness stymied any hope of producing scientific explanation and generalization in economic geography, however. Science was successful, he thought, because it was able to identify common properties in the phenomena it studied, enabling it to generalize, and at the limit to posit explanatory laws. Economic geographical regions, however, were not the same kind of natural phenomena because each region was a collection of exceptional features, describable only in its own terms. No generalization was possible. The consequence was, as Hartshorne wrote in *The Nature of Geography* that set out his larger thesis: "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...." (p. 44).

Spatial Science

Hartshorne's book was published at exactly the wrong time. The regional descriptivism it proposed for geography, and economic geography in particular, quickly became out of step with a set of larger changes that pointed in exactly the opposite direction. In particular, from the beginning of World War II, a number of social sciences, and even some humanities, were transformed from a descriptive approach of the kind championed by Hartshorne to one that instead emphasized scientific generalization and explanation. In part because of Hartshorne's influence, economic geography initially resisted that impulse, but by the mid-1950s it joined in too. The resulting shift to spatial science, and represented by the 'quantitative revolution', profoundly altered economic geography, sweeping away talk of regional uniqueness in favor of the systematic application of scientific forms of general theorizing and rigorous statistical techniques of description and analysis.

Spatial science within economic geography was defined by five main features. First, there was the use of formal theory and mathematical models, many of which were begged, borrowed, and stolen from neoclassical economics (in particular, from rational choice theory, general and partial equilibrium, and German location theory), and, a more unlikely source, physics (spatial interaction theory and later entropy maximization models). Second, there was the use of an increasingly sophisticated arsenal of quantitative methods. Initially used were off-the-peg inferential statistical techniques, but later specialized statistical measures and methods were designed in-house to meet the peculiar features of economic geographical data (e.g., techniques of spatial autocorrelation). Third, there was the use of computers. At first they were very crude and limited, but within a decade they performed hitherto unimaginable calculations, for example, the inversion of large urban and regional economic input-output matrices that would otherwise have taken a lifetime to calculate by hand. Fourth, there was a philosophical justification made for spatial science based on positivism, the idea that only scientific knowledge is authentic knowledge. Fred K. Schaefer provided an early influential justification based on logical positivism, but it was broadened and deepened by David Harvey in his *Explanation in geography*. Finally, there was a focus on abstract spatialities and geometrically defined location. Regions remained part of the economic geographical lexicon, but conceived utterly differently than under the previous regional geographical regime. Regions were now explanatory, theoretical, and instrumental, a spatial unit to achieve functional objectives (and

brilliantly realized in the parallel movement of regional science). The consequence was that people like Finch, Whitbeck, and Fielden Jones (and their respective books) were no longer recognizable as part of the discipline. They were not in the same field, not on the same planet.

Spatial science like most intellectual revolutions began at only a few sites, later diffusing more widely. In Europe it was associated with Cambridge University, Bristol University, and Lund University, and within North America, the Universities of Iowa, Washington, Chicago, and Toronto, as well as Ohio State. In each of these places, groups of young, bright, ambitious, competitive, and almost exclusively male students gathered to participate in the revolution.

The University of Washington at Seattle provides a good case study. The graduate students who gathered there from 1955, and given the moniker the 'space cadets', included Brian Berry who was to make a series of seminal contributions to spatial science. Berry and the others were drawn by two faculty members interested in establishing a more theoretical and quantitative economic geography: Edward Ullman and William Garrison. Garrison was especially important acting as a mentor, protector, critic, muse, and paymaster. In 1955, Garrison offered the first advanced course in statistics ever in a US geography department, and the same year he gave a course on spatial economic theory using Walter Isard's regional science textbook, *Location and space economy* (1955). Such training held the 'cadets' in good stead for their next project, and funded through Garrison, which was to evaluate a proposal for federal highway development around Seattle. It was the perfect assignment, allowing the students to hone their analytical and theoretical skills, to bootstrap-learn from other disciplines such as engineering and economics which were also recruited, and to display their newfound knowledge of abstract theorizing, quantitative methods, and computer programming. The project produced a revolutionary book, *Studies of Highway Development and Geographic Change*. Packed with calculations, data matrices, statistical techniques, cost curves, and demand schedules, and conventional maps overlaid with numbers, arrows, starburst lines, and balancing equations, it was a volume like none other previously published in the name of economic geography. But it became the norm as spatial science took over the discipline in the 1960s.

Marxism, Political Economy, and Radical Economic Geography

The first signs of trouble for spatial science appeared in the early 1970s when David Harvey 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 abstract, closed, 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 1970s that was increasingly politicized and drawn to issues of social relevance; and not true to its own scientific logic as assorted logical contradictions, inconsistencies, and aporias revealed.

An alternative was political economy, colored especially by Marxism. Certainly, this was Harvey's choice after his spatial science renunciation. Subsequently, he provided a set of what have proved to be valuable and enduring concepts, for example, 'space-time compression', drawn from Marx for understanding capitalism's geography of accumulation (best found in Harvey's magisterial *The Limits to Capital*).

In Britain, political economy surfaced in the late 1970s, emerging within industrial geography. Because of de-industrialization Britain was hemorrhaging manufacturing jobs (and occurring also in other Western countries). Political economy with its focus on economic crisis and instability offered an ideal explanatory frame. Moreover, it was usefully supplemented by a methodological approach, critical realism, developed also in the late 1970s by the economic geographer Andrew Sayer that linked political economy with specific on-the-ground strategies for empirical research and explanation. To explain economic geographical events, argued Sayer, required an intensive research strategy to separate out necessary structures that bore on their occurrence from merely contingent ones that happened to be present. Doreen Massey and Richard Meegan relied explicitly on political economy and critical realism in their important dissection of the *Anatomy of Job Loss*. And 2 years later, Massey brought everything together – political economy, critical realism, and the larger context of de-industrialization and industrial restructuring – in her watershed book, *Spatial Divisions of Labour*. Of the volume's many accomplishments, reestablishing place and region on the economic geographical agenda was central. This wasn't back to Hartshorne, however. Place and region were to be understood theoretically, as an evolving recursive relation between rounds of capitalist accumulation and the socially constructed character of geography. Massey's work sparked the UK locality project, a large multisite, multiyear venture charged with explaining the changing fortunes of British regions.

While British economic geographers during the 1980s slogged in the grim trenches of industrial decline, a number of American economic geographers instead idled in the brilliance of industrial regeneration and growth. This was the flip side of capitalism: its innovativeness, creativity, and powers of recuperation. Drawing on a combination of political economy and institutional economics, the 'California school', including AnnaLee

Saxenian Allen Scott, Edward Soja, Michael Storper, and Richard Walker, carried out during the 1980s a series of impressive theoretical and empirical studies based mainly in the Los Angeles and San Francisco Bay regions on high tech, the motion picture industry, and garment manufacture. They showed industrial capitalism was capable of rewriting its economic geography, producing new industrial spaces, and requiring a new theoretical lexicon of representation and explanation.

While initially these British and American versions of political economy were like ships passing in the night, they came together in the 1990s through regulation theory that later provided the template for economic geographical work during the rest of that decade. Initially developed by the French economists Allain Lipietz and Robert Boyer, regulation theory was an attempt to explain why capitalism survived in spite of Marx's best prediction of its demise. The regulationists argued that capitalism endured because historically an appropriate conjunction formed between the regime of accumulation, defined as the macroeconomic relationship between consumption and investment, and the mode of regulation, defined as a set of institutional rules, norms, and laws. For example, the post-war Fordist regime of accumulation defined by mass production and mass consumption was sustained because of the attendant mode of regulation, the Keynesian welfare state, which promoted private investment and consumer spending necessary for its maintenance. Moreover, regulationism explained how British and American economic geographical experiences were so different. While British economic geographers were documenting the disintegration of an older Fordist regime and mode, the California school was looking at the formation of a brand new one labeled variously post- or neo-Fordism, or flexible production. They were different sides of the same capitalist Janus face.

The 'Cultural Turn'

By the 1990s another approach was emerging, the 'cultural turn'. In part it reflected a larger move across English language social sciences and humanities in taking culture more seriously (and linked to the rise of cultural studies and interest in post-structural theory). But it also tapped existing disciplinary tendencies and inclinations especially since Massey's *Spatial Divisions* that invoked a set of cultural understandings for explaining economic geographical events, including gender, patriarchy, religion, and cultural politics. It took almost a decade more, but by the mid-1990s the 'cultural turn' was turning.

The agenda continues to be developed, but two main effects are apparent: rethinking the discipline's object of inquiry, theory, and methods, and using case studies of particular substantive topics to work through a cultural approach. Proponents aver that the emphasis on culture

is not mere intellectual fashion, but reflects fundamental changes in capitalism as it moves to a 'soft', 'reflexive', or 'symbolic' form where the line between culture and economy is not just hard to see but is no longer there.

The traditional conception of economic geography presumed: (1) a clear object of study, the economy; (2) rationalist forms of theorizing; and (3) empiricist methods. The 'cultural turn' took aim at them all, finding each wanting.

- (1) J. K. Gibson-Graham in *The End of Capitalism (As We Knew It)* attacked the idea of a monolithic, purified economy. That idea possessed traction, Gibson-Graham argued, only because of the grip of Western dualist metaphysical thinking. Once shed, however, the economy will be seen as it is: hybridized, heterogeneous, multiple, nonmarket, bleeding into other spheres such as the cultural, the social, and even the environmental. Consequently, it is not sufficient to do only economic geography, but one must engage other kinds of geography too.
- (2) Rationalist, top-down theorizing, the second characteristic, is discredited by post-structuralism, and implying one must do theory in different ways as well. Following post-structuralism, new theorizing should be reflexive, open-ended, and catholic in its sources. Theory should be conceived as a vocabulary to achieve new ends, rather than mirroring the object of investigation. As a result, what counts as theory dramatically expands. It might include established frameworks such as globalization modeled as a process of spatial diffusion, but it could also include globalization modeled as rape (as in Gibson-Graham's *The End of Capitalism (As We Knew It)*).
- (3) Because of the increasing influence of feminist scholarship associated with the 'cultural turn', there is also a need for a dramatic revamping of methods. The traditional economic geography empiricist mindset of collecting numbers and the *ad verbatim* recording of 'expert interviews' no longer cut it. They should be replaced by methodological self-consciousness and promiscuity that dramatically widens the definition of appropriate research data and strategies for collection.

The 'cultural turn' was not only conceptual, but a reworking of disciplinary content. In particular, the mid-1990s saw publication of a set of economic geographical monographs demonstrating the importance of taking culture seriously for particular substantive topics. Susan Hansen and Geraldine Pratt in their study of female labor markets in Worcester, MA, *Space, Place and Gender*, showed how gender mattered fundamentally in the supply and demand for jobs. Linda McDowell in *Capital Culture* focused on gender and sexuality in her case study of the practices of merchant bankers in the City of

London. Erica Schoenberger's concern in *The Cultural Crisis of the Firm* was the culture of senior managers in US multinational corporations who sometimes produced stunningly bad decisions, taking companies to the precipice of bankruptcy, and sometimes over it. And Andrew Leyshon and Nigel Thrift in *Space/Money* examined the culture of money within international financial centers such as London, including not only its making but its spending. The larger point was that economic geography required broadening: that economic geography was always more than economic geography. Economic geography should recognize the multiplicities of connection, its joints, hinges, and folds with the noneconomic, its "trailing and," as William James once put it. This is what the 'cultural turn' was a turn toward.

Summary

Perhaps the most striking feature of the history of economic geography is the lack of overall disciplinary progress. Later approaches rarely take up and refine ideas contained in earlier ones. Rather, much more likely is caustic criticism and rejection. Furthermore, the history is not the classic Kuhnian one of paradigm shift either, with new paradigms developed to explain past anomalies. This is because there is no agreement on what constitutes anomalies, or even whether they exist. Instead of new paradigms emerging and eradicating old ones as envisaged by Kuhn, economic geography is more like a palimpsest, with past versions of the discipline still partially visible, not completely erased, and continuing to contribute to the discipline's present form. This makes for a messy discipline, but clear from its recent history, a lively one, as different approaches continue to jostle and rub against one another. Since the 1980s the discipline has been marked by vibrancy, experimentation, fecundity, and rude health. In particular, its vibrancy is especially evident in eight areas of conceptual discussion and substantive work: theory and methods; globalization and neoliberalism; firms, industry, agglomerations, and networks; innovation and high tech; labor, bodies, and work; retailing and consumption; producer services and finance; and nature and resources. These eight areas are not a definitive list, but exemplars showing contemporary economic geography's range, vitality, creativity, and relevance.

Contemporary Economic Geography

Method and Theory

Perhaps no discussions within economic geography have been more animated than those over its theories and methods. The theoretical controversies have been especially potent, but even issues of methodology, which in the past were subject to a "don't ask, don't tell policy," triggered sometimes heated dispute.

Economic geography continues to be an empiricist discipline in the sense that it is concerned with representing an empirical object. But what counts as empirical information, and the methods used to collect, assemble, and interpret data, have significantly shifted. In the past the central method turned on the assiduous collection of numbers and statistics, and taken to its extreme under spatial science and the quantitative revolution. But since the 1980s a 'qualitative revolution' has occurred, that is, a move to methods concerned with gathering and analyzing non-numerical data. It began with 'intensive case-study research' pioneered by proponents of critical realism in the early 1980s. But since then qualitative methods have multiplied and include now in-depth interviews, focus groups, oral histories, ethnographies, participant observation, discourse and textual analysis, actor network theory, action research, and more beside. In this new methodological environment, nothing is proscribed, everything is permitted. The upside is diversity and rapid change: most of the methodological techniques listed would have been viewed as beyond the pale, or at best, suspiciously *avant garde* when first introduced. The downside is the derogation of quantitative analysis and loss of associated skills. Because of lack of training, economic geographers are now increasingly unable to undertake formal statistical and numerical analysis. As a result, critics complain that the turn to qualitative methods in economic geography has induced slapdash and superficial research. The response is that one needs methods appropriate to the necessary data, and if the necessary data is now qualitative, and reflecting what is important for understanding the object of inquiry, these methods must be employed.

Along with permissive methodology has gone permissive theory. As in the case of methods, now almost anything goes. Economic geography is polycentric, consisting of a set of dispersed theoretical communities. At least five are recognizable: an older mathematical modeling tradition drawn from spatial science, which is sometimes refurbished for the new economic times and spaces, but often is not; a variety of political economic theorizing, loosely grouped around writings of Marx, and frequently focused on theorizing the state or its absence; various stripes of feminist theory that sometimes intersect with political economy, but more likely linked with post-structuralism, and concerned with bodies and subjectivities of men and women at work; a range of institutional approaches that draw upon theories developed especially in economic anthropology and sociology (Karl Polanyi's idea of 'embeddedness' and Mark Granovetter's notion of 'social network' have been especially influential); and selective theories drawn from science studies (particularly writings of Bruno Latour and Donna Haraway) and used to understand the brute materialities of economic geographical activities from CAD-CAM

technology to the lurching movement of primary resources along the commodity chain.

As with the new methodological practices, loose uses of theory ('reading around') has been liberating. There is no single authority to kowtow. One simply draws upon the theoretical tradition most appropriate to the task at hand. Critics complain that the result is anarchy, eclecticism in which nothing fits, producing flimsy, sloppy, and sometimes incomprehensible works. The overall result 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.

Globalization and Neoliberalism

Both permissive theory and methods are used to understand an issue increasingly preoccupying economic geography, globalization, and forming a body of research as energetic as its focus of study. Increasingly linked with the study of globalization is work on neoliberalism, the larger political ideology and project averring the importance of free markets. Globalization and neoliberalism are not necessarily connected, but over the last decade the two have often been twinned.

In many ways, globalization was made for economic geographical examination. And as already discussed, in the beginning it was economic geography. He didn't use the term, but George Chisholm was a student of globalization. That focus was lost, however, as economic geography later drew inward and investigated only Western industrial economies. The rest of the world was parceled up and given over either to study by regional specialties, for example, Asian or Latin American geography, or to the new subdiscipline of development geography. Processes beginning from the 1970s, however, such as the emergence of a new international division of labor, the increasing number, size, and dominance of multinational corporations, the growth of international financial capital, and new forms of communication and long-distance transportation, showed economic geographers that they needed to deal with the world as a whole. Further, it became clear that separating economic geographical study of the West from the rest of the world was not just unnecessary but obstructive. Under rapid globalization, the linkages, the 'networks', that connected places across the world were critical. Dividing the globe into separate spheres of study was precisely the wrong strategy, obscuring what was most important. Peter Dicken in his book *Global Shift* was the first contemporary economic geographer to make this point through his study of international investment, and particularly carried out by large multinational corporations. But Dicken made another point just as important. That globalization was no seamless process, eradicating geographical

difference. Globalization represented not the "the end of geography," as economists sometimes said, but the latest form of its continuing importance. Geographical differentiation was crucial, the very precondition for globalization's possibility and achievement.

Subsequent work by economic geographers over the last decade demonstrates unassailably that geography matters fundamentally in the processes of globalization. Globalization is not a thin film spreading equally over the globe, but is uneven; it clumps and is spiky, occurring in very particular places. Geographical differentiation makes a difference. It determines where in the globe multinational corporations invest, where different links of the global commodity chains come down to Earth, where international financial transactions occur, and how firms are managed and the spatial interactions they forge. Globalization is not smooth, homogenous, flattening geographical difference as it goes, but utterly dependent upon spatial variegation, disjuncture, and distinction.

Hand in hand with this discussion of globalization has been a complementary critical examination of neoliberalism. It is argued that globalization requires an appropriate regulatory framework. The economy, even the global economy, cannot exist shorn of an apposite governance structure, and which from the late twentieth century has taken the form of neoliberalism, and facilitated by global institutions such as the International Monetary Fund (IMF) and World Bank. By neoliberalism is meant the political ideological project of promoting free markets as the optimal means for undertaking economic activity. While originating as an idea in the 1920s, it came to the fore during the 1980s in the politics and domestic policies of the Margaret Thatcher government in the UK, and the Ronald Reagan administration in the US. Later it was 'exported' to developing countries through the Washington Consensus. Its injunction is that places in the globe where free markets either do not exist, or are insufficiently free, must be transformed to meet neoliberal strictures, subject to policies such as trade and financial market liberalization, deregulation, privatization, and the securing of private property rights.

Whether emerging internally or externally foisted, neoliberalism has increasingly taken over the world, and found not only in high-income countries like the UK and the US, but also in the former Soviet Union, China, India, much of SE Asia, and in large parts of Central and Latin America as well as sub-Saharan Africa (as a result of the World Bank's neoliberal policies of structural adjustment). Through neoliberalism's aggressive stance in favor of open trade, investment, and financial capital movement, the wheels of globalization are greased, making it happen more smoothly, quickly, and easily. This is clear from a growing and diverse set of economic geographical studies examining such topics as international finance, the internationalization of education, the international

migration of skilled labor, and international trade in primary resources such as for diamonds, lumber, and water.

Firms, Industry, Agglomerations, and Networks

Studying the economic geography of firms has always been a bulwark of the discipline. In 1910, even Chisholm turned away (briefly) from his global maps of primary commodities to use the work of the German location theorist Alfred Weber to examine the locational factors bearing on 'seats of industry'. Subsequently, each new generation of economic geographers has provided its own interpretation of the firm, and the factors bearing on its geographical behavior. In the 1930s, Michael Wise focused on small firms, and their propensity to cluster geographically in what the economist Alfred Marshall earlier called "industrial districts." The 1960s saw the emergence of 'the geography of enterprise', later morphing into 'corporate geography', and concerned with multisite locational decisions made by very large firms. The 1980s and 1990s saw a return in part to the concerns of Wise, an interest in the tendency of firms to cluster or embed themselves geographically in agglomerations, albeit agglomerations that were themselves interlinked and sometimes half a world apart. And most recently, there is an interest in how firms of different sizes and types cohere together in the form of a network, held in place as much by social as economic relations, and sometimes extending over the entire face of the globe.

The focus on firms in economic geography reflects a deep-seated belief that they are principal agents shaping the economic geographical landscape. Understand them, and you understand economic geography. For this reason, industrial geography, the subdiscipline of economic geography principally concerned with firms, and manufacturing firms in particular, has always been important. Given mounting globalization, and industrial restructuring turning on the shift from Fordism to post-Fordism, the subdiscipline became central during the 1980s, and defined by several elements.

At first, especially British researchers concentrated on understanding the process of industrial decline particularly in old industrial regions as firms closed down, or moved offshore, or restructured their production operations, with associated large losses of manufacturing employment (de-industrialization). But even in the UK there was recognition that it wasn't only a story of job loss. A new industrial landscape was emerging, triggered by innovative firms. Massey, for example, documented a new spatial division of labor in South Wales created by American and Japanese multinational electronic firms exploiting a spatially trapped, greenfield female labor force.

In the US, Allen Scott focused less on decline than the potential for growth, constructing a new theory of the

dynamic firm based on transaction costs, external economies, and spatial linkages, and leading him to rediscover Michael Wise's earlier work, and before him, Alfred Marshall's idea of an "industrial district." Defined as a tight-knit agglomeration of small firms with a high degree of specialization and production interconnection, the industrial district became a condensation point for an enormous amount of economic geographical research during the 1980s and 1990s. Interest was given further momentum by Michael Piore and Charles Sabel's influential book, *The Second Industrial Divide*. Piore and Sabel were political scientists but their book was important for economic geography because they made industrial districts central to their thesis of an abrupt shift from mass production (Fordism) to flexible production (post-Fordism). Later work within the industrial districts genre emphasized the variety of forms taken by industrial districts (Anne Markusen rechristened them, "sticky places" recognizing four types); global interlinkage (Ash Amin and Nigel Thrift's "Neo-Marshallian nodes in global networks"); and the importance of an appropriate institutional framework, in particular, the presence of thick social relations among firms and the larger communities in which they were set (Karl Polanyi's idea of "embeddedness").

Paralleling the work on industrial districts, and drawing partly on Polanyi but also on the economic sociologist Mark Granovetter, was allied research on firms and social networks. Here the relation among firms is determined by social relationships, that is, by the social network among key decision makers who head different firms. Social networks are so important because they are the limits of the decision maker's social world, and thus the limits of who can be relied upon and trusted. Moreover, they are not necessarily confined locally, as in industrial districts, but can stretch across the globe. Their form is topological, independent of proximity, given only by the location of other members of the social network. One particular social network investigated by economic geographers was the Overseas Chinese (particularly by Henry Yeung).

Innovation and High Tech

Ideas of both social embeddedness and networks have been at the forefront of an outpouring of work, again much of it set within industrial geography, on innovation and high-tech development. Some of that work was completed by the California school – Anna Lee Saxenian wrote the classic account of high-tech development in Silicon Valley and Boston's Route 128 – but a lot is undertaken also by Northern European economic geographers concerned with state-led regional development.

The interest in high tech initially focused on the computer (both hardware and software development), but

it expanded to include biotech, and more generally all forms of digitally based design industries. High tech emerged as a research topic partly because of its increasing importance to Western economies (and the seeming antidote to de-industrialization); partly because its locational logic was quite different from traditional manufacturing industry – it was frequently suburban, and drawn by entrepreneurs and skilled labor found around university hubs; and partly because it offered the potential to try out new methodological and theoretical frameworks.

Saxenian's study, for example, rested on the novel (novel, that is, for economic geography) method of long-term ethnographic research. Given her method, it was perhaps not surprising that she also stressed the importance of culture. High tech, Saxenian argued, is a cultural practice as well as an economic one, with culture seeping into the minutiae of everyday business, regulatory, and work routines. Michael Storper subsequently coined the term "untraded interdependencies" in his work on high tech to understand better the role that culture played. He used "interdependence" to stress the collective, communal nature of work in the industry, and "untraded" to signal that high tech was different from other economic sectors because it involved many non-market-based transactions.

Given the success stories of high tech in places like Silicon Valley and on Route 128, an obvious question was whether they could be replicated elsewhere. This lay behind much economic geographical research especially during the 1990s on 'creative' or 'innovation milieus', or 'learning regions' and 'networks'. The purpose was to find the elements that made successful high-tech complexes – for example, particular governance structures, or relations among firms, or involvement by workers, or the presence of educational institutes – and then reproduce them in new regional contexts. It is a project that continues in different forms, most recently in Richard Florida's research on creative cities. Whether one believes success is repeatable depends upon the extent to which one thinks that the economic potential of a given place rests upon either elements that are unique and inseparable from the place itself, or are general and detachable. Certainly many communities that literally bought advice about how to become the next Silicon Valley believed the latter, but the fact that there still remains only one Silicon Valley may suggest the truth of the former.

Labor, Bodies, and Work

Given the emphasis on production by economic geographers it is odd that labor and work until recently received so little attention. Perhaps it was because labor as a factor of production was conceived as sedentary, stuck in

place, while capital was represented (more interestingly) as mobile and active. As David Harvey once put it, "unlike capital, labor has to go home every night." But the attitude to labor and work has changed and it has become a fertile topic of research.

In part, the new interest stems from globalization which has spurred research at both ends of the labor market. On the one hand, there are studies of the international movement of various professionals such as accountants, bankers, and high-end managers, as well as entrepreneurs such as among the Overseas Chinese and Indian high-tech engineers. On the other hand, there is also work examining patterns of immigrant workforce segmentation in low-end jobs by gender and ethnic origin, as well as case studies of particular occupations, such as janitors and back-of-the-house hotel workers.

Additionally, there has been a changed conception of labor, one concerned to recognize its greater agency, its ability to make a difference to economic geographical outcomes. In part this revamped view is associated with research on the geography of labor unions. Andrew Herod, whose work in this area has been important, makes a useful distinction between the geography of labor, the older view of labor as passive, and labor geography, the notion that labor possesses some autonomy. In this newer view, while workers still go home at night, at least during the day, as an organized collective, they possess sufficient force to shape the economic geographical conditions in which they find themselves.

An important strand of writing, deriving especially from post-structuralism, examines the performance of work, and the role various bodily social markings play. Doreen Massey's writing on *High-Tech Fantasies* was the first to recognize the gendered nature of high-tech work. While high-tech work was often couched as an ethereal, abstract form of rationality, Massey contended the corporeal reality told another story. Based on her study of Cambridge (UK) high-tech firm, Massey argued such rationality was achieved by workaholic young, white male bodies that were sustained at the worksite by female secretarial and administrative labor and at home by female partners undertaking domestic labor. McDowell's study of *Capital Culture* involved merchant bankers in the City of London. In her case, she was concerned with how the bodies of both men and women, including their markers of sexuality, were contorted in the performances of making large sums of money for their employers (and sometimes for themselves). And at the other end of the employment spectrum, Geraldine Pratt examined *Working Feminism* through the bodies of Filipina domestic workers in Vancouver. The larger point is that labor and work are not neutral, just another technical input into production, but are inscribed by the social, cultural, and geographical contexts in which work is practiced.

Retailing and Consumption

Retail geography first emerged in the 1960s with Brian Berry and the work of his students at the University of Chicago. Following spatial science, the presentation was formal: tangential budget lines and bid-rent curves, distance-minimizing constrained maximization equations, and quasi-hexagonal grids of inter- and intra-urban retail location. As spatial science languished, however, so did retail geography. But it has been recently recouped, and like the contemporary retailing experience itself, repackaged into more enticing forms.

While during the first part of the twentieth century there were retail giants like Sears Roebuck or Woolworth, some of which even internationalized, they did not come close to matching late twentieth-century trends of exponential growth in corporate retailing and retail globalization. Wal-Mart is the classic example. Founded in 1962, within 40 years it was the largest corporation by revenue on the planet, with a million employees, and located in 14 countries. Other retailers, for example, France's Carrefour and the Netherlands's Ahold, while not as large became even more internationalized. Wal-Mart also helped pioneer a different form of retailing, the big box store, transforming the economic geographical landscape of towns and cities first in the West but then everywhere. Big box stores frequently located in the suburbs rather than the city center (the presumed destination for shops in the old retail geography), and took the form of warehouses rather than traditional shops. The locational advantages were cheap land rent, space for on-site parking, and highway accessibility. This was not how old retailing was done, but it sparked interest by economic geographers because it fitted with other emerging disciplinary motifs such as corporatization and internationalization.

Another motif with which the new retailing fitted was the cultural turn's emphasis on meaning and identity. We shop till we drop not because it rationally yields the greatest amount of economic pleasure and satisfaction (the presumed motivation in the old retail geography), but because it enables us to express our identity: we are what we consume. We buy things in order to signify who we are. Studies by economic geographers of the new geography of consumption, from drinking Starbucks coffee to trawling the shelves of the local Safeway, show that going shopping is always more than buying goods. It is to participate in the larger cultural performance of affirming social identity.

Finally, linked to the recognition that goods are more than just economic commodities are economic geographical studies illustrating the moral geography of consumption, and represented by sites of sweated labor, or clear-cut old growth forests. Once we defetishize consumer goods by knowing the details of their social production, including their geography, such studies

suggest we no longer see goods as simply good, as only 'things' for consuming pleasure. One technique used by economic geographers to de-fetishize is commodity chain analysis. A commodity chain traces the entire trajectory of a good from its conception and design, through production, retailing, and final consumption. Such chains by definition are geographical, and they make it immediately apparent, as David Harvey once put it, "where our breakfast comes from." That is, they direct us instantly to other parts of the world where our goods are made, and germane here, they direct us to the moral conditions of production found at such sites whether that be in papaya plantations in Jamaica, cut flower nurseries in Kenya, or virgin cedar and spruce stands in British Columbia.

Producer Services and Finance

Although services as opposed to manufacturing have been the dominant form of employment in high-income Western countries, since around 1950 it has taken a long time for economic geography to catch up to this fact. Even during the 1980s, manufacturing was given priority as a study topic. Finally, this is beginning to change.

Initially much of the discussion focused on what are called producer services, that is, high-order service firms such as advertising, management consultancy, accountancy, and legal services, that serve the business community. Such firms tend to cluster geographically, often around client head offices, are strongly interconnected, rely on face-to-face contact, and depend upon the educational credentials, knowledge, and expertise of the employees hired. At the core of the producer service complex is the generation of specialized, high-value knowledge and information, and creating large financial rewards for those engaged in its production.

Subsequently, much of the attention has focused on professional workers undertaking producer services particularly in global cities. Through the information they provide, they are critical to facilitating the larger processes of internationalization gripping the economy for the last quarter century. Further, as a workforce they are globalized themselves with a high degree of international mobility. Most recently, it is their culture and the culture of the work they perform that has been scrutinized. For some economic geographers, professional workers are emblematic of wider changes occurring in the economy as the central product becomes knowledge. Producing and selling that product, however, requires very different skills than under the older conditions of work, skills that now emphasize cultural acumen and intelligence. Consequently how people work, the sites in which they work, the tools they need to work, and even the larger built environment in which they work have changed radically, and producer services are at the center of that maelstrom of change. Those who study them are at an ideal vantage

point to understand the emergence of the new economy and its economic geography.

The producer service receiving the greatest consideration in economic geography since the 1990s is the financial sector, along with its principal focus, money. Money is a commodity like no other; the commodity of all commodities. Given advances in telecommunications, as well as deregulation, money is the commodity with the least friction of distance. Calling it 'liquid' does not come close to representing its ability to move effortlessly around the world, and literally at the speed of light. It was the breakneck speed of money that led the economist Richard O'Brien to announce "the end of geography." Since then economic geographers have been keen to show how geography continues to matter. The existence of international financial centers like London, New York, and Tokyo are one form in which geography still matters. Money does not move on its own, but needs to be made to do so. And where this happens are in the international financial centers: they possess smart machines, smart buildings, and above all the smart people to propel money around the world. Geography matters also in that money does not flow everywhere but usually only along well-worn circuits. Accordingly some places are left out, subject to financial exclusion as, for example, in large tracts of sub-Saharan Africa, or in inner city US neighborhoods. And geography matters for the opposite reason that some places possess advantages for holding money such as the Bahamas, or the Canary Islands, or Zurich, with money sticking to such sites. The point is that even money, that most fleeting and slippery commodities, cannot escape geography.

Nature and Resources

Finally, nature and resources have become the focus of an animated disciplinary discussion since the late 1990s. For a long period the larger topic was an intellectual backwater, and almost lost altogether under spatial science. The simplifying assumptions required for spatial modeling meant that the uneven and lumpy nature of resources were treated as complicating factors, the analysis of which was promised but indefinitely postponed. In the mid-1970s, David Harvey drawing upon Marx made a powerful case for considering nature along with the economy. This was not nature 'red-in-claw' but social nature, 'the production of nature' as it was called. Production of nature did not mean creating something where nothing existed before. Rather, original nature, 'first nature' as it was referred, was transformed by industrial capitalism becoming 'second nature': farmed fields, urban climatological hot spots, polluted air, and a scarred manufacturing landscape.

The original Marxist approach emphasized the centrality of social relations in constituting the economic

resource, and in doing so joined discussions with political ecology. But alongside these radical studies of nature and resources also went more traditional accounts, for example, of specific sectors such as the wood products industry, or oil and gas, or agriculture. But even here there were attempts to offer relatively sophisticated theoretical renderings drawing upon, say, regulation theory or institutional economic theories such as found in the work of the Canadian economist Harold Innis. More recently, two themes have characterized the literature on nature and resources.

First, there is a discussion of the effects of neoliberal regimes of governance on resource ownership, production, and distribution. The argument is that resources are treated differently under the new regime such as, for example, with the privatization of water in many jurisdictions, or the deregulation of mining, or the trade liberalization around the export of primary commodities such as coffee or tropical fruits. Second, drawing upon especially work from science studies there is an attempt to rethink the nature of nature. The difficulty with the Marxist idea of the 'production of nature' is that nature appears to drop out, the consequence of only the social. The issue, then, is how to keep nature in the discussion, but also the social too. Useful here is the notion of a hybrid, that is, joining together two different entities to create a third that is related to but nonetheless different from its original constituents. A number of economic geographers have tried to develop hybrid conceptions of nature as both social and natural in studies of water, coffee, lumber, and fresh fruit.

Conclusion and Future Direction

Economic geography even until the late 1970s was relatively staid and conservative. It was masculinist in inclination as well as membership; it had a clear sense of its object of inquiry, the economy, and which primarily meant manufacturing industry; it favored the tried and true methods of either statistical analysis or the expert interview; and it tended toward straight and narrow theory drawn from economics. As a result, by 1980 according to Nigel Thrift, the discipline was "pretty moribund ... at risk of boring its audience to death."

Contemporary economic geography is almost unrecognizable by comparison. It is intellectually lively, open, eclectic, pluralist, possibly chaotic and anarchic. Inconstancy is the only constant, inconsistency the only consistency. The last adjective one would now use is boring. Boring would be a welcome respite. Accordingly there is no agreement about economic geography's definition, or even whether a definition is important. Boundaries between economic geography and other fields are muddy and indistinct. Likewise, the idea of a separate

discipline, and a separate empirical object of study, is also contested. Anything can be fodder for its inquiry, and any method can be fashioned appropriately to yield results.

Along with these internal changes the discipline is becoming less masculinist, partly because of the influence of feminist theorizing and methods, and partly because of recent formative contributions made by women such as Kathy Gibson, Julie Graham, Susan Hanson, Linda McDowell, Geraldine Pratt, and Erica Schoenberger along with the continuing influence of Doreen Massey. Economic geography is also becoming even slightly less Anglo-American. The Second Global Conference on Economic Geography was held in Beijing in 2007 (the first was in Singapore in 2000) and drew participants from thirty-six countries. The biggest contingent continued to come from the US, and the lingua franca was English, but it was a start. And this sense of expanded inclusion applies also to younger economic geographers. Since 2003 there have been bi-annual Summer Institutes in Economic Geography held both in the US and the UK designed specifically to socialize graduate students and junior faculty into the discipline.

Not everything is rosy. There are signs of increasing fragmentation and discord, and critics from outside have complained of a hopeless “fuzziness” and a haphazard approach, while even inside there are grumblings of a lack of rigor, focus, and policy relevance. In short, economic geography’s future is not assured.

This is odd. For, the subject matter of the discipline is what so many people outside of the discipline want to talk about. There can be few disciplines whose object of investigation is more germane to the present historical moment. This has even led to other disciplines muscling into economic geography’s traditional intellectual turf: such as economics, economic sociology, and even economic anthropology. While there is a temptation to turn one’s back on such intrusions, to give the cold shoulder (and which certainly has been given to economics), an alternative strategy, and which may ensure that there is a disciplinary future, is to embrace them, to try to learn from them. The best future for economic geography paradoxically may be the continual dissolution of economic geography as we knew it.

See also: Commodity Chains; Cultural Turn; De-Industrialization; Globalization, Economic; Industrial Districts; Location Theory; Spatial Division of Labor; Spatial Science.

Further Reading

Barnes, T. J. (1996). *Logics of Dislocation: Models, Metaphors and Meanings of Economic Space*. New York: Guilford.

- Chisholm, G. G. (1889). *Handbook of Commercial Geography*. London: Longman, Green.
- Cook, P. (2004). Follow the thing: Papaya. *Antipode* 36, 642–664.
- Dicken, P. (2007). *Global Shift: Mapping the Changing Contours of the World Economy*. New York: Guilford.
- Gibson-Graham, J.-K. (1996). *The End of Capitalism (As We Knew It): A Feminist Critique of Political Economy*. Oxford: Blackwell.
- Hansen, S. and Pratt, G. (1995). *Space, Place and Gender*. New York: Routledge.
- Hartshorne, R. (1939). *The Nature of Geography*. Lancaster, PA: Association of American Geographers.
- Harvey, D. (1969). *Explanation in Geography*. London: Edward Arnold.
- Harvey, D. (1982). *The Limits to Capital*. Chicago, IL: University of Chicago Press.
- Isard, W. (1955). *Location and Space Economy*. New York: John Wiley.
- Jones, C. (1935). *Economic Geography*. New York: Henry Holt.
- Leyshon, A. and Thrift, N. (1997). *Money/Space: Geographies of Monetary Transformation*. London: Routledge.
- Massey, D. (1984). *Spatial Divisions of Labour: Social Structures and the Geography of Production*. London: MacMillan.
- Massey, D. (1992). *High-Tech Fantasies*. London: Routledge.
- Massey, D. and Meegan, R. (1982). *Anatomy of Job Loss*. London: Methuen.
- McDowell, L. (1997). *Capital Culture: Gender at Work in the City*. Oxford: Blackwell.
- Peck, J. (1996). *Work Place: Social Regulation of Labor Markets*. New York: Guilford.
- Piore, M. and Sabel, C. (1984). *The Second Industrial Divide*. New York: Basic Books.
- Pratt, G. (2004). *Working Feminism*. Philadelphia, PA: Temple University Press.
- Saxenian, A. (1994). *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Cambridge, MA: Harvard University Press.
- Schoenberger, E. (1997). *The Cultural Crisis of the Firm*. Oxford: Blackwell.
- Scott, A. J. (1988). Flexible production systems and regional development: the rise of new industrial spaces in North America and Western Europe. *International Journal of Urban and Regional Research* 12, 171–185.
- Scott, A. J. (2000). Economic geography: The great half-century. In Clark, G. L., Feldman, M. P. & Gertler, M. S. (eds.) *The Oxford Handbook of Economic Geography*, pp 18–44. Oxford: Oxford University Press.
- Smith, N. (1984). *Uneven Development: Nature, Capital and the Production of Space*. Oxford: Blackwell.
- Storper, M. (1997). *The Regional World: Territorial Development in a Global Economy*. New York: Guilford.
- Thrift, N. J. and Olds, K. (1996). Refiguring the economic in economic geography. *Progress in Human Geography* 20, 31–37.
- Tickell, A., Sheppard, E., Peck, J. and Barnes, T. J. (eds.) (2007). *Politics and Practices in Economic Geography*. London: Sage.
- Watts, M. (1994). Oil as money: The devil’s excrement and the spectacle of black gold. In Corbridge, S., Martin, R. & Thrift, N. J. (eds.) *Money, Power, and Space*, pp 406–444. Oxford: Blackwell.
- Whitbeck, R. H. and Finch, V. C. (1924). *Economic Geography*. New York: McGraw-Hill.

Relevant Websites

<http://www.clarku.edu>

Clark College: the website for the journal *Economic Geography*, the oldest journal in the field.

<http://www.egrp.org.uk>

The website of the Economic Geography Research Group of the Royal Geographical Society, Institute of British Geographers and which includes working papers and book reviews.

<http://geog.uconn.edu>

University of Connecticut, Department of Geography: the website of

the Economic Geography Specialty Group of the Association of American Geographers.
<http://faculty.washington.edu/Krumme/gloss>
University of Washington faculty web server: a website with an A-Z

listing of relevant terms for economic geography designed and maintained by Gunter Krumme at the University of Washington, Seattle.