INTRODUCTION

What is economic geography?

What are the major factors that explain the recent growth of the Chinese economy and the relative decline of the United States economy? What explains persistent poverty in pockets of global cities such as New York, London and Tokyo, and what prompted the emergence of vast urban slums in Calcutta? What are the impacts of globalization on people's jobs and livelihoods in different parts of the world? Explaining the causes and consequences of uneven development within and between regions is a central concern for economic geographers. The discipline's goal has long been to offer multi-faceted explanations for economic processes – growth and prosperity as well as crises and decline – manifested across territories at various scales: local, regional, national and global. Contemporary economic geographers study geographically specific factors that shape economic processes and identify key agents (such as firms, labour and the state) and drivers (such as innovation, institutions, entrepreneurship and accessibility) that prompt uneven territorial development and change (such as industrial clusters, regional disparities and core – periphery).

Over its history, economic geographers have considered various key geographically specific endowments as drivers of territorial development. In the early days of the subdiscipline, the economy was dominated by agriculture, and therefore climate and natural-resource endowments mattered significantly, as did labour supply. As industrialization advanced during the twentieth century, the focus shifted to the geography of firms and industries, factory wages, production processes, technology and innovation, the quality and skills of labour, and the role of the state in inducing and promoting industrialization. Most recently, emphasis has shifted away from geographically specific resource endowments in forms of tangible and quantifiable indicators towards research that focuses on often unquantifiable and intangible contributions to territorial development, and, in particular, social endowments such as institutions, networks, knowledge and culture. Analyses that recognize differences among agents have emerged, taking into account, among other things, race, class and gender. New research themes are also emerging, ones that focus for example on financialization, consumption, the knowledge economy and sustainable development.

Still, economic geography as a subdiscipline of geography has frequently been misunderstood. The confusion is partly attributed to its multiple roots, its heterodox methodologies and its various overlapping interests with other social science disciplines. As we shall show, contemporary economic geography has a long history and represents a wide range of inter- and intra-disciplinary influences from fields such as geographical economics, regional science, urban/regional studies, regional economic development planning and economic sociology. Despite the complex and diverse web of influences, economic geographers are bound together by a common interest in economic processes as fundamentally territorial processes as manifested in the economic fates of communities, cities and regions. The goal of the subdiscipline is to understand the economic processes of a place, rather than using economic factors as independent or intervening variables to explain environmental change (cultural ecologists) or socio-cultural change (cultural/social geographers).

Origins and evolution

Various interpretations exist on the origin and historical lineage of economic geography. Some argue that the earliest roots of economic geography were deeply linked to British colonialism, which necessitated the study of commercial geography to better understand and improve trade routes and modes of transportation (see Barnes, 2000). Others point to the Germanic location theories of Heinrich Von Thünen and Alfred Weber (who were then followed by Walter Christaller and August Lösch) as the roots of economic geography. Their goal was to develop optimal location patterns for the most efficient functioning of farms, factories and cities, given geographical endowments and accessibility (e.g. transport costs). Location modelling subsequently crossed the Atlantic, where it was incorporated into North American economic geography and became an important foundation of regional science, thanks to Walter Isard.

Yet another lineage of economic geography comes from Alfred Marshall, a notable British economist who was a central figure in the marginal revolution that transformed economics in the early twentieth century.

Marshall was among the first to articulate the phenomenon of industrial agglomerations and he highlighted the importance of economies of scale (i.e. the sharing of labour pools and infrastructure) in industrialization. Research on agglomerations/clusters continue to occupy centre stage in contemporary economic geography, although today attention is increasingly shifting from economic to social, cultural and institutional dimensions of clusters. Finally, lineage is also traced to North American human-environmental geography, in which appropriate use of abundant extractive resources in a territory preoccupied scholars and policy makers alike. For example, when the journal *Economic Geography* was established at Clark University in 1925, Wallace W. Atwood, the founding editor, intended to cover areas of research that engaged with human adaptations to natural resources in the process of industrialization. He wrote: 'As citizens of the modern commonwealth we are prepared to act intelligently on the larger problems of national and international economic and social relationships only when we appreciate the possibilities and limitations of the habitable portions of the earth.' (Atwood, 1925) The topics covered were mostly natural-resource industries, such as timber, coal, wheat and the grain trade, and included the study of population in relation to cultivated land.[1]

Thus, economic geography since its inception combined multiple trajectories involving multiple, and sometimes contradictory, epistemologies and methodologies. For example, those who followed Germanic and Marshallian traditions used deductive, scientific methods seeking abstraction and universal application, while those in North American human-environmental traditions (e.g. Keasbey, 1901a; 1901b; Smith, 1907; 1913) regarded economic geography as a 'descriptive science' that would contribute to knowledge by gathering 'concrete information' about lands (i.e. natural resources) and their usefulness to humanity. These early papers reflect the influence of Hartshorne's (1939) regionalist approach, which is largely empirical and idiographic, and they maintain strong ties to physical geography (e.g. see Huntington, 1940).

Subsequently, the Great Depression and the catastrophe of World War II dramatically changed economic geography as imperial expansion ended and the extreme consequences of implementing deterministic concepts into policy and then practice became evident (e.g. the Holocaust). As Fisher (1948: 73) observed, economic geography had 'become an apology for the *status quo*'. This led to a few developments during the 1950s and 1960s. For one, economic geographers sought to move the subdiscipline away from descriptive studies and deterministic theories. For another, the idiographic tradition that emphasizes the specificity of places and regions came head-to-head in the post-World War II period with the theoretically driven views of both neo-classical economics and Marxist structuralism. The fact that some of the early work in human-environment economic geography much like the discipline of geography itself – was plagued by environmental determinism did not help support their strictly descriptive approach.

Finally, this period was most profoundly marked by the shift towards spatial science in economic geography, a transformation that was inspired in large part by the work of German location theorists such as Weber, Christaller and Lösch. Otherwise known as the 'space cadets', quantitative, theoretical economic geographers and regional scientists sought to develop universal, abstract, and explanatory spatial theories for industrial location and regional economic evolution. Through works by Hoover (1948), Isard (1949, 1953), and Berry and Garrison (1958), the quantitative revolution was launched, eventually transforming all areas of human geography from descriptive analysis focused on specificity to scientific analysis aimed at developing generalized theories to explain geographical phenomena. The development of new areas of research, including transportation geography, innovation diffusion studies and behavioural geography, further challenged the old methodological orientation. Research on urban economics with abstract models of transportation, accessibility and the structure of metropolitan areas (e.g. Alonso, 1964) dominated the field, and this trend remained strong throughout the 1970s, as indicated by the dominance of published articles in *Economic Geography*. At its apex (e.g. see Scott, 1969; Chojnicki, 1970), the analytical methods used (e.g. Monte Carlo simulations, equilibrium analyses, and predictive statistics) were complex, often highly abstract, and required extensive mathematical training.

Diverging trajectories: 1970s–1990s

Beginning the late 1960s, some economic geographers began making an initial foray into new areas of scholarship. This was largely in response to geo-political conflicts, environmental and political crises, the social turmoil of the late 1960s, and the global economic slow-down of the 1970s. The limits of American scientific management and associated mass production, the Keynesian welfare state, and deindustrialization in United Kingdom and the United States not only helped to generate new themes for economic geographers but also prompted stronger links to macro-theories on the structure and organisation of economies. David Harvey's conversion from positivism (e.g. see Harvey, 1968, 1969) to Marxism and political activism (e.g. see Harvey, 1974) is emblematic of the increased interest in the early 1970s in politics, as well as poverty, race and class, especially in the inner cities of the industrialized world. These changes also opened economic geography to the influences of structuralism, such as dependency theory (Frank, 1966) and world system theory (Wallerstein, 1974), then dominant in other social sciences.

Others chose to learn from work primarily by labour economists in North America (Bluestone and Harrison, 1982; Piore and Sabel, 1984) and in France (Aglietta, 1976), or sought to engage with newly emerging branches of economics (evolutionary economics by Nelson and Winter, 1974, institutional economics by Williamson, 1981) and business/management studies (e.g. work on industrial organization by Chandler, 1977). Upon recognizing that innovation and technological change hold potential for new industries and job creation after deindustrialization, debates over the French Regulation School and flexible specialization dominated the conversation, with an emphasis on the link between various types of innovation and economic growth. Pursuing these themes further, the 1980s saw growing interest in the organizational aspects of production (with emphasis on high-technology manufacturing industries) and its geographic consequences (particularly with respect to regional and national competitiveness) (see, for example, Malecki, 1985; Scott and Storper, 1986; Castells, 1985); in addition, focus increasingly shifted towards highlighting strategies for urban and regional growth in national and international contexts (see Clark 1986; Schoenberger, 1985).

At the same time, another new branch of economic geography was emerging. This was represented by those who became increasingly steeped in work by French and German philosophy and drew significantly from political theory, critical social theory, cultural studies and architecture (Dear, 1988; Harvey, 1989; Soja, 1989). This group incorporated themes from post-modernism, post-structuralism, feminist theory and cultural geography, and rejected the positivistic underlying assumptions that had dominated economic geography to date. Furthermore, the on-going globalization of economies resulted in greater interest in the socio-cultural factors that affect economic growth in various parts of the world. Some took inspiration from sociology (Castells, 1984; Giddens, 1984; Granovetter, 1985) to seek new frameworks that incorporate socio-cultural aspects of economic change. These trends combined together became known as the 'cultural turn' in economic geography.

Thus, economic geography became even more heterodox since the 1970s, with a variety of ideological orientations, such as Ricardian, Keynesian, Marxian, Polanyian, Gramscian, Schumpeterian, as well as broadly neo-classical, evolutionary, institutional, cultural and critical approaches to co-exist in the subdiscipline. Whereas area studies and ethnography have been closely associated with anthropology, political science and sociology, industry studies are conducted by scholars active in business/management and in economic sociology; and regional science is dominated by neo-classical economists. This disciplinary and ideological mix has contributed to further diversify methodological approaches, which now include econometrics and statistical analysis, questionnaire surveys, structured and semi-structured interviews, and participant observation. As economic geographers we conduct structural-institutional analysis, cultural analysis, policy discourses, social network analysis, as well as archival and textual analysis (see Barnes et al., 2007). Also, the advent of corporate geography in the 1980s meant that access to firms became increasingly important to researchers, and with data becoming increasingly proprietary, economic geographers have opted for unconventional and mixed-methods in their research. Thus, methodological pallets for economic geographers have greatly expanded during this period, and have firmly moved beyond exclusively positivist economic analysis.

Economic geography since the 1990s

Economic geography since the 1990s reflected these diverse shifts that had occurred since the crises of the 1970s. The rebirth of economic geography, known as the 'new economic geography' (NEG), was claimed by different groups, including those who catered to the epistemological segment of the 'cultural turn' (e.g. post-modernism/post-structuralism) and those with econometric interests, strongly influenced by the work of Krugman (1991). The latter group of geographical economists gradually gained legitimacy for the use of NEG in the 2000s. At the same time, to better understand the emergence of multinational corporations (MNCs) and spatial implications, and to treat on-going globalization as an explicitly territorial process, economic geographers have attempted to link geographically specific endowments with global networks. This effort has in part been supplemented by continuing influences from economic sociology, this time in the form of global commodity chains (Gereffi, 1994).

Another recent change in economic geography has to do with geographic orientation, which has shifted from predominantly industrialized economies to include emerging economies, and there is an on-going dialogue between economic geographers and development geographers on various themes of common interests. This is a significant change for economic geography, which has been concerned primarily with building theories and gathering empirics in advanced industrialized economies. Thus, although the history of the subdiscipline has long been strongly centred around debates in and about North America and parts of Western Europe (in particular, the United Kingdom), the Anglo-American tradition in the discipline is gradually being transformed by the globalization of the subdiscipline itself. The previous dominance of Anglo-American economic geographers will doubtless give way as the next generation brings new ideas based on their far more diverse experiences.

As broad as the field of economic geography has been, significant new conversations and linkages are being forged today, such as that between geographical economics and economic geography, with the former mainly populated by economists and the latter by geographers.[2] Geographical economics is strictly a branch of economics, aimed at formalizing methodology with roots in international trade theory (e.g. see Combes et al., 2008). Most economists who attempt to model growth and trade across more than one spatial unit of analysis fall into this category. Analysis on the role of proximity is often optional, and the associated rise of agglomeration externalities is typically resolved by assumptions on the mobility of labour and capital. Krugman's (1991) definition of economic geography as the study 'of the location of factors of production in space' (483) exemplifies the approaches taken in geographical economics.

In contrast, economic geography remains a distinctive subdiscipline in geography that focuses on economic differences, distinctiveness and disparity across places; the political, cultural, social and historical dimensions of industrial and regional development; inter-scalar (e.g. global-to-local) economic relationships and their significance for firms, industries and regions; and the causes and consequences of unevenness in the world economy. Regardless of multiple trajectories, one of the most important and distinguishing features of economic geography from economists has been its empirical orientation. Globalization has raised new and important questions about the interconnections and interdependencies among economies, about the processes through which regions develop and compete, and about the utility of classical theories for explaining contemporary economic trends and challenges. Moreover, like globalization itself, a new generation of scholars is expanding the field geographically beyond Western Europe and North America in order to understand these relationships, processes and challenges.

The goal and organization of the book

This book covers the breadth of economic geography from its origins to the present and from developed to developing countries and regions, but it does so without losing sight of what has been the 'core' of economic geography. The writing of this book rose out of our collective concerns that contemporary debates have at times lost sight of what has been learned in the past; neglect of the discipline's history and conceptual roots not only leads to reinventing the wheel, it can prevent further theoretical advances in a field of study. The historical continuity and evolution we highlight in this book are intended to help students and scholars see the links between contemporary themes and earlier, often classical, work, thereby enabling the contextualization of emerging concepts in the various intellectual traditions that have characterized the field.

Our goal is to reconnect old ideas and new phenomena, and we do so by systematically demonstrating the relevance of historical concepts to contemporary debates and showing that what are viewed as newly emerging themes have long intellectual traditions. Each chapter offers origins, initial and subsequent conceptualizations and their transformation. In addition, we examine key contemporary problems and how each concept is used and applied today in order to provide explicit links between contemporary problems with theoretical debates. In doing so, we provide an overview of the key concerns of economic geographers, how these concerns have changed over time, how they are inter-linked and, in some cases, how they have co-evolved.

We have chosen 23 key concepts as points of departure for various ideas that are central to understanding economic geography. Figure 1 shows the organization of the book. These concepts were chosen by their importance over an extended history of the discipline and continue to hold contemporary importance. Some key concepts are agents and drivers, while others are contextual conditions, and yet others are outcomes and spatial manifestations. Furthermore, although the prominence of each concept has waxed and waned, each provides an entry point to a variety of research questions. Collectively, these key concepts combine methodological and ideological orientations, and together they span the field.

There are many ways to organize this book. As we shall show, these key concepts have varying inter-disciplinary links. Some are closely associated with a branch of economics (neo-classical, Marxist, evolutionary and institutional economics), while others are associated with sociology, cultural studies and critical theory. In addition, some of the grand theorizing conducted in economic geography has been based on evidence from just a few industries. For example, the automobile industry has dominated the theory of Fordism/Post-Fordism whereas the garment industry has traditionally been central to the analysis of global value chains.

Section 1 begins with the key concepts that function as important agents of economic change: Labour, Firm and State. The relative importance of these agents has waxed and waned over time. Labour has long been a key factor input to production, forming the foundation of the drivers in Section 2. Firms emerged as a central focus particularly in the 1970s and 1980s, with influences from behavioural geography as well as from business/management studies. Firms are also an important unit of analysis for the key concepts in Section 3: Industries and Regions in Economic Change. Finally, economic geographers have long recognized the state as a key agent of economic growth, as reflected in debates on core–periphery and subsequent studies of industrial restructuring in the core along with the emergence of newly industrializing economies of East Asia.

Section 2 covers key drivers of economic change – Innovation, Entrepreneurship and Accessibility. In innovation, we discuss three branches of economics (neo-classical, Schumpeterian, evolutionary) that have been influential in economic geography. Studies of Innovation and Entrepreneurship suggest the importance of the Schumpeterian tradition in contemporary economic geography, and they represent an important interface to economic development policy. The role of innovation and entrepreneurship is carried forward by key concepts such as Industrial Clusters (Section 3) and Knowledge Economy (Section 6). Accessibility is perhaps the most fundamental socio-geographic concept that affects mobility, and has enduring effect on the day-to-day livelihoods of people. Accessibility has also acquired new meaning with the advent of the Internet.

In Section 3 we turn to four key concepts that are the basics for understanding the role of industries and regions in economic change. The chapter on Industrial Location covers the work of many who are considered the founding fathers of the discipline. Regional Disparity is one of the oldest and recurring policy concerns, and a central motivational issue for economic geography as a discipline. Understanding Industrial Clusters is popular among contemporary scholars and policy makers, but we show that the concept has deep historical roots. In Post-Fordism, we examine the historical trajectories of dominant industrial organization (primarily based on empirical evidence from the automobile industry) and key terminologies associated with them, including Taylorism, Fordism, and Post-Fordism.

Section 4 shifts focus to key concepts that are integral in analyzing Global Economic Geographies. What are the different ways that economic geographers understand inequality in the global economy? Core–Periphery primarily covers the tradition of world-system theory arising out of structural Marxism, whereas the chapter on Globalization emphasizes the operations of multinational corporations (MNCs) in building industrial organizations at the global scale and encompasses a broad array of theoretical and empirical debates over the geographic and strategic roles of multinational corporations as well as critiques of globalisation. With Circuits of Capital, we return to a Marxian interpretation of urban and regional development with flows of capital. Finally, Global Value Chains includes the work of scholars who employ commodity chain analysis (primarily of the garment industry, and more recently, of agro-food businesses) to understand how MNCs spatially organize their production and sourcing activities and whether lower-tier suppliers, who are often based in developing countries, can upgrade the value of their contributions to the global economy.

Section 5 includes key concepts that represent analytical tools to understand socio-cultural contexts. These contexts not only serve as key geographic determinants of economic activities; they also represent many contemporary views actively adopted by economic geographers today. In Culture, we review the renewed importance of culture prompted by the inter-disciplinary 'cultural turn', as well as the characteristics and critiques of post-modernism and post-structuralism and the subsequent development of culturally oriented research, including research on global convergence, conventions and norms, and the cultural economy. Under Gender, we address the contributions of feminist economic geography in better understanding variations in access to economic opportunity and in the economic processes that create regional diversity. Institutions help explain economic growth today, and in this chapter we include both economic and sociological interpretations of institutions. In Embeddedness our emphasis is on the analysis of social relations, illustrating how the social pervades the economic, with implications for the economic growth potential of places. Lastly, the socio-cultural contexts structuring economies can be viewed as compilations of Networks which are horizontal, flexible and infused with power relations.

The final section focuses on emerging concepts that represent economic trends of increasing significance in the twenty-first century. Although the idea of a Knowledge Economy was conceived in the 1960s, this concept has been steadily gaining in significance as the basis for newly emerging sectors of economic activities has shifted from natural to knowledge-based resources. Similarly, the Financialization of economies did not emerge overnight, but has been in progress since World War II and will gain more importance with the financial crisis of the 2008. Consumption is a relatively new focus for economic geographers, who have long been preoccupied with production. Cross-disciplinary fertilization and learning from other disciplines are therefore prominent in research on consumption today. Finally, Sustainable Development emerged in the 1980s, and we expect to see more research at the intersection of climate change and economic change in cities, suburbs and in developing countries. While these concepts are still evolving, we offer some exploratory discussions on the emerging significance of the debates that surround these concepts.

The book was truly a collective endeavour. We had numerous retreats and extensively commented on, critiqued and edited each other's writing. After the outline for each chapter was collectively agreed upon, each chapter was initially drafted by a single author and was developed further with extensive comments and edits involving all authors. Nonetheless, we note the chapters' primary authors as follows: Aoyama was responsible for drafting the Introduction, Firm, Innovation, Industrial Location, Industrial Clusters, Regional Disparity, Post-Fordism, Culture, Knowledge Economy, Financialization and Consumption; Murphy was responsible for drafting State, Core–Periphery, Globalization, Circuits of Capital, Global Value Chains, Institutions, Embeddedness, Networks and Sustainable Developement; and Hanson was responsible for drafting Labour, Entrepreneurship, Accessibility and Gender.

NOTES

1 The authors of the first issue included an official of the U.S. Forest Service and World War I veteran, an agricultural economist at Clark University who also worked with the U.S. Department of Agriculture, an official from Canada's Interior Department, an independent scholar and a faculty member from the University of Stockholm, Sweden.

2 For example, the new journal *Journal of Economic Geography*, in its inception (2000), was intended as a means to strengthen linkage and exchange ideas between economists and economic geographers.