

Creativity and Innovation under the Command of Capital

The Capitalist Imperative of Creativity and Innovation

Contemporary urban and regional research has been shaped by an extensive debate on creativity and innovation, which has been accompanied by the emergence of new urban growth ideologies (such as the “creative class city”) and affirmative accounts of today’s capitalist societies (such as the notion of a “knowledge-based society”). Particularly in the academic disciplines of economic geography and urban and regional studies, the analysis of urban and regional innovation systems and of the interorganizational networks that foster collaborative knowledge creation, as well as the role of creative milieus as a major ingredient in innovative capacity, has seen many advances in the last decades, resulting in diverse models of the socioeconomic organization and spatiality of innovation (see Fagerberg, Mowery, and Nelson 2005).

An initial working definition of creativity and innovation might start from the point that creativity and innovation are a result of human labor (which includes the labor of knowledge generation) and are embedded in a social division of labor. Everyone can be creative in one sense or another, but we restrict the term here to creative work that is economically valued and geared toward the creation of innovations in terms of new products, new production processes, and new organizational forms. In the contemporary era, this kind of creative work has become the task of a specialized and skilled workforce of scientists, engineers, designers, and artists, etc. Thus, creative work and innovation activities are embedded in the functioning of the economy of historically specific social formations. Moreover, as we will explore in some detail, they are differentiated according to specific sectoral and spatial contexts. Creativity and innovation are closely interrelated or

“symbiotic,” since the creative capacity of workers functions as a prime source of innovative capacity that is at the heart of successful innovation activities. Hence creativity functions as an essential “input” to the process of innovation. It denotes the capability of individuals and of interacting groups of workers (both at the intra-firm level and the level of interorganizational cooperation) to create new knowledge that entails the variation of existing forms or the creation of novel forms which are applied to generate new technologies, products, and organizational forms.

The creation of new knowledge essentially requires a recombination or novel combination of complementary “pieces of knowledge” in terms of either specific competencies residing within a particular field of activity or different knowledge bases of particular economic sectors, scientific disciplines, etc. Hence interactive knowledge generation through the collaboration of creative workers is of key importance in the innovation process. Interactive knowledge creation, on the other hand, entails a shared learning process that strengthens or expands the individual actors’ creative capabilities. Innovation is the result of non-linear processes of searching and experimentation, whose course and “success” cannot be known in advance. Hence the generation of new knowledge should not be conceived of as a deterministic process. The process of innovation as a whole comprises research, development, and design activities, the “output” of this creative work being new designs, patents, contents of cultural products etc., and its economic utilization in the form of new products and technologies. Due to the diversity of socio-economic fields and sectors, where innovation activities are to be found, creative capabilities rely on a specific knowledge base. Yet in the process of creative work, different knowledge bases might be combined in order to generate novel forms. The workforce employed in research, development, and design activities must have specific knowledge and skills, but the unfolding of creative capabilities is based on both specifically skilled human resources and broader *social resources* in terms of the organized interaction amongst creative workers in the innovation process. Thus creativity and innovation are embedded in spatially differentiated socioeconomic and institutional environments; specific forms of collaborative organization and “milieus” of interaction are constitutive factors of creative capabilities at the local and regional level. With regard to interregional competition, creativity and innovative capacity function as a socially produced regional advantage that contributes to uneven development in the urban and regional system.

Existing scholarship in economic geography and regional research has for the most part concentrated on the spatial distribution, functioning, and determining factors of creativity and innovation in urban and regional settings, and on the impact of innovative capacities on urban and regional economic development. However, the current debate on the role of creativity and innovation is characterized by a major shortcoming: there is a common

tendency in mainstream writing on this topic to decontextualize the issues of creativity and innovation from their embeddedness in a capitalist society and the imperatives of capital accumulation (see Florida 2004; Fagerberg, Mowery, and Nelson 2005). This book has a different starting point. The geography of uneven development at the global, national, and regional scale is essentially based in the dynamics of a capitalist mode of production. More generally, the contemporary world is characterized by the dominance and global proliferation of the capitalist mode of production, which can be further differentiated according to the variation of regimes of accumulation and modes of regulation and governance into a variety of capitalist development models (see Whitley 1999). These are, however, still characterized by shared basic ingredients such as the primary class division between the owners and “managers” of capital and a workforce dependent on wage labor, and by the overarching imperative of capital accumulation. The decontextualization of creativity and innovation from these basic features of the historical social formation in which such capacities are developing has fostered the emergence and spread of new urban and regional growth ideologies that entail a glorification of capitalism as a socioeconomic formation essentially based on knowledge creation and superior innovative capacities. The most advanced decontextualization is presented in Florida’s theory of the “creative class” (see Chapter 2), which denotes “the rise of human creativity as the defining feature of economic life” and claims that “we can read economic history as a succession of new and better ways to harness creativity” (Florida 2004: 21, 56). In such conceptualizations, the primary motives and the partially destructive powers of innovation activities that develop under the command of capital (such as in the sphere of “financial innovations,” or in the guise of sectoral and regional “switching crises” resulting from basic technological innovations) are widely neglected. Decontextualization leads urban and regional research to deal “immanently” with the unfolding of creativity and innovation – that is, to neglect the broader socioeconomic framework of a capitalist society that shapes the basic economic motives and social organization of such activities. Despite the many relevant and detailed findings of contemporary urban and regional innovation research, decontextualized approaches give rise to overly affirmative positive general characterizations of the current phase of capitalist development.

In the context of a capitalist society and economy, the unfolding of creativity and innovation activity takes place “under the command of capital.” Technological and artistic innovation is dominated by private sector activities, even though national or regional innovation systems often involve cooperative links between private sector firms and public sector research establishments. Private sector dominance leads to the privileging of those fields and modes of innovation activity that promise entrepreneurial and commercial success. Likewise, the issue of creativity is mostly considered with reference to those

forms which can be harnessed for economic growth. Creativity and innovation are thus embedded in the basic imperatives of capitalist economies which subordinate creative work and innovation activity to the continued race for competitive advantage and the appropriation of surplus profits. This basic condition represents a determining force that is also relevant to research on the uneven geography of creative and innovative capacities and to research into the specific regional and local conditions that support the generation and successful utilization of creative and innovative capacities.

The work of David Harvey represents the most advanced and detailed Marxist approach to the urbanization of capital and the forces shaping the geography of uneven development under capitalism. In Harvey's theory of capitalist urbanization (Harvey 1989), the embedding of urban and regional processes (including creative and innovative work) in the imperatives of a capitalist economy is the explicit starting point of analysis. At the most general level, capitalism has been characterized as a historically distinct mode of production based on continued "revolution" in production methods, technologies, organizational forms, and spatial arrangements of the economy. Competition is a major driving force of this dynamic. According to Harvey (1989: 136), "the entrepreneurial search for excess profits is fundamental within the social relations of capitalism. Excess profits can be had by virtue of superior technology and organization or by occupying superior locations ... The coercive laws of competition force capitalists to search out superior technologies and locations."

Within the framework of capitalist competition, the imperative of innovation activity (that draws on creative work) is the continued striving for surplus profits. These represent excess profits above the prevalent "average" rate of profits. For individual capitalist firms, the command of superior technologies and production methods, the invention of new products as well as incremental product innovations, and the introduction of new organizational forms (including spatial arrangements of production and distribution) offer various approaches to the realization of surplus profits. In this sense, Marx's theory of capital (Marx 1981) contains a concept of "endogenous growth" that emphasizes the role of technological change (innovation) in the process of capital accumulation – and this long before the contemporary rediscovery of technological change and innovation as a major economic growth factor in Romer's "new growth theory" (see Romer 1990). However, as Luxemburg (1951) has shown, the accumulation of capital does not solely rely on innovation and technological change – it can also be based on the geographic expansion of capital accumulation and the incorporation (subsumption) of new sectors of social activity into the domain of private capital accumulation. We will return to a more detailed account of the role of innovation and interregional competition in Harvey's theory of capitalist urbanization in the chapter's third subsection.

In contributions to the theory of global value chains (see Gereffi and Korzeniewicz 1994; Kaplinsky 2004), surplus profits have also been interpreted as representing “economic rents” which take on different forms. Economic rents arise from the possession of or control over unique (scarce) resources. As Schumpeter (1952) has shown, scarcity or unique resources can be constructed through purposive action, and those who create these unique resources can then achieve an entrepreneurial surplus. This essentially happens when capitalist firms innovate: the creation of “new combinations” (new technologies, processes, and organizational forms) provides a competitive advantage that entails the realization of economic rents or surplus profits. These economic returns to innovation then act as an inducement to the replication of these innovations by other firms which also seek to raise returns and acquire surplus profits. In the diffusion of innovations, economic rents or surplus profits are whittled away, which leads to a renewed search for “new combinations” that promise an entrepreneurial surplus. In this way, the process of competition in the search for surplus profit or economic rent and its subsequent bidding away by competitors fuels the innovation process.

Drawing on Kaplinsky (2004), we can distinguish a variety of forms of economic rent relevant to processes of innovation, some of which are endogenously “constructed” by individual capitalist firms, while others are collectively constructed by groups of firms through a process of inter-firm networking in particular value chains. The endogenously constructed forms of rent include “technology rents” (command over superior technologies), “human resource rents” in terms of employing a workforce with superior skills, “organizational rents” stemming from superior forms of internal organization (which also includes the particular spatial organization of a multi-regional firm’s production network), and “marketing rents,” which result from superior marketing capabilities and the construction of valuable brands. Collectively constructed forms of rent can be denoted as “relational rents” that are based on superior transactional relationships with suppliers and customers and access to specific knowledge resources that reside in inter-firm cooperation and networks. Relational rents may accrue to an ensemble of collaborating firms, and they are particularly related to spatial organization and the firms’ positioning within specific urban and regional settings (the main focus of Chapters 3 and 5 will be on these socially produced conditions for reaping relational rents). These collectively created conditions are also at the heart of urban and regional competitive advantage. Kaplinsky (2004) has mentioned further sources of economic rent, such as “resource rents” that accrue to firms from superior access to scarce natural resources, and economic benefits provided by parties external to particular value chains such as “infrastructural rents” that stem from access to high-quality public infrastructures. Infrastructures such as transport systems, the

spatial arrangement of the built environment, the public education system, and so on also represent socially produced conditions of production that affect the competitive advantage of individual cities and regions. Furthermore, government policies at different spatial scales actively support the construction of competitive advantage through the upgrading of relevant infrastructures, economic promotion activities, and technology- and innovation-related programs. In general, innovative capacities at the level of individual firms, as well as at the level of groups of interacting firms, have become increasingly important against a background of the rising technological intensity of production, the increasing significance of product differentiation, and the growth of competitive pressures in the context of globalization.

This analysis builds on the assumption that the basic dynamic of a capitalist economy stems from competition and rent seeking (or the race for surplus profits). However, “regulation theory” (see Aglietta 1979, 2000; Boyer 1990; Dunford 1990) underlines the point that different historical phases of capitalism can be distinguished by distinct “regimes of accumulation” and “modes of regulation.” In addition, taking into account the economic-institutional varieties of capitalism that are associated with the uneven geography of capitalism, we have to be aware that there are competing modes of capitalist development. Different regimes of accumulation tend to privilege different basic technologies and lead sectors of the economy. Whereas the “Fordist” mode of development was shaped by a focus on mass production technologies and the rise of “medium high-tech” manufacturing industries such as the automotive industry, the contemporary mode of capitalist development – frequently labeled as “Post-Fordism” (Amin 1994) – is shaped by a wider variety of lead sectors. On the one hand, we have seen the spread of flexible production models and the rise of new high-tech industries that are specifically innovation-driven and based on comparatively high R&D inputs. On the other hand, the capitalist economy is increasingly based on a finance-dominated regime of accumulation, wherein the “secondary circuits” (Harvey 1989) of capital, that is, the trade in financial assets and derivatives as well as the real estate business, are becoming the driving forces of capitalism at the expense of investment and innovation in the real economy sector. Capitalist economies are today characterized by different mixes of the aforementioned lead sectors, and this variation produces competing development models. The German economy, for example, is strongly based on high-tech and medium high-tech industries (aside from the rise of financial industries and advanced producer services), whereas the British economy has to a large extent been converted into an economy that primarily depends on the financial industry, complemented by a strong growth of business service industries with a global market reach.

Interestingly, the current phase of capitalist development in highly industrialized countries – generally characterized by an increasing share of

unproductive and speculative financial deals and a comparatively weakened position of manufacturing industries (of all technological levels) – has been accompanied by a rise of analytical accounts that describe capitalist economies and societies as developing on a path toward a “knowledge-based” and “creative” economy. Against a background of a finance-dominated mode of capitalist development, whose primary characteristic is the unfolding of unproductive and specifically destructive economic activities, these analyses lead to new affirmative ideologies of contemporary socioeconomic developments. Such uncritical accounts widely ignore the prevalent “casino capitalism” and the destructive consequences of a “dealer economy.” Some accounts of the current development phase, such as the “knowledge-based” and “creative” economy, draw selectively on particular types of successful cities and regions that form only part of the geography of uneven development: certainly, there are local and regional economies that focus on knowledge-intensive industries and encompass a “creative” economy with continued innovation efforts in the real economy sectors. These local and regional economies might well achieve competitive advantages in the framework of interurban and interregional competition (which is an essential aspect of urban and regional development in capitalism; see below). They might also represent specific regional systems of accumulation (Leborgne and Lipietz 1991; Peck and Tickell 1994; Krätke 1999). But, as I have shown in this section, they do not represent the currently dominant model of capitalism.

In urban theory, the conceptualization of new pathways of economic and social development such as the “service society” or the “knowledge society,” which are related to the rise of new economic lead sectors, have influenced the emergence of various new general conceptualizations of urban development. Yet many of these (except those focusing on globalization) have been decontextualized from the framework of a capitalist society and economy. They have appeared in the guise of a sequence of (partially overlapping) generalizing models of urban economic development that attempt to relate the respective period’s prime “motors” of urban economic growth to new leading subsectors of the urban economy. These models have been used to develop new urban growth ideologies such as the “postindustrial city,” the “service metropolis,” and the “creative city,” which in turn have strongly affected urban development strategies. A short review of such generalizing models follows, which will underline the need for a critical perspective on urban development that locates it firmly in the context of contemporary capitalism.

Generalizing Models of Urban Economic Development

For a long time, the coevolution of industrialization and urbanization in Western capitalist countries has shaped understandings of the economic

base of cities. Hence the “industrial city” emerged as an influential generalizing conceptualization of urban economic development. The focus on the city’s role as a manufacturing center in a “Fordist” phase of capitalist development (see Scott 1988a) could be combined with the notion of a spatial division of labor across the urban system that corresponded to the rise of the multi-regional organization of large firms, leading to a distinction between “headquarter cities” and “branch plant cities” (see Pred 1977; Massey 1984). Critical urban theory considered the combination of an interurban functional division of labor and the hierarchical control relations existing amongst manufacturing establishments to be a crucial determinant of urban economic development in this era (Friedmann and Wolff 1982).

Against the background of secular declines in Fordist production and the rise of a specialized service economy since the 1970s, which had been theoretically articulated by the notion of an emerging “post-industrial society” (Bell 1974), the “postindustrial city” emerged as a new general concept of urban economic development. Declining employment in traditional Fordist manufacturing sectors led to the decline of many cities whose economy was primarily focused on industrial manufacturing. In the realm of the postindustrial city conception, manufacturing-based cities were regarded as the losers of structural change, and cities with an expanding service economy appeared to be the winners (see Smith and Williams 1986; Soja 2000). This simplified concept of structural change has been converted into the new urban growth ideology of the city as a center of service sector activity, particularly of advanced producer services. The new urban growth concept was taken up as a message of hope, and many cities geared their economic and spatial development strategy toward supporting an expansion of the city’s service industries (e.g., by new extensions of the city’s central business district, by the reconversion of abandoned industrial sites for new office complexes, etc.). In the critical urban theory debate, however, some of the basic propositions about the “postindustrial” economy, namely the notion that it needs a growing share of highly educated workers, have been rejected. Sassen (1996: 581) argued that the new employment regime in service-dominated urban economies predominantly creates low-wage jobs that do not require particularly high levels of education. The debate emphasized the pronounced internal polarization of the service sector’s employment conditions. Furthermore, the idea that cities and urban economies are primarily and increasingly relying on service industries (such as particularly the advanced producer services; see Daniels and Moulaert 1991; Bryson and Daniels 2007), which is still influential among urban researchers and the cities’ political decision makers, did not take into account that manufacturing activities continued to form a relevant part of most urban regions’ economic base. In the binary world of the postindustrial city concept, processes of functional upgrading and structural change within

urban regions' manufacturing sectors have been widely ignored. Yet the continued growth of advanced producer services is to a large extent an articulation of organizational restructuring processes within the manufacturing sector itself: organizational restructuring entailed the relocation of the manufacturing firm's internal technology-related service functions (such as R&D, technical testing activities, laboratory services, etc.) to external firms which are subsequently assigned to the service sector (Krätke 2007). These technology-related services are functionally coupled with research-intensive manufacturing sectors. Today, the urban economy of prospering cities (such as Munich) is often based on a comparatively high share of research-intensive manufacturing sectors and technology-related services. This type of sectoral profile differs from those cities and regions that predominantly rely on market-related business services and the financial sector. The "city as a service metropolis" ideology widely ignored the fact that urban economies were characterized by quite diverse sectoral profiles (i.e., the particular mix of manufacturing and service sectors) and development paths (i.e., the main direction of restructuring of the urban economy's sectoral mix), so that, for example, the particular path of London or Paris could not be taken as a general model of future urban economies (Krätke 2007). London's extremely pronounced specialization on the financial sector that is at the heart of a neoliberal "dealer economy" represents a quite unique urban economic profile, which proved to be highly vulnerable after the breakdown of this particular model of capitalist development in 2008.

The emphasis on the city's prominent role as provider of specialized corporate services has also exerted strong influence on the "global city" line of urban research, which represents a particularly relevant concept of urban economic development in the era of intensifying globalization. This approach places cities' external economic relations and their positioning within globally extended corporate networks at the center of analysis. The advanced internationalization and global organization of economic activities in contemporary capitalism requires nodal points in the coordination and control of these global economic processes. Global cities, in which international financial and corporate services are concentrated, are functioning as locational centers for the production of a global control capacity (Sassen 1991, 2000). The notion of a "postindustrial society" is still influential in global city research and has led many scholars to focus on the city's service economy, particularly the so-called FIRE sector (finance, insurance, and real estate). However, whereas traditional concepts of the "service metropolis" have stressed the importance of a city's corporate services for the respective national economic territory, global city research concentrates on the *global* reach of the city's service capacities. The formation of a world city network that is based on the organizational networks of global service providers is the subject of research carried out by the "Globalization and

World Cities Study Group and Network” (GaWC; see Taylor 2004). Taylor (2004) explicitly emphasized that the GaWC analyses investigate *just one process* in global city development, that is, the “servicing of global capital.” Yet the impact of globalization processes on urban economies cannot be exclusively related to the role played by global service providers. The expansion and diffusion of industrial urbanism on a global scale, which is led by the formation of global production networks with local anchoring points in metropolitan regions all over the world, is a most distinctive feature of the current phase of globalization (see Soja 2000; Dicken 2007). Cities included in the world city network are characterized by specific profiles of globally connected economic functions, which might well include technology-related R&D, research-intensive manufacturing activities, and global production networks’ branch plants. Thus the world city network includes global cities focusing on advanced producer services as well as many other cities with differing profiles of their globally connected activities. This diversity might be interpreted as an articulation of “multiple globalizations” (see Taylor 2004) within the urban system. The “cities in globalization” line of research represents a relevant approach to urban economic analysis that still has great potential for thematic extensions and the deepening of our understanding of urban economic development in an era of intensifying global interurban networking. Since the early 1990s, however, further generalizing models of urban economic development have been presented which are closely related to this period’s restructuring phases of urban economies.

The first phase has been shaped by the “new economy” bubble. The rise of information and communication technologies (ICT) and other new industries has been branded by the term “new economy” in order to indicate a superior quality and good prospects as compared to the “old economy” of traditional manufacturing industries (see Hübner 2005). On the level of cities, the related urban growth ideology and development concept emphasized the fact that cities that are able to become prime centers of new economy sectors, particularly the high-tech sectors of the ICT branches and technology-intensive subsectors of the media industries (such as multimedia and the Internet business), will be the winners of economic restructuring. Thus many cities focused their economic development strategy on the promotion of ICT activities and the expansion of the new economy. However, this new economy triggered a speculative bubble in the financial sector around new economy enterprises, which broke down in 2001. After the crash, the new economy hype was substituted by new generalizing concepts of the “lead sectors” of urban economic development.

A second line of debate on a promising strategy of restructuring and urban economic regeneration has been closely related to the cultural economy of cities. The spread of urban regeneration concepts, which drew on cities’ cultural economy sectors and further cultural assets, has fostered

an increasing interest in the cultural economy of cities. Economic geography and urban research highlighted the strong impact of the cultural economy sector (including the media industry and activities such as film and television, the music industry, publishing, the performing arts, etc.) on urban economies (Scott 2000), and detected its particularly strong embedding in inner urban areas (Krätke 2000, 2002a) as well as its selective clustering in particular centers of the urban system. However, the cultural focus of urban regeneration concepts was accompanied by rather exaggerated expectations concerning the cultural economy's possible contribution to the compensation of shrinking employment opportunities in traditional Fordist industries. In recent times, economic development concepts that concentrate on the city's cultural economy have continued to shape urban development strategies. Yet the cultural economy sectors have increasingly been equipped with the new fashionable branding of "creative industries" (see Garnham 2005; Hartley 2005). These include all of the cultural economy subsectors, with a minor extension to further creative activities such as the software and games industries. The new branding has artificially substituted the former analysis of the cultural economy of cities.

After the termination of the new economy hype in 2001, and parallel to the rise of culturally focused strategies of urban economic regeneration, the "knowledge-based city" became the most influential and still relevant concept of urban economic development and restructuring. This concept is based on the notion that the leading industrial countries' development paths are increasingly shaped by activities of an emerging "knowledge economy" that bets on the generation and economic exploitation of new knowledge in terms of continued innovation activities (Dunning 2000; Cooke 2002). The leading sectors of this model of development are the diverse knowledge-intensive branches of economic activity (including the above-mentioned knowledge-intensive producer services, the cultural economy, as well as research-intensive manufacturing activities). The knowledge-based economy represents an approach to capturing broad trends in contemporary economic restructuring which are of particular relevance to urban economies, since the knowledge-intensive subsectors of the economy are selectively concentrating in large cities and metropolitan regions (Krätke 2007). The debate on urban development prospects in the era of the knowledge economy (see Raspe and van Oort 2006) is strongly related to the debate on urban regions' innovation capacities and the role of cities as major innovation centers for diverse economic subsectors. The debate leads to a reinforced interest in the urban regions' innovation systems and highlights the relevance of knowledge networks and local knowledge spillovers (Tödtling, Lehner, and Trippel 2006; Krätke and Brandt 2009). The "knowledge-based city" concept might be criticized with regard to its prevalent fixation on high-tech industries and advanced producer services, which underestimates the quality

and development of the knowledge base of traditional manufacturing sectors, and with regard to its uncritical representation of tendencies that are essentially embedded in capitalist economies' imperatives of accumulation and competition. The "knowledge economy" is not an alternative economic development model; it rather reflects a tendency in the core countries of capitalist economies to increasingly concentrate on knowledge-intensive sectors and activities within a globally extended functional spatial division of labor (see Dicken 2007). The rise of a finance-dominated regime of accumulation in particular is compatible with the notion of a knowledge-based economy, since the financial sector (as a driver of the financialization of capitalist economies) is regularly included among the knowledge-intensive economic subsectors. Nonetheless, the generalizing concept of a "knowledge economy" still represents a relevant perspective on urban economic development and restructuring that focuses on the urban regions' innovation capacities and the expansion of knowledge-intensive subsectors of the urban economy. Even scholars who predominantly contribute to the advancement of critical urban and regional theory have been influenced by this perspective: Allen Scott (2008) argues that the contemporary global resurgence of cities is based on the emergence of a "cognitive-cultural capitalism," the core sectors of which are technology-intensive manufacturing, business services, and cultural products industries (including design- and fashion-oriented forms of production). The underlying empirical generalization of sectoral restructuring trends in highly developed industrial countries might be appropriate, yet the term "cognitive-cultural capitalism" suggests that contemporary capitalism has reached a kind of "superior" stage of development and doesn't reflect the contradictory tendencies and destructive powers of today's global capitalism (see Harvey 2003, 2006; Zeller 2004).

In recent times, the "knowledge-based city" approach has been overtaken by the fashionable concept of the "creative city" as the locational center of a "creative class" (Florida 2004). The "creative city" approach starts from the assumption of a transformation from the industrial to a "knowledge society," in which creativity is becoming an increasingly important resource. This concept exploits the "cultural inflection" of contemporary urban analysis (Peck 2005) and deals with specific attraction factors of cities for members of the creative class, emphasizing particularly sociocultural attraction factors. According to this approach, the creative class is selectively concentrating itself in those cities that offer the best "qualities of place" in terms of specific cultural amenities. The concept combines with a booming debate on "creative industries" and has been transformed into a new urban growth ideology that is characterized by an affirmative concept of class and capitalist development (see Chapter 2). The theory of the creative class doesn't entail any critical account of the socioeconomic embedding of creative work in a capitalist society and economy. Furthermore, it doesn't

touch the important question of how creative work is generating successful innovation in the institutional setting of capitalist industries and urban economies. The embedding of innovative capacities in urban and regional economies' specific socioeconomic configurations has been taken up more seriously in the framework of the "knowledge-based city" approach (see above). The macro-level analysis of urban regions' creative capacities (as presented by Florida 2005) predominantly deals with particular "human resource" factors of urban economies and their uneven distribution within the urban and regional system. A more detailed critique of Florida's creative city approach will be presented in Chapter 2 (see below).

Altogether, the rise of new economic subsectors that are strongly based on knowledge-intensive work and continued innovation activity has led to a resurgence of urban economies as strategic activity nodes in the core countries of global capitalism. However, the new urban growth sectors in total cannot compensate for the ongoing loss of traditional "regular" jobs in Fordist industries (due to "offshoring" etc.) and the decline of "regular" low-rank service sector jobs (due to rationalization and the exploitation of informal immigrant labor). Thus many large cities today are facing severe labor market pressures with regard to the large population group of less skilled workers, and are confronted with related problems of social polarization, even though they might achieve a "high rank" or positive development in the new economic growth sectors of knowledge-intensive industries. The urban population of these centers still contains large social groups which tend to be excluded from the gains of the "new islands" of urban growth. The capitalist city has never ceased to create economic and sociospatial polarization, whose driving forces are the imperatives of capital accumulation and competition, with their specific articulation in a system of competing urban regions.

The Role of Innovation and Interurban Competition in Harvey's Theory of Capitalist Urbanization

Returning to this chapter's starting point – the capitalist imperative of creativity and innovation – we will deal with essential arguments on the role of technological innovation and interregional competition in David Harvey's theory of the urban process under capitalism. Harvey proceeded from a detailed account of Marx's theory of capital (Marx 1981) with regard to its spatial implications (Harvey 1982). His work aimed at the integration of the production of spatial configurations as an active element in the development of capitalism. Harvey explicitly conceptualizes urbanization in the context of a predominantly capitalist mode of production (Harvey 1989: 17) and emphasizes the urban system's functioning as a "rational landscape for

capital accumulation.” He chose the urban as a distinct focus of analysis, without neglecting the relevance of other spatial scales (such as the regional, national, and global) at which the production of spatial configurations takes place. According to Brenner (2009), critical urban theory requires sustained engagement with contemporary patterns of capitalist urbanization, which become increasingly generalized on a world scale. By employing a political economy approach, Harvey presented various insights concerning the urban process under capitalism on which the analysis of creativity and innovation under the command of capital can draw. This section concentrates on a discussion of Harvey’s ideas in order to arrive at a basic contextualization of the role of creativity and innovation in urban development under capitalism. Of particular interest is Harvey’s approach regarding the spatial configurations of capitalism as an expression of capital flows which can switch their sectoral and geographical directions and imply the unfolding of various crises. Furthermore, the conceptualization of the urban region as a competitive economic and geopolitical unit within the geographical division of labor is relevant for understanding the general role of creative and innovative capacities in urban development.

In his account of the urban process under capitalism, Harvey (1989) emphasized the interplay of three different circuits of capital as a macroeconomic background that directs particular capital flows into the built environment and the infrastructures of technological innovation. In this way, the circuits of capital exert a profound impact on urban development. Harvey distinguishes a primary, secondary, and tertiary circuit of capital: the *primary circuit* is related to the capitalist production process, wherein the creation of surplus value can be focused on diverse forms of “absolutely” extended exploitation (representing “absolute surplus value” in terms of Marx’s analysis of capital; see Marx 1981) or on productivity gains derived from innovation of the productive forces through the application of advanced technology, the reorganization of work processes, and the division of labor (“relative surplus value”). The driving force of this continued innovation activity at the level of the capitalist firm is competition and the search for surplus profits arising from the command of superior technology and organizational forms (see above). Harvey’s conceptualization of a secondary and tertiary circuit of capital refers to the combined outcome of individual capitals’ accumulation processes in the primary circuit, which are leading at the aggregate level to a tendency of periodic “overaccumulation” (Harvey 1989). Overaccumulation means that too much capital has been accumulated in relation to the opportunities to employ that capital profitably. The tendency may become manifest in the overproduction of commodities, in the creation of production capacities that exceed aggregate market potential, in falling rates of profit, in disposable money capital seeking for profitable investment opportunities.

In his account of the “industrial city” form of capitalist urbanization, Harvey emphasized that:

interurban competition ... increased the pressures toward product innovation and technological change. The industrial city had to consolidate its function as an innovation center if it was to survive. But innovation ... also lay at the root of the overaccumulation problem ... Surpluses could be and were in part absorbed ... within the industrial city through an increasing flow of investments into long-term physical and social infrastructures. (1989: 33)

According to Harvey, the *secondary circuit* of capital denotes capital flows into the built environment for production and consumption. This circuit has a profound impact on urban development in terms of the extension and restructuring of urban infrastructures, and is closely related to the real estate sector. Investment in housing, commercial outlets, office buildings, and so on are included in the secondary circuit. The discontinuous flow of capital into the secondary circuit is detected as a source of “building cycles” (with temporary peaks of investment in the built environment). The switch of capital flows into the secondary circuit represents a feasible – but only temporary – solution to the overaccumulation problem.

The concept privileges investment in the built environment and the real estate sector as the focus of a secondary circuit. The switching of capital flows into large-scale “gentrification” projects and the proliferation of gentrification as a *global* urban development strategy (Smith 2002) can be regarded as a specific manifestation of investment activity in the built environment of cities that has become dominant in present times. However, it can be argued that there are further possible ways of dealing with the overaccumulation problem: according to Rosa Luxemburg (1951), the geographic expansion of capital investments in order to include new spaces in the process of capital accumulation represents a particularly relevant approach, as well as the switching of capital flows into sectors that have not yet been incorporated into the domain of private capital accumulation (as it is articulated by the continued struggle for privatization of ever more sectors and resources). Most important to the dynamic of a secondary circuit of capital flows, however, is the financial sector. The particular sphere of financial investments and the creation of “fictitious capital” has expanded greatly in contemporary capitalism (see Huffs Schmidt 2002; Chesnais 2004). Harvey’s initial concept of a secondary circuit underestimated the continuous “unbounding” of the financial sector in modern capitalism. Part of this development is the incorporation of the real estate sector in the sphere of financial investment and the creation of fictitious capital (Krätke 1992, 1995). Harvey rather emphasized that “a general condition for the flow of capital into the secondary circuit is ... the existence of a functioning capital

market and, perhaps, a state willing to finance and guarantee long-term, large-scale projects with respect to the creation of the built environment” (Harvey 1989: 65). This point apparently assigns a service function to the financial sector (i.e., mobilizing and offering financial means for large-scale investment in the urban built environment) and underestimates the sector’s specific dynamic. In his more recent works, however, Harvey emphasizes the unbounding of the financial sector and its role in the proliferation of strategies of “accumulation by dispossession” (Harvey 2003, 2006).

Accumulation by dispossession denotes the proliferation of accumulation practices that Marx had treated as “primitive” or “original” during the rise of capitalism. Today, such practices include the commodification and privatization of hitherto public assets and the conversion of various forms of property rights (common, collective, state, etc.) into exclusive private property rights; the neocolonial or imperialist appropriation of natural resources; the slave trade which shapes the contemporary sex industry; and, as the most devastating form of all, “financialization” in terms of the worldwide proliferation of speculative financial “products” that serve as a means of primitive accumulation. According to Harvey,

the strong wave of financialization that set in after 1980 has been marked by its speculative and predatory style ... Deregulation allowed the financial system to become one of the main centers of redistributive activity through speculation, predation, fraud and thievery ... We have ... to look at the speculative raiding carried out by hedge funds and other major institutions of finance capital for these formed the real cutting edge of accumulation by dispossession on the global stage. (2006: 45–6)

With regard to the determinants of the 2008 world economic crisis, a detailed analysis of the proliferation of fraud and thievery in the contemporary financial business sector has been presented by Leo Müller, lecturer of “economic crime investigation,” who comes to the conclusion that the financial sector is increasingly driven by criminal activities (Müller 2010).

Today, the secondary circuit of capital in the financial sector has become a dominating sphere of capital accumulation which increasingly decouples from the business of credit provision to the real economic sector. An increasing share of surplus capital desperately seeking profitable investment opportunities circulates within the sphere of speculative financial investments, derivative financial “products,” and the business of dealing with financial assets. The term “casino-capitalism” is an accurate catchword reflecting the emergence of a finance-dominated regime of accumulation in contemporary capitalism (Aglietta 2000; Chesnais 2004; Windolf 2005). It is important to note that most large industrial corporations of the diverse manufacturing sectors are actively participating in financial sector deals and

financial investment activities (outside the respective firms' real economy activity). In some cases, the share of financial business activity has overtaken the share of real sector manufacturing activity (the Siemens corporation, for example, has frequently been characterized as a "large bank equipped with an electrical engineering department"). Against this background, the industrial corporations can easily switch capital flows to the financial sector circuits. In a finance-dominated regime of accumulation, in which the secondary circuits of capital have become privileged fields of investment, and in which investment in financial assets is "overtaking" real sector investment activity, the capitalist imperative to enhance capital accumulation through technological and organizational innovation in the sphere of manufacturing processes is increasingly subject to competing strategic choices: investment in real sector innovation and technological change is no longer functioning as the major pathway to increased capital accumulation, since financial sector deals and speculative financial investment activities might appear as an equally relevant or even superior strategy. The main conclusion that can be drawn from the increasingly dominant role of the secondary circuit of capital is the point that capitalism today cannot be accurately characterized as an economic development model that is primarily based on continuous *technological* innovation. While technological innovation and the related processes of knowledge creation remain significant sources of competitive advantage and surplus profits, there are different and competing investment options that comply with the imperatives of capital accumulation. On the level of the urban system, some centers are specializing in their sectoral mix on the secondary circuits of capital (e.g., financial centers with a particularly strong share of the FIRE sector) and on the command and control of geographically extended value chains ("headquarter cities"), which offers the chance to channel the gains from manufacturing activities at distant locations into the respective command and control center. Thus on the level of cities and regions, too, there are different pathways to "economic success" in terms of enhanced capital accumulation.

Harvey's general concept of capital circulation also includes a *tertiary circuit* of capital, which comprises investment in science and technology, and a wide range of social expenditures. The tertiary circuit is for the most part mediated through the state, which channels tax income into sectors that are relevant for the reproduction of labor power or generating preconditions for enhanced surplus production. However, the ongoing political struggle on the issue of privatization of public services underlines the fact that there is growing pressure to transfer more and more tertiary circuit activities and subsectors to the domain of private capital accumulation – that is, the primary and secondary circuits of capital. This process of redirecting capital flows also includes intermediate forms such as public-private partnerships

and the direct involvement of private capital in the public sector's infrastructural investment projects.

Switching capital flows into the tertiary circuit is suitable for expanding forms of investment that are indirectly productive in terms of expanding the basis for the production of surplus value. Investment in science and technology in particular helps to generate new scientific and technological knowledge that can be applied to expand capital accumulation. In the realm of the tertiary circuit, the development of science and technology is assigned to public higher education and research establishments. However, these establishments are for the most part engaged with basic scientific research (on which the more application-oriented research activities can draw), and they represent only one significant subsector of the national innovation system. Thus the tertiary circuit as conceptualized by Harvey is not the unique source of research and development which enables the expansion of capital accumulation. The national innovation system of capitalist countries basically comprises public higher education and research establishments, agencies for the transfer of knowledge and technology, as well as private research establishments in the form of private sector firms' R&D departments, or specialized private research establishments and related services that conduct knowledge creation and application-oriented technological research as a private business. A large share of investment in science and technology and related institutional arrangements is directly subject to the command of private capital. Thus research and development activities are to a large extent situated in close connection to the primary circuit of capital and can be conceived as an investment option competing with the strategy of switching capital into the secondary circuit. However, there is no reason to believe that all capitalist firms would privilege an innovation-oriented approach in their accumulation strategy. The rise of the secondary circuit of investment in financial assets and speculative deals can function as a threat to the flow of investment in productive innovation and related R&D activity. On the other hand, state-mediated investment in science and technology creates a "public innovation infrastructure" that functions as a basic component of national and regional innovation systems. The creative and innovative capacities of private sector R&D establishments can be enhanced through inter-firm cooperation and cooperation with public sector research establishments in a national and regional innovation system (see Chapter 3).

Harvey's basic conceptualization of capital circuits entails the sectoral and geographical switching of capital flows which imply the unfolding of imbalances and various crises. We can distinguish partial crises affecting a particular sector or geographical region that can potentially be resolved within that sector or region by reorganization, upgrading, and institutional reforms. Second, there are global crises that affect all sectors and regions of the capitalist production system. The current world economic crisis – which

was triggered within the secondary circuit of capital by new financial sector accumulation strategies, and spread out to the real economy sectors – is a striking example. Interestingly, the large-scale “bail out” of financial sector firms entails the channeling of future tax income from the tertiary to the secondary circuit. Third, there are sectoral and geographical “switching crises” which stem from the massive relocation of capital from one sphere or geographical location to another. Switching crises involve a major redirection of capital flows. This dynamic can be related to Schumpeter’s theory of economic development (Schumpeter 1952), which emphasizes the role of technological change. The process of technological change predominantly includes a sequence of incremental innovations at the level of capitalist firms. However, with regard to “long waves” of technological development, the capitalist economy periodically creates “basic innovations” in terms of new technologies that are becoming essential drivers of technological and organizational change in all subsectors of the economy (such as, at the present time, the new information technologies) and lead to the emergence of new industries. The reallocation of capital into emerging new industries involves a restructuring of the economy’s sectoral mix, which can lead to the downgrading and decline of more traditional industrial subsectors. At the level of the urban and regional system, basic innovations and the rise of new industries can trigger geographical switching crises. Besides strategies of accumulation that are not directly related to basic technological innovations and that focus on the spatial extension of production networks, offshoring of jobs, and improvements of the functional spatial division of labor (see Henderson *et al.* 2002; Dicken 2007) – thereby contributing to the decline of regional centers of traditional industries – the rise of new industries implies the shifting of capital flows to the emerging centers of these new industries. This dynamic can be regarded as a specific articulation of capital’s sustained search for “the command over and the creation of favourable locations” (Harvey 1989: 29). The active creation of new favorable locations that are essentially based on collective economies of scale through the agglomeration and clustering of activities in specific urban and regional centers is the main subject of Storper and Walker’s “theory of geographical industrialization.” Storper and Walker (1989) presented a political economy approach to regional development theory that starts from the capitalist imperative of technological change and emphasizes the dynamic of localization and clustering of new industries in cities and regions outside the long-established regional centers of foregoing phases of industrial and technological development. A major finding of this theory of the capitalist dynamic of geographical industrialization is the point that (new) “industries produce regions” through the active creation of locational advantages inherent to the processes of regional clustering (such as sector-related infrastructures, inter-firm networks, a specific knowledge base, and a specialized skilled

labor pool). Harvey, too, referred to the role of specific regional economic mechanisms in the creation of favorable locations by saying that capitalist firms seek “to manage their own positive externality effects and to capture the benefits of the urban synergism which they consciously help to promote” (Harvey 1989: 137). Hence the search for surplus profits through technological innovation is not independent of the creation of locational advantages.

Throughout the historical development of capitalism, the city functioned as a centerpiece of accumulation and surplus production. Yet within the urban system, the pathways of accumulation and technological innovation varied from one city to another, and interurban competition further increased the pressures toward innovation and technological change. As competitive economic units within the geographical division of labor, cities rely on “systemic competitiveness” which is based on the sectoral mix and the socially produced collective assets that enhance innovative capacities of the urban economy. Thus in the field of technological change, it is not only individual firms that are competing, but more specifically urban and regional “innovation systems” comprising a diversity of actors and their relational fabric. The individual firms’ competitive capacities are to a certain degree dependent on their interaction with the local and regional environment. In Harvey’s theory, interurban competition is one important determinant in capitalism’s evolution and fundamental to its uneven geographical development. At the urban scale, the search for profitable production possibilities and excess profits under conditions of heightened competition between firms and urban regions triggers shifts in the fortunes of individual cities in terms of the rise or decline of particular urban economies.

It is important to note that there are different pathways to urban competitiveness in capitalist societies. Besides an innovation-oriented path that focuses on the development of innovative capabilities (in diverse subsectors of an urban economy), the space economy of capitalism offers – at least for a number of major urban regions – the option to rely on economic command and control relations for attaining superior competitiveness in the urban system. This pathway is based on the concentration of capital and large firms’ headquarters that are able to exploit spatially dispersed external production sites and attract inward flows of value-added from other urban regions. The command and control functions are regularly supplemented by a local concentration of advanced producer services (see Sassen 1991). Based on the interaction between these functions, metropolitan complexes of “strategic business activities” have developed which concentrate on the gains from controlling and managing supra-regional and global production networks in the spheres of manufacturing and producer services. The economic strength and competitive power of urban regions thus may stem from quite different sources, including different functional and sectoral structures as well as different development paths. We have to keep in mind

that the unfolding of creativity and innovation activity represents a particular strategic asset in the framework of increasing interurban competition. According to Harvey (1989), in the present phase of capitalist development interurban competition takes on three forms of competition: for command and control functions, competition within the spatial division of labor, and competition within the spatial division of consumption.

The competition for command and control functions, as mentioned before, represents a strategic option that is particularly widespread among the established metropolitan centers of the urban system. This pathway might be supplemented, however, by efforts to enhance the respective urban regions' position within the spatial division of consumption. The extension of high-rank cultural amenities and the fostering of gentrification projects (in a broad sense) – which include many different forms of “upgrading” of the urban built environment according to the preferences of affluent citizens and functional elites of capitalist society – would be functional to the competition for command and control functions.

The urban regions' competition within the spatial division of labor can focus either on the “upgrading” of the urban economy's sectoral mix or on the strengthening of innovative capacities within the established industrial sectors. Strategies for upgrading the sectoral mix concentrate on expanding the urban region's share of firms and employment in prominent growth sectors of the respective period. In contemporary times, the high-tech manufacturing sectors play a prominent role. More recently, the perspective has widened to include a larger variety of “knowledge-intensive industries” (including the so-called “creative industries”) among the most promising growth sectors. By contrast, strategies for strengthening the innovative capacities of the urban economy can be geared toward any established industrial sector of the respective city. The focus of this approach would be the institutionalization and improvement of an urban or regional innovation system that links the relevant industries' firms, the urban region's research establishments, and further supportive institutions in order to strengthen the innovation-related environment for private sector firms' enhanced surplus production and market success.

On the level of capitalist firms, the capacity to develop and apply superior technologies and products as well as organizational forms yields surplus profits (based on “relative surplus value”) and opens up comparatively good economic development prospects. However, the impact of a firm's innovation activities on employment is ambivalent: product innovation can result in job growth due to increased turnover and market share.

Organizational innovation can either be a component of intra-firm rationalization strategies or a component of the firm's spatial strategies, such as the supra-regional or global expansion of a firm's organizational network. Process innovation regularly implies shrinking employment figures related to

a shift to superior processing technologies that entail the rationalization of intra-firm work processes. With regard to urban labor markets, the loss of jobs resulting from rationalization measures at the intra-firm level represents the downside of technological change. Nevertheless, according to Harvey, “a shift to superior technology and organization helps particular industries within an urban region survive in the face of sharpening competition” (Harvey 1989: 45). Therefore, the role of creativity and innovation in urban economic development might be generally characterized by saying that creative work which leads to technological innovation is functional to the interurban competition within the spatial division of labor. On the other hand, creative work that results in artistic innovation (in terms of the variation or creation of novel forms of cultural products) might *additionally* be functional to the interurban competition within the spatial division of consumption (see below). Cities that develop strong technological innovation capacities might attain a comparatively privileged position within the spatial division of labor as centers of technological innovation – in contrast to cities which predominantly perform “executive” manufacturing functions, or in contrast to declining cities with abandoned industrial activity.

According to Harvey (1989: 21), the spatial division of consumption is as important to the urban process as is the spatial division of labor. The economic development, internal organization, and specific urban qualities of cities such as Paris, Milan, New York, and other cities could not be understood without considering their role as places of consumption. The notion of the urban regions’ competition within the spatial division of consumption refers to the qualities of the living environment (in a broad sense) that a city offers, particularly with regard to the more affluent strata of the population and the functional elites of capitalist society. These people possess a greater mobility (in terms of their ability to voluntarily relocate their place of residence) as compared to the working class and the urban poor. Interurban competition for circulating “consumer funds” is directed toward attracting affluent new citizens to the city, as well as cultural tourists, conference tourists, and so on. The competitive strategy in this realm is based on the extension of attractive shopping malls, cultural facilities, entertainment quarters, the insertion of signature architecture, the upgrading of built environments particularly in the inner city areas (as a precondition or supply-side component of gentrification projects), and the provision of high-quality “green” environments and leisure facilities. With regard to the role of the cultural economy sector, the positioning of an urban region as a center of cultural economy activities functions as a relevant ingredient of urban competitiveness within the spatial division of consumption (besides its role in the urban economy’s industrial mix and its contribution to employment opportunities). A vital and expanding cultural economy sector, in combination with the development of diverse cultural facilities, contributes to a city’s

appearance as attractive, exciting, and creative in the realms of lifestyle, culture, and fashion. Hence cities that qualify as centers of cultural production activity might improve their competitive position by appropriating additional shares of circulating revenues (e.g., in the sphere of cultural tourism) and attracting affluent new inhabitants.

The close interrelation between the cultural economy's potential contribution to the development of the urban economy in terms of employment, new business formation, etc., and its specific role in strengthening the city's "consumerist attractiveness" is at the heart of the contemporary rise of urban growth strategies that focus on the so-called "creative industries." Furthermore, there might be an interplay between the role of cities as centers for cultural innovation and conspicuous consumption and their role as workshops for advanced industrial production and technological innovation. However, we have to keep in mind that the formation of urban innovation centers needs a whole range of specific inputs beyond a mere "amenity based" local attraction and concentration of high-skilled or technologically creative workers (see Chapters 2 and 3).

Those urban regions that achieve a superior competitive position will survive, at least temporarily, better than those that do not (see Harvey 1989). With regard to a city's industrial sectors, a superior competitive position (temporarily) fuels growth in distinct subsectors of the urban economy and thus benefits the private sector firms located in the city as well as employment in the city's competitive sectors. Hence particular fractions of the local workforce might be facing expanding job opportunities and a temporary relief from the threat of local decline and shrinking of particular industries (related to sectoral or geographic switching crises; see above). The quality of workplaces in these growth sectors, however, might be polarized and partially downgraded (due to flexibilization and precarization of employment relations; see Peck 1996). In sum, Harvey's contribution to critical urban theory stresses the point that interurban competition in its diverse forms is fundamental to uneven development in the urban system of capitalism. Creative work that leads to technological innovation is functional to the interurban competition within the spatial division of labor, whereas creative work that results in artistic innovation additionally enhances a city's positioning with regard to the interurban competition within the spatial division of consumption.

Conclusion

This chapter has offered a basic contextualization of the issues of creativity and innovation in terms of outlining the capitalist imperative of innovation. The prevalent trend to decontextualize the issues of creativity and innovation

from basic features of the historical social formation in which these capacities are developing has fostered the emergence and spread of new urban and regional growth ideologies that entail a glorification of capitalism as a socioeconomic formation essentially based on knowledge creation and superior innovative capacities. In such conceptions, the primary motives and the partially destructive powers of certain innovation activities that are developing under the command of capital are widely neglected. The chapter drew on Harvey's theory of capitalist urbanization, wherein the capitalist imperative of accumulation subordinates creative work and innovation activity to the continued race for competitive advantage and the appropriation of surplus profits. We presented a short review of generalizing models of urban economic development that intended to grasp the respective period's prime "motors" of urban economic growth. The rise of new economic subsectors that are strongly based on knowledge-intensive work and continued innovation activity has contributed to a resurgence of urban economies as strategic activity nodes in global capitalism. We proceeded to a discussion of Harvey's approach to urban theory, in which the spatial configurations of capitalism are basically regarded as an expression of capital flows that can switch their sectoral and geographical directions and imply the unfolding of various crises. I have suggested some modifications of the conceptualization of a secondary and tertiary circuit of capital and emphasized the advanced "decoupling" of the secondary from the primary circuit which has led to the rise of a finance-dominated regime of accumulation. In this model of capitalist development, the capitalist imperative to enhance capital accumulation through technological and organizational innovation in the sphere of manufacturing processes is increasingly subject to competing strategic choices – investment in real sector innovation and technological change is no longer functioning as the major pathway to increased capital accumulation, since financial sector deals and speculative financial investment activities can take on the role of an equally relevant or even superior strategy. While technological innovation and the related processes of knowledge creation remain significant sources of competitive advantage and surplus profits, the capitalist economy today can privilege different pathways and investment options that comply with the imperatives of capital accumulation. On the level of cities and regions, too, there are different pathways to "economic success" in terms of enhanced capital accumulation. Besides an innovation-oriented path that focuses on the development of innovative capabilities, the space economy of capitalism offers the option to rely on economic command and control relations for attaining superior competitiveness in the urban system. With regard to Harvey's conceptualization of the urban region as a competitive economic and geopolitical unit within the geographical division of labor, three basic strategic options of interurban competition were examined in order to contextualize the role of

creative and innovative capacities in urban development. The unfolding of creativity and innovation activity represents a *particular* strategic option in the framework of increasing interurban competition.

Altogether, Harvey's theory emphasizes the embedding of creativity and innovation in the dynamic of capitalist development. However, the theory does not offer an account of the specific economic-geographical mechanisms that are at work in the formation of urban centers of creative and innovative activity. We need to proceed from the basic contextualization toward a more detailed account of creativity and innovation that employs relevant concepts of economic geography in order to investigate the development of creative and innovative capacities in their *specific* sectoral and regional/local contexts. This extended and detailed analysis represents the book's distinctive contribution to the "critical urban theory" literature discussed above. Yet Harvey's conceptualization of capitalist urbanization provides a comprehensive framework for our reasoning throughout the following chapters.

On a most general level of abstraction, creative work is characterized by a novel "composition" of ingredients such as specific knowledge and know-how. Since this kind of work is always embedded in different sectoral and spatial contexts, a variety of different "worlds of creativity" have emerged, which may coexist in the same local space and even interact with each other. Particularly within the urban space, we can detect different "worlds of creativity" and local innovation systems that are related to specific subsectors of economic activity. This level of analysis will be the subject of Chapters 3, 4, and 5. The next chapter will focus on the deconstruction of the new "creative city" growth ideology.