3. Accumulation, Regulation, Networks

3.1 Introduction

The goal of this study is to investigate the operation of networks of aesthetic production in urban environments and the ways in which and to what extent these networks can be understood as structured by the broader accumulation regime and mode of regulation. The previous chapter developed a critical realist methodology that can come to grips with stratification and emergence. This chapter develops the more substantive theoretical sociological framework necessary to understand the role of creative networks in relation to urban socio-spatial change.

Section 3.2 presents the main regulation theoretical concepts through a compact analysis of the development of regulation theory, its overlap with other theoretical approaches and its main strengths as well as weaknesses. Particular attention will be paid to the spatiality of regulation. Section 3.3 argues that there is a need to continue the regulationist concern with the stratification of reality, but to simultaneously broaden and diversify the notion of networks as adopted by regulationists in order to gain a more complex grasp of the emergent dynamics of networks of aesthetic production. It does so by discussing a variety of network theories in order to illustrate the ways in which these theories go beyond the more limited understanding of networks in the regulation approach. Section 3.4 concretizes these theoretical reflections with reference to accumulation and regulation in the case of London and Berlin as well as the main characteristics of the analyzed music networks. The following empirical chapters will build on these contextual data and add more detailed empirical as well as theoretical analyses, where necessary.

3.2 Accumulation and Regulation

Contrary to what textbooks often claim through their self-imposed brevity, theories are and have never been unitary and self-sufficient frames (that can be compared one-to-one with one another), but

always assemblages comprised of various elements – immanent to the proposed theory as well as derived from other theories; and with acknowledged as well as hidden influences. Regulation theory is no different in this respect. First of all, regulation theory has a heterogeneous origin. It builds on earlier theoretical developments in the work of, among others, Karl Marx and Friedrich Engels, but also Adam Smith, Friedrich List, Werner Sombart, Max Weber (Becker 2002, 23-60), nineteenth-century German historicism and early twentieth-century American institutional economy (Basle 2002, 21-27) as well as structural Marxism — with Alain Lipietz describing himself and other regulationists as 'the rebels sons' of Louis Althusser (Jenson, 1987).[1] Second, it has developed from the very beginning a number of overlapping research strands. Jessop (1990a) even goes so far as to identify seven regulationist schools, including: the Boccarien approach developed by Paul Boccara (1973), chief economist of the French communist party; the work by the *Groupe de Recherche sur la Régulation d'Économies Capitalistes* (GRREC) in Grenoble (de Bernis 1983); the well-known and influential Parisian school (Lipietz 1987; Boyer 1990; Aglietta 1979); the West German state-theoretical approach (Hirsch and Roth 1986); the Amsterdam School (van der Pijl 1984; Overbeek 1993); the Nordic economic policy models school (Mjøset 1987); and the social structure of accumulation (SSA) approach developed in North America (Gordon *et al.* 1982; Bowles and Gintis 1987). Many authors have therefore argued that it is better to speak not of regulation theory as a theory, but instead as an approach (Goodwin 2001, 71-72) or a research program (Boyer 2002b, 13). As long as it is clear that we are not talking about a unified body of thought, I have no particular preference for either of these terms and in this text I will alternate for stylistic reasons these terms in order to refer to this theoretical complex. I will largely draw upon the influential Parisian school of regulation theory and, above all, its subsequent development in Anglo-American research, since it is this latter tradition

1 At the same time, in this same interview with Jenson, Lipietz emphasizes that the regulationists could also be seen as the rebel sons of Massé – the commissioner general responsible for the formulation and implementation of the French National Plan (*Commissariat general du Plan*) from 1959 to 1966 – since most of the early regulationists were trained as polytechnicians and worked in the institutions in charge of implementing the Fordist economic model in France after World War II. This institutional policy orientation perhaps explains, to an extent, the differences between regulation theory and the more radical strands of post-Althusserian Marxist theory, such as (post-)operaismo (discussed in chapter six) and, more broader, post-Marxism.

that has paid most attention to the meso-level of institutions as well as urban and regional change.

One main starting point for all regulation theories is their rejection of the assumptions of neo-classical economics — or the "asocial disposition of general equilibrium economics", as Gordon MacLeod (1997, 531) describes it. The economy is conceptualized not as a sphere separate from broader social relations that can be analyzed by focusing on exchange relations in a world of perfect markets populated by economically maximizing rational individuals; instead, it emphasizes the openness of the capital relation and the need to socially and institutionally stabilize its reproduction. In order to analyze these stabilizing mechanisms, the regulation approach has developed a range of concepts at various levels of abstraction, the following of which are central to the theoretical framework of my argument.

3.2.1 Accumulation Regime and Mode of Regulation

According to regulation theory, capitalism is best analyzed not as a transhistorical reality, but as an historical phenomenon that exhibits its dominant patterns of production and consumption within certain eras and areas (more on this spatial dimension below). Thus, regulationists do follow Marx and his law of value in arguing that capitalism is inherently accumulative and driven by profit and competition[2], but they also point out that each historical era is characterized by a particular accumulation regime, which refers to a complementary pattern of production and consumption that remains stable for an extended period of time. The most-cited example — and the one that has received the most attention by the Parisian regulationists — is the accumulation regime of Fordism, characterized by mass production and mass consumption (Aglietta 1979). The accumulation regime needs to be understood as a macroeconomic concept, since it focuses on the dominant regularities of accumulation within a particular space (in the case of the Parisian regulationists, the national state), relegating other forms of accumulation to a subordinated location within this space. As a result of this conceptualization, at this point of analysis we are already dealing with three interrelated temporalities: first, the *longue durée* of capitalism as such, dominated by the value form; second, the medium-term temporality of a particular accumulation regime characterized by dominant patterns of production and consumption; and

2 This applies at least to the Marxist strand within regulation theory. Others, most importantly Boyer (e.g. Hollingsworth and Boyer 1999), have increasingly moved away from this Marxist tradition and now use a much more eclectic framework.

third, the short-term temporalities of subordinated and alternative forms of accumulation.[3] Subsequent studies have also shown, however, the difficulties of subsuming the different path dependencies and economic specificities of particular states under one category of Fordism. A partial solution has been to argue that each country exhibits particular versions of the ideal-type of Fordism, such as flexi-Fordism in Germany or obstructed Fordism in the United Kingdom (Boyer 1986). Irrespective of these variations, however, core dimensions of Fordism are: a system of work organization dividing labor into separate tasks, the mechanization of production processes and a separation between production and conception; an institutionalized share of productivity gains with employees (often called a national bargain or social contract); and mass production in economies of scale with processes of adjusting production and demand taking place primarily within one country (Boyer 2002c, 232-233). It is important to emphasize that describing an economic space and historical era as Fordist does not mean, as Jessop (2002a, 56) points out, that "every branch of the economy must be dominated by Fordist production techniques for this mode of growth to be realized: it is sufficient that the leading sectors are Fordist". Fordism, as such, is always only partial and emergent and other non-Fordist production processes can and did exist. Being a macroeconomic concept, Fordism refers to the dominant and not the marginal patterns of production.

This stability of the accumulation regime, however, is only possible through the support of a large number of rules, social norms, institutions, laws and policies, collectively referred to as the mode of regulation. The mode of regulation, according to regulation theory, "ensures the unity, regularization and normalization of the accumulation process" (MacLeod 1997, 532). As Robert Boyer (2002a, 1) points out, this attention to regulation is not to be confused with the more limited focus implied by the English term 'regulation'. Whereas the English term (which would be translated into French as '*réglementation*') refers to a more microeconomic approach concerned with improving the administrative governance of economic processes, the French term *régulation* is much more encompassing, referring to the regulation of the economic and extra-economic dimensions needed to stabilize particular accumulation regimes.

3 Actually, it is by no means certain if these subordinated forms of accumulation need to be short-term. It might very well be possible that alternative forms of accumulation exist for an extended period of time — even surviving a particular accumulation regime — by operating in a societal niche. It is important to recognize that an accumulation regime is never complete, but always tendential and, as such, is always confronted with the limits of its reach due to institutional, functional and spatial differentiation.

Thus, building on the work of Marx, Michel Aglietta understands regulation as the processing and moderation of social relations in order to contain the inherent contradictions of capital, focusing in particular on wage labor, competition and money as the "structural forms" of regulation, although he simultaneously emphasizes the role of institutions in mediating these structural forms (1997, 44 qtd. in Becker 2002, 80-81). Boyer (1990, 37-48) identifies five key institutional forms: 1) monetary and credit relationships; 2) the wage-labor nexus; 3) competition between businesses and markets; 4) forms of state intervention; and 5) the mode of articulation with the international regime.

Social stability — or, the suppression of conflict, since regulation theory operates with the assumption that conflict is central to capitalist social relations — is achieved in those moments where these structural and institutional forms intermesh so that stable accumulation-regulation couplings emerge (Becker 2002, 89). It is in these moments only that one can talk about a relatively stable model of development (Jessop 1990b).

3.2.2 Post-Fordist Accumulation and the Complexity of Regulation

As history has shown, stable modes of development are prone to crisis and it is by no means certain that a successful coupling of accumulation and regulation occurs. Following this line of thought, one of the central arguments of regulation theory is that the Fordist accumulation regime coupled with a Keynesian/welfare mode of regulation underwent a destabilizing structural crisis in the 1970s. Although the causes of this crisis are complex and contested, most regulationist authors emphasize the following aspects. Economically, the increasing saturation of economies of scale within the respective national spaces led firms to develop stronger extraverted forms of accumulation, expanding into foreign markets. This undermined the state-centeredness of the Fordist-Keynesian regime and increased the dependence of firms on foreign credit, finance capital as well as oil supplies, since further economic expansion was literally fuelled by continuing access to affordable oil. The oil crises in 1973 and 1979 questioned this precarious balance. At the same time, the increasing bargaining power and militancy of labor and the consolidation of the welfare state produced a limit to increased capital accumulation 'at home' and offered a rationale for transnational firms to relocate their activities to other countries. Politically, the welfare state was confronted with high expenditures on social welfare benefits due to increasing unemployment in a period in which firm revenues in the home market decreased, the-

reby complicating and reducing capital's contribution to state revenues.

The reality as well as discursive articulation of economic crisis has since been matched by both economic and political developments to escape this crisis. Confronted with declining revenues in the home market, firms started increasing not only their activities abroad, they also increasingly moved away from an accumulation strategy based on mass production and consumption to one based on differentiation, niche markets and flexible production — in other words, from economies of scale to economies of scope. Politically, this led to a stronger interest in supply-side policies that were seen to create incentives for firms to produce goods and services for global markets. Wages were now no longer seen as a source of domestic demand, but instead as a cost of production, which caused a strong downward pressure on wage levels. Similarly, the state in the 1970s and 1980s engaged in a host of neoliberal policy shifts aimed at the reduction of welfare spending in order to improve the competitive position of the state within global flows of capital.[4] This is the process described by Jamie Peck and Adam Tickell as 'roll-back neoliberalism' (2003). Most regulationist authors would argue that this process of economic and state restructuring is by no means completed and that current political and economic shifts need to be understood above all as attempts to develop a new and stable accumulation-regulation coupling (Leborgne and Lipietz 1992; Peck and Tickell 1994). I also subscribe to this skeptical view and my later analysis of networks of aesthetic production within the broader regulatory context of the creative industries will show the extent to which regulation as well as accumulation is problematized.

Emphasizing the constructed as well as precarious nature of these developments — contra explanations that posit a necessary and/or completed shift from Fordism to post-Fordism — Jessop (1990a) distinguishes between state projects and state strategies in order to develop a more conceptual understanding of these regulatory attempts. Specifying his strategic-relational approach (as discussed in 3.3.3), he describes accumulation and regulation as a process in and through which both capitalism and the state (i.e. the value form and the political form) institutionalize and reproduce

4 The above paragraphs summarize and rely on a voluminous amount of literature on the crisis of Fordism and attempts to move beyond Fordism, including, for example: O'Connor (1973); Offe (1984); Hirsch and Roth (1986); Marglin and Schor (1990); Huber and Stephens (2001); Jessop (2002a); Koch (2006).

themselves.[5] On the one hand, state strategies refer to initiatives that mobilize state institutions towards specific forms of socio-economic intervention. Although Jessop does not theoretically prejudge the precise function of these interventions — as part of his larger argument on the need to understand the state as strategically (and not structurally) selective — in actual research, he does focus on those state strategies that contribute to the reproduction of capital and the emergence and regulation of particular accumulation regimes. The object of these strategies is society and the goal is to promote particular forms of economic development through the establishment of hegemonic projects. Over the last decade, Jessop has increasingly focused on those state strategies involved in the promotion of the KBE.[6] The KBE is a highly heterogeneous notion, but one that has acquired the status of a "master economic narrative" playing a "key role in guiding and reinforcing activities that may consolidate a relatively stable post-Fordist accumulation regime and its mode of regulation" (2004c, 154). From this perspective, the promotion and institutional implementation of economically relevant knowledge — signified through the popularity of terms such as the creative industries, tacit knowledge, human capital, information and communication technologies, intellectual property rights, knowledge society, information age, lifelong learning, etc. — becomes the key focus of state strategies. State projects, on the other hand, are oriented towards the institutional structure of the state with the aim to endow it with a degree of internal unity and organizational coherence. States are by no means automatically coherent or simply functional to the requirements of capital; instead, they consist of a wide variety of institutions with different rationales and orientations. The guiding narrative of the KBE offers a way to 'synchronize' these institutions by shifting their orientations towards a concern with the economic development of knowledge, creativity and information. The discourse on the creative industries exemplifies this shift, since it has partially managed to subordinate cultural and social policies (and the related state institutions) to the mantra of economic development by almost fully conflating these terms and interpreting them through the lens of the KBE.

This process, however, is by no means complete nor is it certain that it will be successful. First of all, the state is confronted with conflicting accumulation strategies of various capital fractions ne-

5 Also see chapter five in which I further discuss the value form and political form as well as Jessop's notion of strategic selectivity in order to come to grips with the role of communication in this process.

6 See: Jessop and Sum (2001; 2006); Jessop (2004a; 2004c); and Jessop and Oosterlynck (2007).

cessitating diverse modes of regulation (Jessop 2000; Overbeek 2004). Although the KBE is used as a meta-narrative, the institutional specificities hiding behind this term are extraordinarily diverse and difficult to capture with one type of regulation only. Second, the shift away from Fordism has intensified this conflictual dynamic, since the A-R coupling can now no longer be easily fixed on one dominant scale (in contrast to the dominance of the national scale under Fordism). Although the literature on re-scaling has addressed this issue (e.g. Brenner 1999b; MacLeod and Goodwin 1999), it remains uncertain to what extent this re-scaling exercise of the state can match the re-scaling and mobility of the different forms of capital. Whereas during Fordism one could argue that there was a considerable overlap between the territorial and interaction spaces of regulation and the interaction spaces of accumulation, this is no longer the case (Becker 2002: 166; 266). And third, this also applies to the temporality of the accumulation-regulation coupling. It is very well possible that the duration of particular accumulation strategies and certain characteristics of regulation are not identical, leading to a "temporal phase shift" (Becker 2002: 201). Patrick le Galès comes to similar conclusions and relates these developments to the increased importance of networks: "[…] the proliferation of networks is leading to the disappearance of the traditional conception of the boundary. The coincidence of social, political, economic and cultural structures is coming to an end, and this is opening the way for the logic of deterritorialization of networks and of actors on the one hand […] and of reterritorialization on the other hand" (1998: 500). I will analyze this role of networks in section 3.3 below.

3.2.3 Meso-Level Investigations and Theoretical Intersections

For now, I want to continue my analysis of the regulation approach by describing the intersection of regulationist accounts on meso-levels of abstraction with other accounts of socio-spatial change. The acknowledgement of the emergent nature of the post-Fordist accumulation regime and associated mode of regulation has contributed to a shift in regulationist research away from macro-level theorizations of the capitalist political economy towards more meso-level investigations into the institutional dynamics of capitalist and state restructuring. This has led to increased interaction between the regulation approach and other theoretical strands within a variety of (sub-)disciplines, demonstrating the value of and need for transdisciplinary research (as discussed in 2.4) in order to come to grips with the complexity of current transformations. The following theoretical literatures have proved influential in this regard:

First of all, economic geographers in particular have analyzed subnational (i.e. urban and regional) spaces of production, characterized by flexible accumulation, vertical disintegration and a mixture of formal and informal labor markets. Examples of such regional economies always referenced include Silicon Valley and 'the third Italy' (Piore and Sabel 1984; Scott 1988; Schoenberger 1988; Saxenian 1994). Drawing eclectically on a variety of intellectual sources — including regulation theory, but also Alfred Marshall's (1890) account of industrial districts, Ronald Coase's (1937) and Oliver E. Williamson's (1985) transaction costs theory, innovation theory (Lundvall 1992) as well as economic sociology (Granovetter and Swedberg 1992) — authors have argued that regional economies can realize place-specific economic advantages by drawing on local networks of trust, cooperation and interaction. The research on creative clusters, analyzed in chapter four, can be seen as a more recent development in this strand of literature. Although one has to acknowledge the heterogeneity of this literature, there is a strong sense in which it overemphasizes transaction costs (MacLeod 1997: 538-539) as well as the role of cultural and social 'assets' in contributing (instead of inhibiting) economic development. Also, and in contrast to at least the more recent developments in regulation theory, research on flexible accumulation and spatial agglomeration tends to downplay the role of the state and particular modes of regulation that affect these local economies (the focus is, as Ash Amin (1994, 14) puts it, "on the arena of production").

Research on governance — the second strand of literature interacting with regulation theories — has proven to be more sensitive to questions of political regulation. Nevertheless, Boyer's (2002a, 1) point discussed above becomes relevant here: the mainstream literature on governance largely concerns itself with improving the administrative steering of economic processes and by no means reaches the critical breadth and depth of regulation theory, focusing instead largely on policy development and execution. Particularly in the UK, a normative model of urban governance has emerged in which efficient interaction between state institutions, local communities and businesses is presented as desirable (Leach and Smith 2001). In the context of the creative industries, emphasis is put on the importance both of social cohesion (mediated through communities and social capital) and economic development (achieved through cultural production). This policy-friendly discourse on governance and the management of the creative industries has certainly globalized, although it is always inflected in ways sensitive to local socio-spatial particularities. Theoretically, however, there is no need for research on governance to be dominated by this normative model and one can point to similarities between regulation

theoretical accounts of local regulation and analyses of governance. Thus, according to Jon Pierre, the "governance perspective on urban politics directs the observer to look beyond the institutions of the local state and to search for processes and mechanisms through which significant and resource-full actors coordinate their actions and resources in the pursuit of collectively defined objectives" (2005, 452). This approach is similar to the regulationist analysis of the economy in its inclusive sense, even though regulationists are more sensitive to questions of power by connecting such an analysis to neo-Gramscian discussions on the construction of hegemony. Also, both regulation and governance theories can be understood as reactions against earlier theoretical positions. Where the regulation approach defined itself against neo-classical equilibrium theories and its asocial conception of the market, researchers of governance have argued for the need to move beyond static conceptions of the market, hierarchy, the state and civil society towards an analysis of economic practices that are much more hybrid (Jessop and Sum 2006, 248-250). In this context as well, the notion of network is often used to refer to these hybrid forms of economic coordination, encompassing public-private partnerships, relations of trust, spaces of dialogue and multi-level and multi-sector interaction.[7] Parallel to the Marxist regulationist research that tends to analyze these policy networks as expressions of a neoliberal agenda (e.g. Leitner and Sheppard 2003), the governance literature is often quite critical – the difference being that its critique is usually formulated in liberal terms, with concern focusing on the lack of democratic accountability of these networks (e.g. Sørensen and Torfing 2005; Bogason and Musso 2006; Hirst 2000; Loader 2000). In directing, however, the analytical lens towards questions of interaction and communication, governance research has come much closer than regulation theory to an understanding of the role of discourses and practices in constructing particular modes of regulation (Hay and Richards 2000). It is also this meso-focus that has enabled a dialogue between governance debates and research within the disciplines of cultural studies and media and communication studies (in which, after all, most of the research on cultural production, including popular music, takes place) (Levy and Spiller 1996; Hale 2002; Kendall and Wickham 2001, Ch. 2).

7 This actually points to a debate among governance (as well as flexible accumulation) researchers concerning the discreteness of networks. Some argue that the network constitutes a discrete form of regulation, different from markets and hierarchies (see, for example, Powell 1990). Others, however, argue that networks are hybrids of multiple regulatory forms (see, for example, Williamson 1985). My analysis broadly follows this hybridity argument.

The Foucauldian research on governmentality is a third theoretical strand and one that moves beyond the institutional focus of governance research as well as the macro-analyses of regulation theory. Although Michel Foucault rejected, in contrast to regulation theorists, abstract theorizations on the form of capital or the state and favored detailed and bottom-up studies of discourses, subjects and power, he did connect these data to broader social relations by referring, for example, to such concepts as state apparatus, biopolitical power and neoliberalism. On a meso-level of research, therefore, it seems defensible to use Foucauldian analyses of governmentality in combination with a critical realist and regulationist argument, even though my critical realist approach substantially diverges from Foucault's ontological assumptions. As Thomas Lemke points out most clearly, "the concept of governmentality demonstrates Foucault's working hypothesis on the reciprocal constitution of power techniques and forms of knowledge". There are two sides to this concept. On the one hand, it refers to a specific form of representation with governments establishing "a discursive field in which exercising power is 'rationalized'." We are dealing here with a question of problematization: through the definition of concepts (say, 'creativity') and the provision of arguments, governments enable a problem to emerge by offering certain strategies to solve the problem. On the other hand, governmentality also refers to specific forms of intervention. Having established a discursive field in which certain problems are thematized, governments can now develop political technologies — bureaucratic procedures, agencies, institutions, legal forms, etc. — "that are intended to enable us to govern the objects and subjects of a political rationality" (2001, 191). Developing this theoretical perspective, much important work has since been done on analyzing the emergence of entrepreneurial subjectivities within neoliberalism. Various authors have argued that we are not so much witnessing a simple retreat of the state as the active promotion by the state, through political rationalities and techniques, of citizens as self-responsible, self-governing, individualized and flexible actors.[8] This parallels and complements the regulation theoretical concern with the shift from welfare to workfare (Peck 1996) by offering a much more detailed analysis of particular discourses and subject positions. There are, however, a number of problems with governmentality research that need to be

8 This argument has been made in relation to a wide variety of fields, including: counseling (Bondi 2005); education (Mitchell 2006); border control (Sparke 2006); religion (Gökariksel and Mitchell 2005); health care (Prince *et al.* 2006); the environment (Oels 2005); and, important in this context, labor (Marsden 1998; Manning 1999; Yurchak 2002; Chet 2004; Oglesby 2004; Hoffman 2006).

recognized. Above all, and despite the fact that Foucault understood "discourse as social structure and discursive practice as social practice" (Diaz-Bone *et al.* 2007, par. 2), most governmentality research has focused on the analysis of published texts, such as policy publications or management texts (e.g. Boltanski and Chiapello 2006), thereby foregoing a more nuanced understanding of the 'messy actualities' (Larner 2000) of particular projects and institutions. This is a problem visible in regulationist research as well: despite its argument concerning the importance of materialist analyses, many authors are reluctant to engage in-depth with the collection of empirical data beyond those directly articulating with particular accumulation regimes or modes of regulation. As a result of this reluctance, both regulation and governmentality theorists acknowledge the possible limits of regulation or governance due to the failure of government programs or the resistance by social groups, but have a hard time identifying and locating these failures and resistances as processes with their own dynamics only partially connected to (and thus regulated or governed by) broader modes of regulation and governance. In short: both theories are often too totalizing.

3.2.4 Weaknesses of the Regulation Approach

This discussion of regulation theory, its shift towards meso-level research and its overlap with compatible theories has highlighted the strengths of the regulation approach, but has also addressed some of its weaknesses. Before moving on to my conceptualization of networks (that I feel will remedy certain, but certainly not all, problems), let me recapitulate the main limits of the regulation approach. Four main problems have been identified so far. First, the focus of the Parisian strand of regulation theory was on the national state: the accumulation regime as well as the mode of regulation were understood as 'fixed' on the national scale with dominant patterns of production and consumption oriented towards the national space. Although this conceptualization certainly did not deny the existence of subordinate or alternative patterns of production and consumption, the crisis of Fordism has further questioned this scalar fix, leading to a situation described in the literature as re-scaling (Brenner 1999a), scale fragmentation (Uitermark 2002), remaking scale (Smith 1995) or scale bending (Smith 2004). All in all, it has become much more difficult to identify which mode of regulation and regime of accumulation is dominant in particular spaces. A regulation approach interested in the contemporary era has to engage with these developments, but has to do so without being able to rely on the explanatory value of a clear-cut macro-

economic framework (such as Fordism). Second, this re-scaling exercise has limited the chances of creating a successful accumulation-regulation coupling that is necessary, according to regulation theory, to establish a relatively stable mode of development. This is because regulatory modes are now confronted with high levels of capital mobility, multiple and changing scalar fixes and conflicting accumulation strategies that are more intense than during Fordism. Third, regulation theory has been highly reluctant to analyze the role of discourses and practices in constructing particular modes of regulation, which has limited the extent to which regulationist analyses have been capable of engaging with discussions taking place in disciplines such as cultural studies and media and communication studies. Although an increasing number of authors try to combine regulationist theories with neo-Gramscian interpretations of hegemony (e.g. Leyshon and Tickell 1994; Kipfer and Keil 2002), the overriding methodological focus on the reproduction of capital tends to lead to an analysis that only focuses on those discursive dimensions of political, social and cultural relations that contribute to this reproduction (Purcell 2002). In other words: there is always a danger that regulation theoretical accounts rely too heavily on a selective choice of empirical data. Fourth and related to this third point, the regulation approach is sometimes too totalizing. Similar to governmentality theories, the possible limits of regulation due to the failure of government programs or the resistance by social groups are acknowledged, but they are not theorized as such. This makes it difficult for regulation theory to understand the interaction between complex social processes and broader modes of regulation and accumulation regimes. George Steinmetz – a social and cultural historian sympathetic to the project of regulation theory - has made this point most forcefully:

> The regulation approach can remain relevant for understanding conflict and change in contemporary capitalist societies only by relinquishing such totalizing ambitions. More generally, Marxism can only remain viable as a theoretical perspective if it allows its central conceptual categories, such as commodification and social class, to coexist with a range of causal mechanisms rooted in other theoretical perspectives [...]. (2006, 45)

3.3 Networks

One route towards such a more modest Marxism would be to acknowledge the formative and emergent role of networks. In the regulation approach, networks are paradoxically understood both as producing crisis — since the proliferation of networks has provoked the crisis of Fordism — and as solution to this crisis — since net-

works are seen as hybrid entities that connect states and markets, hierarchies and civil society, possibly contributing to improved accumulation and regulation. Both are important interpretations, but this understanding of networks needs to be deepened and broadened in order to come to grips with the complexity of network emergence *in relation to* regulation and accumulation. In this section, therefore, I will discuss a number of strands of network theory and highlight their main strengths and weaknesses. My concern with the relation of networks to broader modes of regulation and accumulation regimes already implies that I do not believe that network theory on its own offers a convincing analysis of current network dynamics. Nevertheless, it does offer some useful theoretical tools that can be used to enrich the regulation approach.

So what are networks? As my cursory discussion of networks within regulation theory has shown, the current fascination with networks needs to be understood as part of the breakdown of Fordism, the reshuffling of scales and the intensification of processes usually summarized under the notion of globalization. It makes no sense therefore to talk about the essence or reality of networks as such; instead, the analysis of networks is inextricable from particular socio-spatial changes and disciplinary debates. In regulation theory, networks are strangely those moments in production that are simultaneously beyond accumulation and regulation as well as formative of new accumulation regimes and modes of regulation. As we will see, similar tensions also emerge in other theoretical debates on networks.

3.3.1 Social Network Analysis

Thus, social network analysis — one important strand of network theory that has been developed since the 1950s — emerged above all as a critique of methodological individualism as exemplified by rational choice theory and mainstream economics as well as a critique of the structural functionalism of Talcott Parsons.[9] Contra methodological individualism, it stressed the fundamental relationality of individual action, rejecting all attempts to explain social processes in terms of categorical attributes of individuals. Contra structural functionalism, it emphasized that social order was not so

9 There are many publications providing a useful overview of social network analysis. See, for example: Scott (1991); Wasserman and Faust (1994); Freeman (2004); Carrington *et al.* (2005). As always, however, it is easy to identify precursors of network analysis even predating the 1950s, such as Durkheim's argument that strong interactions between individuals create an 'organic solidarity' and Simmel's understanding of the social as produced through association.

much a question of normative integration as an emergent effect of social interaction.[10] Often drawing on mathematical graph theory, analysts developed a quantitative and formal analysis of social networks in which individual or collective actors ('nodes') are linked (these linkages are often described as 'edges' or 'ties') to other actors and where it is argued that this assemblage of nodes and edges constitutes the particular social structure. One of two main research strategies tends to be used to investigate these network structures. A first strategy is to concentrate on the direct linkages between actors and, by doing so, to infer that these linkages explain the behaviors of the actors and the dynamic of the network. An acknowledgement of indirect influence between two actors is possible, but only *through* the mediation of another actor. For example: the success of a musician is dependent on the ability of distributors to distribute his or her records, but this is always mediated through the activities of the record label with which the artist is associated. This is different from the second research strategy, which analyzes not so much the relationality of actors as their positionality. This strategy has been of particular importance to the early work of Harrison White and his co-researchers (e.g. White et al., 1976; Boorman and White, 1976; Lorrain and White, 1971) and their development of the notion of structural equivalence. Structural equivalence exists in those cases where actors are in the same relationship to third parties, without necessarily being linked to each other. In effect, this broadens the research on social networks in such a way that it includes institutional and 'contextual' questions and the location of particular actors within institutions.

Both strategies have their limits. Although the positional (field) analysis avoids the assumption that contacts (ties) between actors fully explain the behavior of actors and the dynamics of networks, positional analysis still grants too much explanatory power to the analysis of network form. According to Mustafa Emirbayer and Jeff Goodwin (1994), three models have been implicit in both strategies, each with its own weaknesses. The first model they describe as structuralist determinism, which "rests analytically on a *reification* of social relations; it transforms the important *theoretical* distinction between a structure of social relations, on the one hand, and cultural formations, on the other, into an *ontological* dualism" (1427). The result is a network analysis that focuses on formal relations between actors while excluding the "potential causal significance of symbolic and discursive formations" (1436). The second model is referred to as structuralist instrumentalism. Although this model

10 Mitchell (1974), however, has argued that most network analyses differed from such a macro-structural approach only in the level of abstraction at which these operated.

does acknowledge the active and historical role of actors, it tends to operate with a reductionist model of homo economicus to explain network transformation (1428), thus "relying on unwarranted assumptions about the overriding importance to historical actors of money, status, and power" (1436). As we will see in chapter four, the cluster theoretical argument so popular in policy circles often imports a similar reductionist understanding of agency into its explanatory framework, despite its insistence that actors are socially embedded. And finally, the third model of structuralist constructionism further opens up the notion of network to questions of "identity conversion, structural channeling of learning, and flexible opportunism", pushing it beyond an economicist understanding, but still does not fully recognize "the (potentially) autonomous causal significance of cultural or political discourses in shaping the complex event sequences that it examines" (1436).

Emirbayer and Goodwin's critique is apt and points to a number of core problems with social network analysis. First of all, the attempt to map networks through an identification of nodes and ties almost by necessity leads to a "static bias" (Marsden 1990, 437) that privileges space over time and that downplays the transformative, changing and dynamic dimensions of networks. As I discussed in chapter two and will also address in chapter four, this is a problem I confronted in my own attempt to map music networks in London and Berlin. In such ephemeral and informal networks, not only is the existence of nodes temporally limited, the linkages between nodes are extraordinarily flexible and subject to constant shifts. In order to account for this problem, Eugene Thacker even goes so far as to argue that "[…] in a sense, networks do not exist. They do not exist precisely because their dynamic existence cannot be fully accounted for within the tradition of the Eulerian-Kantian network paradigm. From this perspective, networks can only be thought of within a framework that spatializes time, and yet this excludes precisely what is constitutive to most networks — their dynamic properties" (2004). Although this, in my view, pushes the argument too far — the fact that network theory cannot fully capture the complex reality to which its concepts are supposed to refer does not disqualify the theory as such (all theories are selective) — it does sensitize us to the fact that networks are themselves characterized by a dialectic of consolidation and decomposition. A second core problem with social network theories relates to the question of boundaries and the role of discourses in shaping networks. From the very beginning, social network analysts were confronted with the problem of identifying the boundaries of networks: in setting limits to the reach of the network, they had to decide on who would be in- and excluded from the network. This, in a way, is a paradoxi-

cal undertaking, since ultimately everyone is connected to everyone, but is usually pragmatically solved by relying on administratively or institutionally defined boundaries, such as school enrolment, participation in certain organizations, urban location or publication in newspapers and journals. Even this pragmatic solution, however, stills runs up against the problem that network boundaries can easily change and shift over time: actors can leave or join the network, shifting the balance of power within the network. More difficult still is the fact that relatively fluid and informal networks are not so much defined by the position of actors in relation to each other, but above all by their enactment through discourses. As Hannah Knox *et al.* (2006) have argued: "[i]n certain times and places these storied networks become institutionalized, so that, rather than discourse arising from network structures, more enduring and institutional ties can coalesce from storied networks" (129-130). Networks, in other words, emerge through their own self-description. This is true in the case of social movements — analyzed by a newer generation of social network analysis that incorporates these discursive considerations (Howard 2002; Garrido and Halavais 2003; McAdam 2003) — but it is applicable, I think, even more so to cultural production networks characterized by constantly mutating genres and aesthetic debates.

3.3.2 Inter-Urban Networks

A second strand of network theory is the research on world or global cities and the development of inter-urban networks (e.g. Friedmann and Wolff 1982; Friedmann 1986; Sassen 1991; Taylor 2004). Although the literature on cities is usually discussed in the context of a macro-structural political economy approach (and thus closely related to regulation theories), it is productive to also understand this literature as part of the shift of attention towards networks. This is because it aims to analyze the role of cities in a world characterized by the breakdown of Fordism and the rise of economic interactions not (primarily) mediated through the national scale. As such, it focuses on those moments that 'escape' the national space, while simultaneously constituting new forms of accumulation and regulation. In contrast to social network analysis, the reference framework is explicitly economic: the goal of analysis, as John Friedmann (1986) points out in his classic article, is to understand cities as a functional unit in the global spatial division of labor, as 'basing points' for global capital, as a center of control (through the concentration of business services, communications and finance institutions), as major sites for the concentration and accumulation of capital, and as important points of destination for domestic and

international migrants that contribute to the expansion of the low-paid and non-unionized workforce. This results, according to Friedmann, in a proliferation of interurban networks and an increase in world city competition. Despite differences between authors in the field of world or global city research, these basic tenets of world city theory have remained stable ever since and there are now various publications on case studies and/or comparative studies of particular cities (Sassen 1991, 2000; Massey 2007; Knox and Taylor 1995) as well as explicitly on the networks connecting these cities and structuring their activities as well as position within a global urban hierarchy (Beaverstock *et al.* 1999, 2000; Krätke and Taylor 2004). This has substantially increased our understanding of the hierarchical position of particular cities within global networks of capitalist production. At least the quantitative work on world-city networks, however, is confronted with a problem similar to the one identified in the case of social network analysis: its focus on network connections too often leads to the assumption that 'contact' is of primary importance in shaping the behavior of particular nodes. This leads to a network bias that repeats, in my view, many of the mistakes of structuralist determinism, as identified by Emirbayer and Goodwin (see above). Above all, it leads to a reification of networks that excludes those social processes that are not immanent to the network, but which might impact on the network.

3.3.3 Commodity Chains and Transnational Cultures

Other authors have also focused on networks, but have taken a more grounded and often qualitative approach to network analysis. On the one hand, this includes those researching global and transnational commodity and production networks. In effect, this research can be seen as a complement to (as well as critique of) the regulationist literature that concentrated on accumulation-regulation couplings on the national scale by emphasizing the more fluid and temporary dimensions of accumulation and regulation as they are mediated through various networks. Thus, we now have a wealth of information on global commodity chains, the role of transnational corporations and the global distribution of production (e.g. Smith and White 1992; Henderson *et al.* 2002; Gereffi *et al.* 2005; Whatmore 2002, Crang *et al.* 2003). Most of this research focuses on institutional analyses of production under the conditions of globalization and is less concerned with the interaction between these global networks and particular urban spaces. Recent research, however, has increasingly addressed this urban or regional dimension (e.g. Smith *et al.* 2002; Coe *et al.* 2004; Leslie and Reimer

1999) and this book can be understood as a further contribution to this emerging literature. In contrast to social network analysis, the research on global networks and commodity chains is sensitized to the dynamic nature of networks, but this comes at the cost of a somewhat more metaphorical use of the term.

On the other hand, this third strand of network analysis also includes those authors — often with a background in ethnography or media and cultural studies — that have analyzed the emergence of transnational spaces of cultural interaction. Research areas that have emerged over the last decades include: immigration networks (Basch *et al.*, 1993; Faist 2000); transnational and cosmopolitan cultures (Hannerz 1996); bottom-up transnational urbanism (Smith 2001); resistance and conflict beyond the nation-state (Evans 2000; Bank and van Heur 2007) and diaspora media (Karim 2003). It is impossible to review this voluminous literature within the limits set to this publication and clearly there is much interesting work done in this field, but — in the context of this discussion on networks — a number of analytical problems arise. First of all, the notion of networks used in this literature tends to remain highly metaphorical, which makes it easy to import concepts from related theories (such as theories on globalization, identity formation, media and communication, etc.) without, however, having to justify how and in what ways the network is distinct from other forms of socio-spatial organization. Second, this leads to analyses that are clearly sensitive to cultural specificities, the role of discourses and the positionality of particular actors within these networked environments, but that cannot conceptualize how networks interact and are partly constituted by broader modes of regulation and regimes of accumulation. Capitalism and the state tend to recede to the background of analytical attention, which often leads to a culturalist line of argumentation. Also, and similar to some of the work on global commodity networks, the specificity of the urban is lost out of sight.

3.3.4 Actor-Network Theory

A final and fourth strand of research on networks is actor-network theory (ANT). With its methodological roots in symbolic interactionism and ethnomethodology, ANT is clearly operating on a different ontological ground than regulation theories: where regulationist accounts emphasize regularities, mechanisms, depth realities and structures, ANT highlights contingencies, flat ontologies, precarious assemblages and translations. Not surprisingly, therefore, academic positional struggles have rallied around this ontological tension, most recently mediated in the discipline of geography through the

question of scale vs. relationality.[11] The relationality-side of the debate builds on an earlier appreciation for ANT and the constitutive role of networks in the disciplines of geography, urban studies, sociology and cultural and technology studies (Smith 2003; Murdoch 1997a, 1997b, 1998, 2001; Latham 2002; Latham and McCormack 2004; Bonner and Chiasson 2005; Kendall 2004; Law and Mol 2001; Pels *et al.* 2002; Hommels 2005a, 2005b). My position is clearly more on the regulationist side of the debate: I am interested in identifying and explaining structures and regularities and can therefore only grasp networks within a framework shaped by the notions of accumulation and regulation. This does not mean, however, that ANT has nothing useful to contribute to the further theoretical development of my regulationist account. For one thing, ANT operates with a much broader and complex notion of the object than is usually achieved within Marxist regulation theories.[12] To a large extent, the analysis of objects within regulationist accounts starts from the Marxist analysis of the value form, which almost by necessity skews the interpretation towards a concern with commodification and reification.[13] Although, on lower levels of abstraction, the regulation approach allows the introduction of alternative regulations and processes, the approach itself does not have any theoretical tools to grasp the complexity and heterogeneity of objects. This is why, in my view, the attempt to criticize ANT by emphasizing the role of dead labor and commodities in the production process (see Kirsch and Mitchell 2004) is understandable, but ultimately self-defeating. ANT accounts, in contrast, interpret networks as integrating material and semiotic environments in which human actors are decentered: humans and non-humans (objects, technologies) are seen to co-create their respective networks. In doing so, it goes beyond social network analysis that limits itself to an analysis of linkages between human actors or organizations.[14] This principle of 'generalized symmetry' automatically widens the reality and potentiality of objects, since these are now shot through with and part of a potentially unlimited amount of networks, dis-

11 See: Collinge 2006; Grabher 2006; Hoefle 2006; Jonas 2006; Escobar 2007; Jones III *et al.* 2007; Leitner and Miller 2007b.

12 As is hopefully clear, this is not inherent to the tradition of Marxism as such – one only needs to refer to Benjamin's most famous article ('The Work of Art in the Age of Mechanical Reproduction') to make this point. See Benjamin (1963).

13 This bias is also visible, to an extent, in the research on commodity chains as well as the research on flexible accumulation.

14 The focus on organizations or collective actors could – in principle – refer to an assemblage of human and non-human actors, but this is not the route taken by social network analysis.

courses and practices. As a sophisticated form of ethnography, ANT also pays much more attention to the actual construction of these actor-networks and the ambivalences that result from this construction than the regulationist analyses of accumulation-regulation couplings and modes of production. This process has been described by Michel Callon (1986) as translation, involving four steps: 1) problematization, which defines the problem and the actors needed to solve this problem; 2) interessement, or the period in which primary actors try to interest other actors to participate in the network; 3) enrolment, during which actors take up the roles that have been defined during the second step; and 4) mobilization, which involves enrolled actors mobilizing their respective allies. In the context of state regulation, this understanding of networks actually comes quite close to Jessop's discussion of state projects and strategies, even though the respective theories are developed from completely different starting points. Where Jessop, however, is interested in identifying possible new regularities (even though he is clearly skeptical as to the feasibility of particular projects and strategies), ANT is certainly more comfortable with inconsistencies and transformations in the process of network building. Interestingly enough however, after two decades of ANT research, leading researchers in this field have expressed their concern that ANT has become too concerned with identifying network structures at the expense of identifying these inconsistencies. Thus, John Law worries that he and others might be contributing to a new form of functionalism: "[…] if we write as network analysts what we may be doing, what we're often doing, is buying into and adding strength to a functional version of relationality. One that is, to say it quickly, managerialist" (2000, 6). And Bruno Latour emphasizes that ANT has merely sensitized us to the fact that networks are not that interesting at all. Instead, as he argues, it is the "empty space 'in between' the networks, those terra incognita [that] are the most exciting aspect of ANT because they show the extent of our ignorance and the immense reserve that is open for change" (1999, 19). ANT, in other words, has become aware of its own blind spots and exclusions. Similar to regulationist accounts, the network ends up being constituted by, on the one hand, structure and order and, on the other hand, emergence and the 'in-between'.

3.4 Towards a Cultural Political Economy of Emergence

As we now know, regulation theoretical accounts of socio-spatial change have focused on the breakdown of Fordism, the rescaling of

accumulation and regulation and the resultant difficulties associated with achieving a new stable accumulation-regulation coupling due to the proliferation of networks. Network theories have been developed (also) in order to explain this proliferation and the ways in which these networks circumvent and transform older forms of regulation and accumulation. Social network analysts have developed sophisticated tools to map networks, but its concern with the social form of networks has led to a relative neglect of its symbolic and discursive as well as temporal dimensions. The research on world city networks attempts to map the global and regional linkages between functionally important cities, but by doing so falls into the trap of a structuralist determinism that grants too much explanatory power to a 'contact' view of networks. Similarly, the research on global commodity networks can easily be accused of paying too much attention to the structuring role of the commodity. Those authors that confront the literature on commodity chains with spatial questions manage to avoid this bias by embedding the commodity and production within particular urban and regional environments. They can only do so, however, by pragmatically combining multiple theories, which raises the difficult question of how these theories interrelate. And actor-network theory (ANT), despite its insistence that networks are characterized by translations and transformations, does not completely manage to capture the complexity of those moments of translation and transformation in its own theoretical approach: Latour finds himself cherishing the "empty spaces 'in between' the networks, those *terra incognita*" (1999, 19), which, however, his own theory cannot explain.

Considering this situation, it is perhaps not surprising that a number of authors have chosen to abandon the theorization of the structural dimensions of social life altogether in order to focus precisely on those moments *in* these theories that cannot be explained *by* these theories. This, it must be emphasized, is not limited to specific disciplines such as urban studies, geography, sociology or media studies, but part of a broader shift in academic sensibilities. As Alex Callinicos has pointed out: "[o]ne striking intellectual reconfiguration that has taken place over the past generation is an increasing preoccupation with, instead of regularities, singularity, instead of structures, the event" (2006, 83; italics removed). This is already visible in Latour's fascination with *terra incognita*, but is further radicalized — in different ways — by those philosophers oriented towards an analysis of the event (Badiou 2005), the exception (Agamben 2005) or the virtual (Deleuze 1994) and has spawned a veritable cottage industry of writings dedicated to analyzing these "wormholes", as Eric Sheppard calls these "discontinuities in the warped space/time of the universe" (2002, 323-325). As Sheppard

also recognizes, however, the theoretical possibilities of these discontinuities are not equally transformed into reality and there remains an urgent need for sociological analysis that investigates the relation of these wormholes to particular accumulation regimes and modes of regulation.

The previous section in this chapter analyzed the regulation theoretical focus on accumulation and regulation, their potential couplings and the different levels of reality. I argued that regulationists analyzing the period after Fordism rely (explicitly or implicitly) on a three-level critical realist ontology: the root stratum locates the core features of capital and the state; on level i, the accumulation-regulation coupling on the national scale constitutes the dominant interacting mechanism; and on level ii, the urban scale and the transscalar are provisional grounds for emergent forms of accumulation and regulation that are only partially coupled. Network theories start from a different perspective than regulation theories. In principle, networks are analyzed as potentially limitless: ultimately, everything can be connected to everything; changing discourses change the very network structures through which these discourses are mediated; and the point of interaction between nodes is simultaneously also a point of translation and transformation. The research on world cities and inter-urban networks as well as the research on global commodity chains operates from a more structural political economic perspective, but even here accumulation and regulation can, in principle, take place everywhere. This flexibility of networks is one of their main strengths and explains, to a large extent, the current popularity of network theories, since they enable analysts to understand institutional emergence and the development of social formations in much more grounded detail than can be achieved by the regulation approach. As such, I would argue that network theories need to be understood as part of the broader shift towards meso-level research that followed the crisis of Fordism. Unfortunately, this interpretive and experimental flexibility of network theories is not only their main strength, but also their main weakness. Although networks are indeed best understood as open and dynamic, this downplays the difficulty of network reproduction within socio-spatial environments at least partially shaped by capitalist relations and which involves to a substantial extent the 'closing down' of these networks. Callon has usefully described this as a process of framing, which needs to be seen as an inversion of the argument concerning externalities as proposed by economists. Drawing on ANT, he argues as follows:

> The evidence is the flow, the circulation, the connections; the rareness is the framing. Instead of adding connections (contingent contracts, trust, rules,

culture) to explain the possibility of the co-ordination and the realism of the calculation, as in the various solutions proposed by economists, we need to start out from the proliferation of relations and ask how far the bracketing of these connections - [...] 'framing' – must go to allow calculation and co-ordination through calculation. (1999, 186)

Framing, in other words, allows actors to close down networks in order for market transactions (what Callon terms calculations) to be possible in the first place. This framing is achieved through a wide variety of elements and devices, including intellectual property laws, the formalization of interpersonal relationships, the introduction of particular techniques of accounting, the strategic use of buildings and urban planning, and so on. Unavoidably, however, framing always remains incomplete and "overflowing" (1999, 188) will take place. Networks are thus characterized by this constant back-and-forth between framing and overflowing or between opening up and closing down.

The problem with network theories is that they cannot explain beyond the single case why this framing takes place and how this framing relates to broader socio-spatial transformations. In that respect, the regulation approach's focus on accumulation regimes and modes of regulation on various levels of reality is clearly superior to network theories. Nevertheless, networks play an important heuristic and experimental role in investigating this tension of framing and overflowing within particular socio-spatial environments. The important point about networks is not that they have a particular well-established form (i.e. networks as non-hierarchical and flat and as absolutely distinct from organizations, hierarchies or firms), but that central to their constitution is a relationality that connects the moment of framing with that of overflowing. In that respect, networks seem to parallel the methodological moment of abduction within retroduction, as discussed in chapter two. They are characterized by a moving 'away from' established causal mechanisms, but can simultaneously only be explained in relation to (if certainly not reduced to) these mechanisms.

3.5 Cities and Networks

This closing section briefly presents the main dimensions of the political economies of London and Berlin and interprets these two cities within the broader theoretical framework of accumulation and regulation, the crisis of Fordism and the provisional emergence of a KBE. It also describes the main characteristics of the analyzed music networks and their emergence and development over the last two

decades in relation to my theoretical understanding of networks, as discussed above. By doing so, this section merely sketches the basic empirical coordinates. The following chapters (four to six) build on these coordinates in more empirical detail, while simultaneously interrogating the empirical evidence and the strengths and limits of the adopted theoretical framework through a sustained discussion of alternative theories.

3.5.1 London and Berlin

The restructuring of London and Berlin in the last decades can usefully be conceptualized in relation to a Fordist accumulation regime, its crisis and subsequent attempts to find a way out of this crisis. Thus, until at least the mid-1960s, London was an important industrial and manufacturing city, a major port for import and trade, and the central consumer market of Great Britain. The City of London was already a significant international financial center, but its contribution to overall employment was relatively low (approximately one in ten of all workers) (Hall 1962, 1964). Also, even though London clearly occupied a distinct position within the broader political economy of Britain, the postwar period was characterized by political attempts to redistribute employment and economic development throughout the national space (Brown 1972; Yuill 1979). State regulation of the London economy was located on different scales of government, including the urban — London had a London County Council (LCC) from 1888, which was replaced by the Greater London Council (GLC) in 1965 — but the urban scale was subordinated to the national scale. The British Parliament granted rights to local authorities, thus enabling a relative autonomy of the local scale, but these rights could always be revoked. Local authorities pursuing activities without previous authorization of Parliament could be forced by courts to halt these activities, since they were seen as operating *ultra vires* i.e. outside the law (Nissen 2002). Berlin in the postwar period can also be analyzed in relation to a Fordist accumulation regime, although in different ways. After the end of the Second World War, the division of the city caused most large companies as well as political institutions to leave Berlin. As a result, West Berlin declined in economic importance and was transformed from a central economic hub into a relatively marginal one within the Federal Republic of Germany (FRG). Nevertheless, due to high subsidies from the federal state, the cultural sector, the city administration as well as an industrial sector oriented towards mass production of simple consumer goods (with research and development located in different FRG cities) were developed into the central sources of employment for local workers (Wechselberg 2000;

Gornig and Häussermann 2002). This particular development was, of course, largely the result of the symbolic function of capitalist West Berlin within a socialist German Democratic Republic (GDR), but can also be related to the dominant Keynesian mode of regulation in the FRG at the time, which was oriented towards the redistribution of economic development across the entire national space and the support of economically disadvantaged areas (Heeg 1998). East Berlin, in contrast, became the capital city of the GDR and its main political, administrative, economic, cultural and academic center. Within the GDR, it operated as a supra-regional industrial- and service-center, but the level of productivity within these sectors was comparatively low and incapable of competing with capitalist accumulation regimes during the existence of the GDR and after the fall of the Wall (Wechselberg 2000).

The crisis of Fordism manifested itself earliest in London. From the mid-1960s onwards, London saw a dramatic contraction of industrial labor, losing around fifty per cent of its workers in manufacturing between 1961 and 1981 (Hamnett 2003a, 31). As Chris Hamnett makes clear, this decline was further reinforced in the period between 1981 and 1991. Total employment declined by 8.6 per cent, but the cuts were largest in the industrial sectors: manufacturing lost 47.5 per cent, construction 26.7 per cent, primary industries 27.8 per cent, and transport and communications 16.5 per cent. This was partially offset, however, by the dramatic increase of employment in banking, finance and business services (+ 29.6 per cent) (31-32). This economic restructuring continued into the 1990s with further employment growth in finance, business services, hotels and restaurants as well as the creative industries (33-36). It is important to realize, however, that these changes were not merely caused by the emergence of a new regime of accumulation, but intimately intertwined with and further intensified by regulatory shifts on and between multiple scales. From 1979 on, the Thatcher government pushed for a more market-driven style of development and actively promoted London as a global city oriented towards finance capital. It was capable of developing this strategy due to a long history of central-local relations with local authorities in a subordinate position to central government. Local authorities have been and still are to an important extent — between fifty-five and sixty per cent (Schröter 2002, 66) — dependent on grants from the central government and only a minority of their revenues is derived from local taxes. The Thatcher and Major governments further tried to control these already subordinate local authorities by shifting the responsibility for collecting business taxes away from the local to the national scale and by imposing constraints on the local administrations through a combination of spending control

and rate-capping policies (that set limits to the amount of local taxes that could be collected). It also intervened directly into the economic development of urban areas through the promotion of Enterprise Zones and Urban Development Corporations, the most important of which included the London Docklands Development Corporation (LDDC) and which was responsible for the regeneration and economic development of the Docklands area in east London (Brenner 2004, 225; Batley 1989). Also, the Thatcher government in 1986 abolished the Greater London Council (GLC) — which had tried to implement a manufacture-based model of economic development in combination with community participation and leftist 'bottom-up' strategies — distributing its functions across local boroughs, public-private agencies and central state institutions. A new GLC, the Greater London Authority (GLA) was established in 2000, which constitutes a return to metropolitan-wide governance, but it needs to be kept in mind that the GLA remains sandwiched between the demands of the national government, which provides the overwhelming amount of funding, and the local boroughs who receive their own funding from the national state and can collect their own taxes. In effect, the rationale of the GLA is one of developing strategies, whereas execution needs to take place through the boroughs or its executive bodies. This includes the London Development Agency (LDA), which is responsible for economic development, but which is itself funded by central government (Syrett and Baldock 2003). In contrast to the earlier GLC, however, the GLA largely operates in line with the entrepreneurial logic espoused by the national Labour governments (see the following chapters for an analysis of London's creative industries policies). Although economically successful, many authors have pointed to the negative dimensions of this process of restructuration, including: 1) an increasing 'London-centeredness' of the UK economy involving deepening inequalities between the North and South (Brenner 2004, 187; Dunford 1995); 2) gentrification involving complex processes of social exclusion and polarization or even segregation (Atkinson 2000; Butler and Robson 2001; Beaumont 2006; Fainstein and Harloe 2000); 3) the emergence of non-accountable governance structures (Atkinson 1999); and 4) securitization of public spaces through the increased use of CCTV and private security firms, dedicated to the development of 'safe' spaces for commercial urban development (Coaffee 2004).

In Berlin, the crisis of Fordism only emerged after the political crisis in 1989 and the subsequent re-unification of East and West Berlin. Although this delayed the economic restructuration of Berlin, post-1989 developments fit within the broader shift from Fordism to post-Fordism, even though the city is characterized by a

temporal asynchrony in comparison to most other cities. Within three years, the former East Berlin lost nearly forty per cent of jobs. In contrast, the former West Berlin managed to increase its amount of jobs by approximately fifteen per cent, mainly due to the rise in trade and services within the former GDR area. From 1993 onwards, former East and West Berlin have increasingly aligned themselves with one another, although largely in a negative sense: until 1997, both halves of the city experienced an employment decrease of approximately fifteen per cent (Gornig and Häussermann 2002, 334-335). It was only after this period that certain sectors have grown, although by no means as dramatically as in London (see Ch. 5 for a discussion of this most recent period in the context of the creative industries). First, however, most industries declined. As Stefan Krätke (1999) has shown, this includes traditional industries such as food and textile (-20.7 % between 1993 and 1996), transport (-25.9 %), the building sector (-7.6 %) and trade (-8.9 %), but also industries that are usually associated with the rise of a KBE and post-Fordism. Thus, industries heavily reliant on R&D decreased in this period by 22.4 %, the cultural and media industries by 9.8 % and consumer services (hairdressers, laundering, etc. as well as employees in non-university educational institutions) by 5.5 %. Even the small finance sector further decreased (although only by 1.4 %). The only sector that increased in employment size during this period was business services (+ 7.2 %), which includes management consultancies, trade associations, security services, translation services, engineering firms as well as cleaning companies. In short, Berlin has experienced a similar decline in manufacturing and industrial labor as London, but only a limited increase in post-industrial labor. The period after 1996 has been characterized by a more positive economic development, but remains instable.[15] As in the case of London, these economic transformations were intimately connected to changes in the regulatory framework. First of all, the collapse of the manufacturing industries was directly connected to the reduction or cancellation of subsidies that these industries received from the federal state before 1989 (Heeg 1998; Gornig and Häussermann 2002). Second, this economic shift was further encouraged by political forecasts that Berlin would and should become a global city — comparable to London and New York — oriented towards services and knowledge-intensive sectors (Krätke 2001, 2004; Krätke and Borst 2000; Cochrane and Jonas 1999; Lompscher 2000). This vision translated directly into the local government's programs of economic develop-

15 For more recent data on employment trends, please see the website of the Berlin Senate for Economy, Technology and Women: http://www.berlin.de/sen/wtf (01.12.2009).

ment and also informs the current fascination with the creative industries. Third, this increasing interest in Berlin as an entrepreneurial, outward-looking global city followed attempts on the national scale to re-position "urban regions rather than the entire national economy as the most crucial geographical target for spatial planning policies" (Brenner 2004, 230). This involved a shift away from national redistribution towards a view of planning that understands uneven development as necessary in order to increase the economic competitiveness of major German cities within global circuits of capital. Having said all this, it is also important to acknowledge the limits of these various state strategies. As the discrepancy between the policy dream of Berlin as a global city and the reality of Berlin as a city with a structurally weak economy clearly illustrates, it is by no means certain that policy initiatives and mechanisms are or even can actually be implemented along the lines envisioned. This is something I will also address in my analysis of creative industries policies and the actual practices of networks of aesthetic production. Similar to London, the social effects of this restructuring of Berlin are by no means positive only. Researchers have pointed towards the following negative side-effects: 1) a rejection of older and more democratic planning strategies in favor of urban planning that is participatory on the surface, but exclusionary at its core (Lompscher 2000; Bernt 2003; Hain 2001; Lebuhn 2007; Holm 2006); 2) a promotion of a new image of *Stadtbürger* (urban bourgeois/citizen) as a property-owning, cosmopolitan actor that rejects the overly regulated Berlin of the postwar years and instead embraces a deregulated and privatized notion of urban engagement (Heeg 1998); 3) gentrification, social exclusion and polarization (Holm 2006; Marcuse 2000; Keil 2000; Knecht 1999; Veith and Sambale 1999; Krätke 2004; Krätke and Borst 2000); and 4) the securitization of urban space (Eick 1998, 2003).

3.5.2 Music Networks

Having discussed London and Berlin within the context of the crisis of Fordism and the provisional development of new forms of accumulation and regulation, this part briefly describes the analyzed music practices in relation to my theoretical understanding of networks. To recapitulate, my approach towards networks needs to be seen within a broader regulationist framework and, as such, interprets networks as encompassed by, but simultaneously moving away from dominant accumulation regimes and modes of regulation. There is, in other words, a constant tension between stasis and movement or between order and transformation that defines networks.

As I see it, the emergence of electronic music over the last decades can usefully be analyzed through the lens of this conceptualization of networks. Please note, however, that the notion of electronic music is vague — almost all music, in one way or another, is electronic nowadays — and also refers to the highly institutionalized forms of music production that emerged after the Second World War and which included both publicly and privately funded set-ups: examples include Max Matthews' or Laurie Spiegel's experiments at Bell Labs in the United States, Pierre Boulez's directorship of IRCAM in France or Herbert Eimert's work at the electronic music studio of the WDR in Germany (see Holmes 2002 for a useful overview of this history). In principle, I would not consider these institutions to be networks, since they are to a large extent shielded off from direct accumulation and regulation (in this case, the Fordist accumulation-regulation coupling) due to high levels of subsidization: even at the private company Bell Labs, internal subsidization opened up niche spaces in which a small group of actors could experiment without direct market pressure. Having said that, the identification of certain social processes as networks is always a relative one — it is certainly possible, for example, to argue that the Bell Labs' experiments and subsequent inventions by companies such as Casio, Roland or Korg need to be analyzed as networks, since they constitute processes that rely on but are simultaneously emergent from established forms of accumulation and regulation. In other words, these processes create something new, which can potentially lead to a shift in dominant patterns of accumulation and regulation. Paradoxically, this process of innovation has simultaneously become more central to the current era after Fordism as well as curtailed by it, since innovation and the promotion of spaces in which creativity and experimentation can flourish now seems to be much more directly subject to the requirements of capital accumulation than during the era of Fordism-Keynesianism.

It is this paradox — of emergence in relation to contemporary accumulation and regulation — that I want to investigate and I will therefore focus on more recent music practices. Electronic music, in this text, functions as shorthand for those forms of music production that rely on electrically produced sounds, created with computers, virtual instruments (software), synthesizers, samplers and other tools that can only function when connected to the electrical circuit. From this perspective, I also include record players and the use of record players by DJ's as belonging to the category of electronic music, since, first of all, the recorded music played is often electrically produced and, second, the use of the electric-powered record player as an instrument is central to the aesthetics of electronic music. This definition is a pragmatic one, however,

since even on the level of sound sources, there are many hybrids. Electro-acoustic music, for example, uses sounds from the outside world (the weather, the built environment, household objects, but also acoustic instruments) and is thus not properly electronic, but these sounds are often electrically modified to such an extent that I would consider this music to be electronic music. Similarly, voices or samples from traditional instruments can easily be incorporated into a musical texture that otherwise consists of electrically produced sounds. This book concentrates on the current state (i.e. the period 2006-07) of electronic music in London and Berlin, but incorporates these more historical reflections on the development of electronic music in order to emphasize the network-specific path dependencies of aesthetic production that are irreducible to the particular urban political economic environment in which this production takes place.

In relation to music genres, this leads to a focus on those dance music genres that emerged in the 1980s, such as house, techno, garage and rave[16], although there are important links to earlier dance music cultures such as disco that need to be acknowledged (see Straw 2002, for example, for a discussion of the important role played by 12-inch vinyl in disco). Whereas these genres were and are often represented (by popular music scholars as well as participants) as belonging to particular communities or scenes (Straw 1991), subsequent developments have questioned this logic through a fragmentation of dance music genres into various micro-genres.[17] Aesthetically, the past decades have witnessed constant genre-shifts that have deconstructed and reconstructed established genres such as house and techno, while introducing new sounds and styles.

16 There is by now a large body of literature, both academic and journalistic, on club and dance music cultures. See Thornton (1996), Reynolds (1998) and Gilbert and Pearson (1999) for a first overview.

17 Straw makes a distinction between communication and scenes: whereas communities are a population group with a relatively stable composition and whose musical practice involves a constant exploration of one musical idiom, scenes are to be understood as a "cultural space in which a range of musical practices coexist, interacting with each other within a variety of processes of differentiation, and according to widely varying trajectories of change and cross-fertilization" (373). My own understanding of networks matches to an important extent Straw's conceptualization of scenes, but further radicalizes his argument by emphasizing the moments of fragmentation at the expense of coherence. This difference in emphasis can be partly explained, I think, with reference to the time of writing. Whereas Straw wrote his article in the late 1980s at the high point of the popularity of electronic music dance cultures, I conducted this analysis in 2007 at the likely end of this era. We can now witness the 'de-emergence' of electronic music genres into the broader field of music.

Organizationally, electronic music production is characterized by thousands of small production nodes and the role of large conglomerates in this production process is a highly marginal one. Hesmondhalgh (1996) is correct in arguing against an optimistic view of flexible specialization as based on mutual trust and cooperation, but the hierarchical types of partnership that he identifies between large and small music industry firms are simply not that important within electronic music networks. And technologically, electronic music production is substantially shaped by the rise of the internet as an important mechanism of distribution (Jones 2002), which has questioned older accumulation regimes and modes of regulation (largely in relation to intellectual property) and has led to the development of new attempts at accumulation and regulation.

3.6 Conclusion

Building on the methodological chapter, this chapter discussed the three main concepts of this book: accumulation, regulation and networks. The first section introduced the regulation approach and its conceptualization of accumulation regimes, modes of accumulation and the coupling of accumulation and regulation as a model of development. Largely developed to analyze the era of Fordism, the second part within this section pointed towards the crisis of Fordism, the partial decoupling between accumulation and regulation and the analytical difficulties this creates in developing a coherent theoretical framework. The third part of this section described the ways in which regulation theories have increasingly moved towards a meso-level of analysis in order to grasp these complex changes and how this has created important intersections with theoretical discourses on flexible accumulation and urban and regional spaces of production, governance, and governmentality. After briefly discussing these theories, the fourth part of this section then summarized the main weaknesses of the regulation approach (its focus on the national state; the problematic assumption of a stable macro-economic framework; its lack of attention to discourses and practices; and its overly totalizing perspective). The second section of this chapter introduced the third central term — networks — as one way of addressing some of these limits of the regulation approach and in order to come to grips with the irreducible complexity of network dynamics in relation to regulation and accumulation. Four network theories were discussed: social network analysis; the world city literature with its focus on inter-urban networks; the research on global commodity chains and transnational spaces of

cultural interaction; and actor-network theory (ANT). Although each approach clearly operates with its own specific analytical schemes, I argued that they all represent attempts to come to grips with the fundamental tension between structure and emergence i.e. between stability and change. The third section continued these observations and argued that there is a need to develop a cultural political economy of emergence. The final section of this chapter concretized these theoretical reflections through a brief discussion of the main dimensions of the political economies of London and Berlin and the specificities of electronic music production networks. Having sketched these basic coordinates, the following three chapters delve into the empirical data as well as further theoretical analysis of music networks in London and Berlin through a focus on three heuristic dimensions: location, communication, and labor.