# regulation theory, space, and uneven development

*conversations and challenges*

*edited by*
Brandon Hillier
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1984press

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# PREFACE

## Régulationist encounters

Rachel Phillips, Brandon Hillier and Jamie Peck

The idea for this book emerged from a graduate seminar in the Geography Department at the University of British Columbia. The seminar was primarily concerned with theory projects at the boundaries of economic geography, including world-systems theory, dependency theory, Polanyian socioeconomics, and French régulation theory. Even though the intensity of the dialogue between economic geography and régulation theory had fallen off in the 2000s, various traces of the earlier interactions remained in evidence, while the destabilizing events that followed—the global financial crisis of 2008-2009, Brexit, and the US-China trade war— resuscitated régulationist problematics like financialization, macroinstitutional change and rupture, and the comparative development of different "models" of capitalism. A number of UBC graduate students were picking up these and related themes in their own research, while others were pursuing parallel projects that in various ways were régulation-theory adjacent, or which prompted questions about the potential of régulationist approaches. Out of this came a follow-up workshop, convened in the Spring of 2021, where participants explored a range of interdisciplinary dialogues with, and contextual assessments of, régulation theory, staged from different perspectives or literatures. In the subsequent months, these exploratory papers evolved into the series of essays collected here, which variously set out to revisit or rework the régulationist problematic.

Working on this volume has provided an opportunity both to reevaluate the régulationist project-cum-program and to consider paths taken (or not taken) in economic geography and related fields. This was, on the one hand, a chance to look back, dusting off copies of Aglietta's *A Theory of Capitalist Regulation,* and charting the rise and eventual eclipse (or dissipation, perhaps) of régulation theory as a distinctive approach and perspective in the field. On the other hand, working on the book presented a chance to look forward—to explore the potential future(s) of régulation theory in economic geography. What, we wondered, would a reactivated or reanimated régulation theory look like? What parts of the régulationist toolkit are worth holding on to? And, two decades on from the régulationist heyday, what would need to be added to the régulation approach for it to gain traction in a more pluralized and diversified economic geography? The assembled chapters in the book represent the group's collective attempt to grapple with these questions. The subject matter varies across each of the chapters, but they all take a similar tack: engaging régulation theory, in a spirit of constructive but critical curiosity, from a particular standpoint (a body of literature, a subfield within geography, or a theoretical concern), and exploring the "value added" of régulation theory, actual and potential, particularly for the current conjuncture.

Chapter 1 of the book sets the scene. Prashant Rayaprolu presents a guide to the core concepts and concerns that animate the régulation approach, arming readers with both a glossary of key terms and a guide to understanding the development of the régulationist problematic. Focusing primarily on the foundational contributions of the French régulation school, Rayaprolu (this volume, 9) underscores the régulationist emphasis on "different forms of institutionalization, crisis, and restructuring as 'normal' and indeed recurring features of capitalist development" and traces how these ideas diffused into economic geography, catalyzing secondary literatures that would go on to take up questions of uneven development and spatiality in distinctive ways. As well as contextualizing the régulation approach, this primer lays the theoretical and conceptual groundwork for the chapters that follow.

The next two chapters engage the book's motivating questions from the vantage point of geographical subfields where the influence of régulation theory has waxed and waned over the decades, but where it still holds significant analytical promise, particularly for restoring a macroscopic perspective to fields where some of the "big" questions of structural transformation may have receded from view. In these chapters, the authors explore some of the analytical and methodological tools that were lost in the dissipation of régulationist geography in the 2000s and make a case for their (selective) recovery. In Chapter 2, Max Cohen looks back at a pivotal period in the development of régulationist economic geography: the emergence, evolution, and subsequent eclipse of the "British School" in the 1990s, which brought a régulationist optic to bear on the study of local governance and uneven development in neoliberalizing Britain. Asking what a return to this strand of régulation theory might offer to contemporary studies of local governance, Cohen chronicles the conceptual innovations that the British School introduced to the régulationist cannon—a new analytical language equipped to deal with questions of spatiality, a sensitivity to geographical unevenness and difference, an empirical focus on the locally-embedded processes and actors involved in local restructuring—and accounts for its eventual eclipse by new institutionalist and governance approaches by the early-2000s. With these approaches tending to emphasize micro-politics and meso-level institutional analysis, but arguably losing sight of the systemic forces of capital accumulation that shape and constrain local governance, Cohen (this volume, 25) argues that a revival of the British School's régulationist sensibilities could help local governance studies grasp "broader, macro-economic transformations, paying attention to the bigger picture without getting lost in either macro-abstractions or atheoretical empiricism."

Staging a dialogue between post-millennial critical urban studies and régulationist urbanism in Chapter 3, Rachel Bok (this volume, 29) similarly shows how an engagement with the régulationist project sheds light on "a 'missing macro' in contemporary studies of the global urban, where macroscopic questions lie out of sight for many." With postmillennial urban studies driven by imperatives to produce more worldly conceptions of cities, and to pluralize and provincialize our understandings of the urban, régulation theory has often been written off as a totalizing approach that is ill-equipped to deal with difference. Bok traces the development of régulationist urbanism from the 1990s onwards—from early work on state rescaling and the production of urban space to more recent interventions on the globalization of urban governance—to push against these framings of régulation theory as inescapably totalizing and structuralist, and to show that such dismissals have resulted in lost analytical opportunities to engage with macroscopic issues like uneven spatial development, which profoundly shape global urbanization. For Bok, these lost opportunities appear particularly pressing at a time when more holistic and "big picture" thinking is needed to confront polymorphic global crises; a critical reinvention of régulationist urbanism could provide one path forward.

A second pairing of chapters engage régulation theory from the starting point of a historical rift between the régulation approach and a body of literature whose development ran parallel to the régulationist project, setting out to explore potential new lines of exchange. In Chapter 4, Andrew Schuldt probes the intersection of political ecology and the régulation approach, examining the gulf that formed between these bodies of work around questions of nature and reproduction as they both emerged in the 1970s, before exploring their more recent (and somewhat tentative) convergence. With the first substantive engagements between political ecology and the régulation approach taking shape in the mid-1990s in the wake of James O'Connor's second contradiction thesis and Neil Smith's work on the production of nature, Schuldt maps out how some political ecologists worked to produce "stretched" versions of the régulation framework that could consider ecological constraints and the underproduction of nature as new dimensions of analysis, while others sought a reformed régulationist approach that could treat capitalism as an ecological regime in and of itself. While persistent tensions exist within these attempts to integrate political ecology and the régulation approach, Schuldt (this volume, 56) argues that the emerging encounter between these literatures represents a productive space "for scholars to examine the politics of nature while engaging in wider discussions about the political tactics and strategies that are necessary to confront the urgency posed by the twin emergencies of climate and capital."

Like Schuldt, Rachel Phillips begins Chapter 5 from a historical moment of disconnect between régulation theory and a subfield of geographic scholarship—in this case, legal geography—and asks what there is to be gained, analytically and politically, by forging a dialogue between these bodies of work. Revisiting the "real regulation" debate of the early 1990s—which brought the nascent field of interpretivist legal geography into conflict with a booming régulationist literature on economic restructuring—Phillips traces the persistent bifurcation between these two strands of literature and explores why the law has, until recently, been overlooked in régulationist analyses, in spite of its pivotal role in smoothing out the contradictions and crisis tendencies that plague capitalist accumulation. Drawing on a growing body of literature within geographical political economy that has aimed to cast new light on the legal technicalities and regimes that shape the uneven development of global capitalism, Phillips (this volume, 73) argues that a deeper engagement with the law would help régulationists to uncover previously illegible dimensions of political-economic transformation and capitalist relations by highlighting that "law is always produced and embodied in social processes and relations; that it is intrinsic to capitalist development but not functionally determined by it." Reciprocally, introducing a régulationist optic into the realm of legal geography would open up a new world of intellectual and political questions to a subfield that has, until now, shied away from analyzing the structural dynamics of capitalism.

Four chapters make up a third cluster of contributions to this volume, which variously seek to realize the "additive" potential for régulation theory—finding ways to adopt or adapt aspects of the framework to investigate contemporary understandings of macroeconomic change. These contributions accept that the theory is grounded in the specific empirical conditions of North Atlantic Fordism's breakdown. However, they see productive linkages between parts, aspects, or subsets of the full régulation rubric and more recent concerns in political ecology, uneven and combined development, state capitalism, and the study of capitalist temporality. There is a sense here that the real value of this mode of analysis lies less with some holistic, all-encompassing application to current questions of political economic transformation, but rather with a more piecemeal, selective or "régulation-plus" approach. While they reach for various instruments in the régulation toolbox, common to these four chapters is a concern with the theory's facility for generating meso-level accounts of crisis, analytical grounding in institutional forms, and powers of periodization.

In Chapter 6, Nick Gandolfo-Lucia identifies in dominant eco-Marxist accounts the limited means to theorize differences within and between capitalism and its natures, making the case that the régulation approach and its ontology of crisis offers a productive way forward. Contending that eco-Marxism "necessarily reduces the empirical richness of actual crises to an illustration of abstract and mechanical crisis tendencies," Gandolfo-Lucia (this volume, 87) points to three features of régulation theory which might inform a grounded account: firstly, in inverting the analytical primacy from understanding the causes of breakdown to investigating how an inherently contradictory social formation secures periods of stability; secondly, in focusing less on highly abstracted forces and more on institutions as midlevel products of particular conjunctures; and, thirdly and relatedly, in placing and periodizing crisis. Régulation theory thus produces an explanation which, combined with conventional eco-Marxist understandings, maintains a line of sight on capital's destructive relationship with nature while also recognizing that it is a process made rational through institutions stabilized in certain times and places.

In Chapter 7, Chris Meulbroek (this volume, 100) interrogates a methodological bias in contemporary theories of uneven and combined development (drawn primarily from recent interventions in critical international relations theory) which focus on "transformations *between* modes of production over dynamics *within* modes of production" and submits that the régulation approach offers a means to address this partiality, in attending to variegation, change, and stability *in* versus *of* capitalism. Where uneven and combined development privileges accounts of sweeping macroeconomic transition, régulation theory roots an analytical focus in the principle of continuity and institutional (and spatial) interdependence. While offering other perspectives that might accomplish the task of filling out the intra-transformational moments of uneven and combined capitalist development (for example, neo-Gramscian international political economy, developmental state theory), Meulbroek argues that the régulation approach produces an account which balances the big-picture dynamics of capitalism's unity with its internal moments of contestation and change, with reference to the ontological principles of stability, governance, and periodization.

In Chapter 8, Brandon Hillier problematizes the literature on the "new state capitalism" and discusses how the régulation approach accounts for some of its shortcomings. He identifies the fragility of the new state capitalism literature's theorization of the state, its treatment of periodization, its critique of political economy, and its contextualization of macro-institutional forces. In a similar vein to Gandolfo-Lucia and Meulbroek, Hillier argues that régulation theory serves as a "system of subtle reminders for how a political economy *can* fit together," in the context of producing a better reading of the extension of state(-capital) power today (Hillier, this volume, 126, emphasis added). Furthermore, "state capitalism" is conventionally understood as a signifier which establishes empirical primacy on locations in the non-west (with some exceptions, but usually countries such as China or Brazil); through the case of central banking in the liberal-capitalist west, and focusing on the contemporary example of the United States Federal Reserve, Hillier brings in a régulationist perspective in order to demonstrate how the analytic of state capitalism can and should be applied to economic contexts often assumed to operate under a less statist and more market-oriented logic.

In Chapter 9, Mikael Omstedt likewise focuses on the Federal Reserve, exploring its pre-history to establish how multiple and uneven temporalities are disciplined to accommodate capital's reproduction and continued expansion, and how these temporalities serve as key sites of régulation. Economic geography often assumes history as a mere background to the social processes of the present, rather than as an eventful and messy terrain of analysis in its own right. The régulationist problematic, through its thoughtful calibration of periodization, crisis, and institutional mediation, provides a means to open up questions around uneven and nonsynchronous development of economic relations across time and space: "the past and the present, the eventful and the cyclical, the biophysical and the financial" (Omstedt, this volume, 139). Looking to the formative years of the Federal Reserve, Omstedt illustrates the institutional effort required in bringing order and synchronization to capitalism's disordered senses of time, while arguing for a renewed appreciation of temporal matters by economic geographers in the present day.

The fourth and final cluster of contributions to this volume take on the régulation approach in a more holistic fashion, calling attention to its conceptual architecture and internal logic wholesale. Hewing to many of the same macroeconomic preoccupations as previous chapters, Chapter 10 portrays the current conjuncture as one characterized by an after-Fordist accumulation regime, distinguished principally by the ascendency (and rule) of finance. Albina Gibadullina works with the familiar proposition that advanced global capitalism has entered a "finance-led" regime and demonstrates, on one hand, the legacy of the régulation approach's influence on various strains of financialization studies and, on the other, the utility in returning to a more thoroughgoing adoption of the framework in order to understand the present moment. Inheriting a finance-led regime rubric established by previous régulationists, Gibadullina (this volume, 165) considers the "unrealized potential" of the theory, while at the same time problematizing its under-theorization of transnational accumulation, advising a closer look at the unique contradictions of the present regime (versus previous ones), extending to a consideration of the apparently increasing complexity of the financial system today and its implications for contemporary processes of regularization.

The book closes, in Chapter 11, with Jamie Peck's personal (and of course positional) reflections on a series of moments in economic geography's own uneven development over the past three decades, commenting on the shifting place of régulationist and post-régulationist theorizing in the early 1990s, the early 2000s, the early 2010s, and the present day. Befitting what has been a somewhat checkered history, with some moments that were seized upon, while other opportunities were missed, the story is told in a willfully episodic and nonsequential fashion. With its well-known propensity for "turning," economic geography is not really a field characterized by smooth evolution or incremental consolidation. Moving as it seems to do with the vicissitudes of real economies and their diverse (mis)representations, economic geography displays a theory-culture that is both heterodox and eclectic. The story of régulation theory in economic geography is therefore not one of a discrete episode that came and went, and certainly not of an approach universally shared. This story is also in a sense diagnostic of a field that, at different times and places, has variously emphasized and deemphasized the historical, the institutional, and the macro-conjunctural. Régulationist concerns, perspectives, and problematics never defined or dominated the field, but neither did they disappear without trace or consequence. Some of these concerns, perspectives, and problematics were engaged only to be later marginalized; others were baked into the cake in some fashion or another; others still have the potential to illuminate future pathways and projects in economic geography.

# CHAPTER 1

## A régulationist primer

**Prashant Rayaprolu**

### Introduction

The goal of this framing chapter is to describe some of the building blocks of the régulation approach (RA) and comment on its development. While five or more distinct "schools" of régulationist research can be identified (see Boyer, 1990; Jessop, 1990), the focus here is on the approach that has been most influential in economic geography and the wider social sciences, *l'école Parisienne de la régulation*, the French régulation school associated with Michel Aglietta, Robert Boyer, Alain Lipietz and others. Emerging in the stagflation-era 1970s, this influential branch of what would become a broadly-based régulation approach (RA) presented a novel and productive theorization of long-run processes of growth, stagnation, and crisis in the "advanced" industrial nations, coupled with a distinctive response to some of the puzzles associated with the "golden age" of post-war economic growth. This heterodox variant of radical political economy grew out of a series of more or less sympathetic critiques of orthodox Marxism, drawing inspiration from a range of complementary currents in Keynesian and Kaleckian economics as well as engagements with Althusserian and Gramscian traditions, supplemented by connections to Bourdieusian sociology and the social structures of accumulation approach. The Parisian variant of the RA was notable for its emphasis on different forms of institutionalization, crisis, and restructuring as "normal" and indeed recurring features of capitalist development. Here, the French régulationists trod a particular line, interpreting the crises of the 1970s as neither merely cyclical nor necessarily terminal for capitalism as a socioeconomic order. Instead, these crises were read as "structural" crises for a *particular conjunctural form* of capitalism, the Fordist-Keynesian regime of the postwar period.

In their explorations of the role of "mutational" crises in capitalist development, the French régulationists drew particular attention to contradictory processes of régulation, the other side of the coin to crises, and the ensemble of political, institutional, and social forms implicated in the complex reproduction of capitalism as a more-than-economic formation (see De Vroey, 1984; Lipietz, 1988b). For the French régulationists, macroeconomic regimes are contingent on class struggles, institutional forms, and regularized patterns of norms, behaviours, and rules. In the absence of appropriate institutions, norms, and conventions, capitalist accumulation systems are prone to crises, conditions which, in turn, prompts a search for combinations and configurations of institutional forms and procedures capable of "restarting" economic growth. The French régulationist project was notable for its historicization of capitalist development, for the manner in which it specified the role of institutions and "régulation" (in an expansive rather than narrow sense), and for the pathways that it opened up for mid-level theorizations of capitalist restructuring and crisis. For the most part, the RA was less attentive to issues of spatiality, tending to reproduce norms of methodological nationalism, although it was a spur to secondary literatures that took up questions of space, uneven development, and spatiality in distinctive ways (see Brenner, 2004; Jones, 1995; Moulaert and Swyngedouw, 1989; Moulaert, Swyngedouw and Wilson, 1988; Peck and Tickell 1992; 1994).

The chapter proceeds as follows. The next section outlines the foundations of the régulationist problematic, specifically, an aspiration to construct an alternative to mainstream economics; a defining concern with crisis in its various forms; and a distinctive approach to reproduction that stresses the role of social institutions and an emphasis on their co-evolution with capital accumulation. The chapter then sketches the principal concepts associated with the RA, namely the regime of accumulation, the role of so-called institutional forms, and the mode of régulation. The next section focuses on the contingent nature of "structural couplings" between regimes of accumulation and modes of régulation, and the different types and levels of crises identified within the RA. A penultimate section lays out a stylized evolution of régulation, from competitive to monopoly régulation with an emphasis on the couplings and crisis tendencies within both forms of régulation.

## Régulationist problematics

While neoclassical economics was searching for an explanation to the combined stagnation and unemployment crisis that was gripping advanced industrial nations through the 1970s, régulationists developed their problematic in relation to a counterfactual question: why, despite the crisis tendencies inherent in capitalist economies, had the world experienced nearly three decades of relative economic stability in the "golden-age" of post-war capitalism? For régulationists, the inability of neoclassical economics to identify and explain crises rested in its indifference to the historical evolution of capitalism, coupled with a limiting reliance on a microfoundational approach rooted in behaviours of supposedly timeless and placeless rational actors (Aglietta, 2000). The resulting theoretical orthodoxy was unable to account for actually existing capitalism and its intrinsically social nature. The régulationist alternative involved the development of theories, concepts, and categories of analysis that were historically specific and socially embedded. This began with the social relations of production, moving on to shed light on the frictions and tensions in capitalism that variously impede and interrupt long-run accumulation. A key objective here is to uncover the specific conditions, procedures, and practices that have enabled and sustained long waves of relatively stable capitalist expansion, punctuated by periodic crises and accelerated restructuring.

Régulationists assume that economic relations, in the form of wage and commodity relations, are inherently subject to crisis and contradiction. For example, simple forms of exchange necessary for capitalists to valorize labour power cannot be guaranteed in the absence of a functioning market for commodities and an accepted medium of monetary exchange (Lipietz, 1988a: 22-23; Boyer, 1990: 37). Moreover, the production of commodities requires coordination between capitals with distinct organizational logics. Capital goods (department 1) and consumer goods (department 2) work with different product cycles, time horizons for capital formation, labour and product markets, creating vulnerabilities to coordination failure in the medium to long run. Furthermore, the wage-relation, while fundamental to capitalism, is subject to profoundly contradictory imperatives, including those of maintaining shopfloor control and consent, while optimizing labour effort and productivity (Lipietz, 1988a: 27).[1]

1 More precisely, this is understood as the contradiction that emerges from the *relations of economic ownership* and *possession* that requires establishing a wage contract, skill qualifications, incentives among other things (Lipietz, 1988a: 27-28).

The relations between different capitals and between capital and labour generate uncertainties and contradictions in the process of accumulation that lead to periodic booms and busts. Since these tendencies characterize the *normal* functioning of capitalism, régulationists seek to explain why and how long periods of capitalist expansion nevertheless proceed. Here, régulationists shift the optic away from general equilibrium in neoclassical economics to the *reproduction* of economic relations.[2] While accepting the overdetermined nature of the social relations of production, they suggest that the intrinsically conflictual nature of the wage and commodity relation does not guarantee their reproduction.[3] For the successful reproduction of economic relations, a set of procedures, practices, and institutions must be in place to coordinate the interests between different types of capital and between capital and labour. These practices do not emerge from the accumulation process but are contingent on the development of an *institutionalized compromise* between capital and labour and their political agents.

These institutionalized compromises are organized into *structural or institutional forms* that give accumulation a concrete shape; they are "complex social relations, organized in institutions, that are the historical products of class struggle" that effectively govern—albeit imperfectly—essential relations like wage-labour and money (Aglietta, 2000: 19). For instance, commodity exchange might be enabled through the development of the *money form* in ways that allow for the exchange of commodities, the payment of wages to labour, and the flow of credit required by capitalists to sustain production. Similarly, the establishment of employment protection laws, wage contracts, and shopfloor work organization are necessary for setting the basis for labour control, while also offering workers incentives for increased effort.

Régulationists further are particularly concerned with the coevolution and "structural coupling" between institutional forms and accumulation over time. Each phase of capitalism is associated with new patterns of production, consumption, and a new ensemble of institutional forms and organizational logics that evolves in a path-dependent manner. Each phase of accumulation consists of a *regime of accumulation*, a reproducible set of production-consumption relations, and a *mode of régulation*, the combination of institutional forms, networks and the norms and behaviour it engenders (Boyer, 1990; Jessop, 1990: 174). Consequently, a structural crisis ensues when contradictions inherent the tendencies of accumulation cannot be contained within the prevalent mode of régulation. This resumes the search for an *institutional fix* that can only be resolved through a new institutionalized compromise between antagonistic political and social forces.

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2 For Aglietta (2000: 12), "The notion of 'reproduction' then becomes necessary. To speak of reproduction is to show the processes which permit what exists to go on existing." For Lipietz (1988b: 11) to speak of the régulation of fundamental social relations is to problematize, as an active analytical question, "the way in which this relation is reproduced despite and through its conflictual and contradictory character." As Boyer and Mistral write, "This approach leads to the replacement of the concept of market equilibrium, treated as the universal regulator of individual behaviour, with that of reproduction, which condenses all the practices necessary for the deepening of the constitutive social relation of the mode of production, wage labour, treated as a structural invariant … Expressing the logic of capitalism in the language of its structures, this approach describes its dynamics in terms of its reproduction, so that the regulation of the mode of production becomes a necessity" (Boyer and Mistral, 1978, quoted in Boyer, 1990: 120).

3 For an overview of the Althusserian roots of régulation theory, see Lipietz (1993) and Jessop (1990: 168-170).

These problematics—concerning the contradictory reproduction of capitalism, its uneven historical development and vulnerability to periodic crises, and the roles of social struggle and institutionalized compromises—served, in turn, as spurs to the development of a distinctive repertoire of régulationist concepts and routines, subsequently animated what would become a long-term research program. We turn to these key concepts now, focusing on the regime of accumulation, the role of institutional forms, and the mode of régulation.

## Régulationist concepts

This section introduces the concepts deployed by régulationists in their analysis and historical periodization of capitalism. In keeping with the Parisian school's approach, focusing on the regimes of accumulation, institutional forms, and the mode of régulation. While the regime of accumulation describes a reproducible set of production-consumption relations, institutional forms and the mode of régulation actualize these patterns of accumulation. While some régulationists have addressed the role of hegemonic structures and technological paradigms (see Lipietz, 1988a; Jessop, 1990; Dunford, 1990), these emphases are not widely shared, so in the discussion that follows I concentrate on the key concepts associated with the RA.

As Jessop (1990) shows, the role of party politics and the role of hegemonic structures were of interest to the West German state theory-school led by Joachim Hirsch. For developments in understanding the role of politics and hegemonic structures, see Jenson (1989, 1990), Jessop (1991), MacLeod (1997), and Mayer (1994). Among those working in the tradition of the Parisian school, Jane Jenson has made the most sustained conceptual advances in integrating politics and discourse. While technological paradigms have not been a primary concern for régulation theorists, there are complementarities with some work in evolutionary economics and long-wave theory (Dunford 1990). This has been further explored by Boyer (1987), Coriat and Dosi (1995), and in more detailed industry studies by Boyer (2005). Lipietz and Leborgne (1988) also examine the relationship between new technologies and regional growth.

### *Regimes of accumulation*

The *regime of accumulation* (RoA) is defined as the "systematic organisation of production, income distribution, exchange of the social product, and consumption" (Dunford, 1990: 305). For an RoA to exhibit a coherent "schema of reproduction," there needs to be evidence of "certain convergence between the transformations of production (amount of capital invested, distribution among the branches, norms of production) and transformations in the conditions of final consumption (habits of consumption of wage-earners and other social groups, collective expenditures, etc.)" (Lipietz, 1988b: 23).[4] An RoA consists of specific production processes, a time horizon for capital formation, a pattern of income distribution, a particular composition of social demand, and a certain set of articulations with non-capitalist sectors (Boyer, 1990: 35; Dunford, 1990:

4 This closely resembles Dunford's observation that a RoA coalesces when "changes in the amount of capital invested, its distribution between sectors and departments, and trends in productivity are coordinated with changes in the distribution of income and in the field of consumption" (Dunford, 1990: 305-306). In contrast, Aglietta prefers value-theoretic reading of the RoA, as a "form of social transformation that increases relative surplus-value under the stable constraints of the most general norms that define absolute surplus-value" (Aglietta, 2000: 68).

305).[5] The notion of an *industrial or technological paradigm*, referring to the leading sectors of a given economy and their associated technologies, skills and work processes, can also be incorporated into the RoA, as this will mediate how production is organized and how productivity is raised (Dunford, 1990: 306). Therefore, RoAs are defined according to the ways in which productivity gains are secured, how they are distributed across various sectors, their implications for income distribution, and the subsequent balance between production and consumption.

Typically, régulationists distinguish between two RoAs: extensive and intensive. In an extensive regime of accumulation, economic growth is sustained through the expansion of industries producing the means of production (Department I), rather than consumer goods (Department II), characteristic of the pre-war economies of United States and Western Europe (De Vroey, 1984: 48). In an extensive regime, firms have short-run time horizons for capital formation and tend rely on extensions of the working day, rather than gains in labour productivity, to accumulate capital (Aglietta, 2000: 71). Because it relies on valorization through intra-capitalist exchange, the growth of capital stock is prioritized over consumer demand. Indeed, wages are indexed to prices, linking consumption directly to business cycles (Boyer, 1990: 130; De Vroey, 1984). Nevertheless, productivity gains are primarily achieved through the intensification of work by means of Taylorist methods and scientific management. The growth of Department I industries is largely sustained through expansion into new markets (Noel, 1987: 312; Lipietz, 1988b: 27). The extensive regime coexisted with a "traditional way of life" (De Vroey, 1984: 48) in regions such as the Western United States and provincial Europe, where the wage-relation was only partially constituted, and where household and domestic labour were particularly important in the social reproduction of labour-power.

The intensive RoA, on the other hand, is characterized by relatively balanced growth between Department I and Department II, achieved through orienting the labour process towards improving productivity (De Vroey, 1984a: 48; Dunford, 1990: 313-314; Lipietz, 1988b: 27). Typified by growth regimes in United States and Western Europe during the three decades after the Second World War (Boyer, 1990: 130-131), this regime involved the institutionalization of technological dynamism and harnessing economies of scale through semiautomated assembly lines. Importantly, mass consumption becomes an established norm, sustained by high wages often indexed to productivity (Noel, 1987: 312). These virtuous dynamic between the adoption of mass production and mass consumption gave rise to the labeling of this RoA as *Fordism*. Synchronizing between production and consumption, the intensive regime allows for longer time horizons that are necessary for capital formation and investment planning (De Vroey, 1984: 48). Core industries in the regime of intensive accumulation are the automotive sector, home appliances, and consumer electronics.

It is axiomatic for the RA, however, that RoAs are not self-sufficient or freestanding. Theoretically, there are some bases for stabilization in processes of learning and adaptation between different capitals, and between capital and labour (Dunford, 1990:

5 This is taken from Boyer (1990: 35) and Dunford (1990: 305). Production organization relates to the social and technical organization of the labour process; the time horizon for capital formation equates to the imperatives of investment and production and organization for firms; the distribution of value refers to the income distribution; the composition of social demand indexes the outlet of productive capacities; and the articulation of non-capitalist sectors refer to the ways in which non-capitalist organizations, like familial, slave, and feudal modes of production, complement capitalist social relations.

305).[6] But Lipietz, (1987: 33) articulates the general position of régulationists when he insists that the "regime of accumulation is not some disembodied entity which exists in the ethereal world of schemas of reproduction." The stabilization and reproduction of the accumulation process leans on the reciprocal development of institutional forms and the mode of régulation (MoR).

*Institutional forms*

If an essential goal of the RA is to understand why and how the history of capitalism reproduces and reinvents itself, notwithstanding its inherent crisis tendencies, the concept of institutional forms establishes a remit for exploring how this happens. While there are continuing debates around the degree of theoretical priority that should be afforded to institutional forms, there is a broad consensus that they perform a crucial mediating role by providing both the means and mechanisms through which the conflictual tendencies of capitalist social relations are temporarily contained and to some degree "managed" (Peck, 2000: 65; Lipietz, 1988a; Boyer, 1990). While the effective function of institutional forms is to neutralize and manage the antagonisms and contradictions associated with the capitalist accumulation process and its social relations, they are never divorced from social and political struggles and their potentially destabilizing effects. The work of institutional forms, however, is to transform fundamental relations of antagonism into "simple differences" (Jessop, 1990: 172), effectively defining the space and ground rules for strategic conduct and conflict resolution.[7]

The concept of institutional forms refers to five institutional domains: wage labour (and the wage-labour nexus), money (and the monetary regime), inter-firm relations (and the competition regime), modalities of state intervention (state forms), and the prevailing order of international rules and norms (the international regime). There is also a concern with how these institutional forms interact and gel together in a supermodular fashion in the context of a given pattern of accumulation, where institutional forms articulate with an overall MoR.

1. The *wage-labour nexus* refers to the manner in which wage relations are institutionalized and reproduced. The contradictory nature of the wage-relations means that excessive and heavy-handed forms of control could lead to lockouts and strikes, while on the other hand, managerial concessions to shopfloor autonomy are likely to eat into profits, necessitating the development of institutionalized norms and governance systems around conditions of employment and workplace incentives. The wage-labour nexus duly comprises of specific labour processes, the social and technical division of labour, mechanisms of labour recruitment and retention at the firm level, and workplace culture (Boyer, 1990: 38-39).
2. The *monetary regime* refers to the organization of money and monetary relations within a given society (Boyer, 1990: 37). Arrangements for the organization of private and public credit are seen to shape investment, prices, and

6 As Dunford (1990: 305) suggests, "conditions inherited from the past and the expectations that earlier trends in the norms of production and consumption will continue" could form the basis for an RoA.

7 As Nadel (2002: 33) writes, institutional forms are ultimately "institutionalised by the action of individuals working through complex and unpredictable attempts between different interest groups, and are ultimately imposed/accepted as compromises."

output. The money supply and the availability of credit are further shaped by central banks and by rules and statues governing liquidity.

3. The *competition regime* refers to the organization and regulation of inter-capitalist relations (Boyer, 1990: 39). Since it is understood that the two departments of capitalist production will tend to grow and develop in an unbalanced manner, régulationists seek to explain how these relations are coordinated in the service of sustainable accumulation, distinguishing between market (competitive) and non-market forms of coordination (monopolistic) and price-setting between department I and department II.

4. The notion of *state forms* refers to the various dimensions of state intervention that are associated with a given patterns of institutionalized compromise, which in turn are seen to emerge from the dynamics of class struggle. In many cases, the state exerts a direct and significant influence on the monetary order and on the wage-labour nexus. Boyer (1990: 42) maintains that the state "plays a definite role in the establishment, rise and crisis of every regime of accumulation." For Aglietta (2000: 19), institutional forms are outcomes of the pressures emanating from changing modes of competition, which tends to impel "unity in the framework of the state and to consolidate its domination by enmeshing the entire society in state-governed relationships." In concrete terms, one might think of the functions of the welfare state in partially decommodifying labour-power, the role of fiscal transfers in subsidizing social reproduction, and the contributions of industrial policy, monetary policy, and fiscal policy in variously shaping production, investment, and income distribution. The notion of state forms also includes basic functions for the maintenance of capitalist society, such as the legal system, policing, and infrastructure.

5. An *international regime* denotes the rules, norms, and routines of the interstate system that govern, constrain, and enable national and regional regimes of accumulation (Boyer, 1990: 40-41), including those relating to cross-border capital flows, investment, exchange rates, and broader norms around global production.

While the wage-labour nexus, monetary regime, and competition regime can be said to be derived from the capitalist mode of production in general, the forms of state intervention and the international regime are configured in relation to the scale at which these three "fundamental" forms are deemed to operate—the nation-state. For Lipietz (1988b: 14), sovereignty at the nation-state level is the source of both the legitimacy and the "durability" of the MoR. While an exhaustive critique of this methodological nationalism is beyond the scope of this chapter, régulationist and non-régulationist scholarship in political-economic geography have emphasized the interscalar and regional organization of wage-labour, money and competition and the contested nature of sovereignty itself.[8] Nevertheless, institutional forms play an important role in régu-

8 For an overview of régulationist scholarship that has attempted to move beyond the nation-state, see Brenner (2004), Jessop (2001), Peck and Tickell (1994, 1995), Tickell and Peck (1992, 1995), Jones (1995), MacLeod (2001), and Van Der Pijl (1984). Although not régualtionist, the literature on state internationalization and the territorial trap in geography has effective critiques of methodological nationalism (see Glassman, 1999; Agnew, 1994). In this volume, see Cohen's chapter for a discussion of régulation theory in the field of municipal governance and Meulbroek's chapter for a commentary on the potential for dialogue between heterodox international relations theory and régulation theory.

lationist analyses, as keys to the historical evolution, periodization, and organization of capitalism across time and space.[9]

*Modes of régulation*

While the RoA allows us to schematize potential mechanisms of macroeconomic reproduction and institutional forms provide the foundation for managing and containing the conflictual tendencies of accumulation, the MoR is what gives periods of capitalist expansion a semblance of macroeconomic coherence. The MoR can be understood as "the totality of institutional forms, networks and explicit or implicit norms assuring the compatibility of behaviours within the framework of a regime of accumulation in conformity with the state of social relations and hence with their conflictual character" (Lipietz, 1988b: 24). Lipietz goes on to argue that the MoR plays a necessary role in the stabilization of an RoA, such that:

> For one or another such schema to be realized and reproduced over a prolonged period, it is necessary for institutional forms, procedures, and habits to act as a coercive or inciting force, leading private agents to conform to the schema (Lipietz, 1982, quoted in Boyer, 1990: 121, emphasis added).

To speak of a coherent RoA is consequently impossible without due attention to the corresponding MoR. In contrast to the understanding of rational agents in neoclassical economics, regulationists take the view that individuals and firms are coerced and socialized within the parameters established by the MoR. Codified through formal rules, norms, and conventions, these are realized through the combination of institutional forms. MoRs are understood to contain and mediate the crisis tendencies that are intrinsic to capitalist social relations, by providing the incentives, signals, and sanctions for economic agents to successfully participate in capitalist accumulation. Under conditions where firms cannot fully anticipate the decisions of their competitors and suppliers, institutional forms and various mechanisms of implementation together enable a certain level of coordination between capitals, such that firms can make requisite investments, secure the necessary factor inputs, and accommodate their labour demands with appropriate supplies.

Regulatory mechanisms, therefore, amount to what Lipietz terms "coercive or inciting forces" that structure economic relations. In neoclassical terms, the MoR develops and socializes a form of "situated rationality," where markets are inserted into "a series of institutional arrangements that socialize both information and behaviour and restricts rationality of agents available information and cognitive abilities" (Boyer and Salliard, 2002: 41). As a result, MoRs enable the reproduction of fundamental social relations, support and steer a given RoA, and ensure that the decentralized decisions of capitalists are at least minimally compatible with one another (Boyer, 1990: 43).

However, it is important to stress that MoRs do not appear automatically; they are not determined by the functional(ist) requirements of capitalist accumulation. Rather, they materialize as "post-factum outcome[s]," emerging through the experimentation, mutual adjustment, innovations and learning of political and economic actors (Crouch et al, 2002: 366). The MoR is therefore not simply functional for the expressed imper-

9 As noted earlier, while régualtionists have the theoretical tools to take on the organization of capitalist social relations across space, few have ventured particularly far in that direction. Beyond the pioneering work of Lipietz (1987), some of the most sustained work has been carried out by Robert Boyer and Bruno Amable (Boyer, 2000, 2005; Amable, 2000, 2003).

atives of accumulation; it is an arrangement that is politically and socially feasible for continued accumulation in the context of a given conjuncture.

The MoR and institutional forms operate through three mechanisms. First, they rely on formal rules and laws that set the constraints within which capitalists and workers effectively operate. While this establishes some of the "hard" constraints, these rules and constraints can nevertheless be subverted through the actions of dominant or powerful groups. Second, they require conventions and institutionalized modes of cooperation in particular domains, such as labour and inter-firm relations, that set the parameters for engagement between antagonistic groups on "the basis of their own interest" (Boyer, 1990: 44). This includes collective-bargaining agreements, strategic alliances between firms, and modes of interfirm bargaining. Finally, particular value systems, representations of reality and routines play a critical role in regularizing economic behaviour in the absence of formal laws. Here, Boyer suggests that "new social relations may also be established in guise of the old rules" (Boyer, 1990: 45), indicating that traditional forms of organizing production might articulate with imperatives of a given accumulation regime. Moreover, routines and heuristics can directly emerge from the very imperatives of competition and innovation both at the level of the firm and the region (Nelson and Winter, 2002; Essletzbichler and Rigby, 2007).

Finally, recent work in régulation theory and comparative political economy have demonstrated the complementary and hierarchical operation of institutional forms within a given MoR (Petit, 1999; Boyer, 2003; Amable, 2000). The notion of complementarity refers to the condition where the operation of a given institutional form is dependent on, and conditioned by, other institutional forms, such that they facilitate the temporary coherence of a given growth model. Hierarchy on the other hand denotes the dominant logic that a given institutional form confers upon the entire system, based on the respective contribution of other institutional forms.[10] Régulationists adopt a more a dynamic notion, where complementarities between institutional forms result from complex processes of coevolution over time, but can also unravel in the context of crises impinging on the dominant institutional form. Therefore, the dominant tone established by the MoR is determined in the course of political and social struggle.[11]

Régulationists have typically distinguished between two MoRs: competitive and monopolistic. Competitive régulation tends to articulate with extensive accumulation and was dominant in North America and Western Europe between the late 19th and early 20th century. In this MoR, prices were subject to considerable fluctuation, while interfirm relations were largely organized according to market principles. Labour contracts were individualized at the firm level and wages were linked to price levels. Labour supply and demand would often fluctuate on a short-run basis, following short-run movements in prices. Future investment decisions by firms were constrained by prevailing market conditions, with public and private credit playing a minor role. The gold-standard was the institutionalized money form at the time. Finally, state interven-

10 I take this from Boyer's formulation where institutional complementarity is defined as "a configuration in which the viability of an institutional form is strongly or entirely conditioned by the existence of several other institutional forms, such that their conjunction offers greater resilience and better performance compared with alternative configurations" (Crouch et al 2002: 367) and institutional hierarchy is defined as "a configuration in which, for a given era and society, particular institutional forms impose their logic on the institutional architecture, lending a dominant tone to the mode of régulation" (Crouch et al, 2002: 367).

11 For recent applications of this perspective, see Amable (2000, 2016, 2017), Amable and Palombarini (2009), and Piletic (2019).

tion was limited, adhering to the minimalist concerns of law and order, policing, and the protection of property rights. In this context, the competition regime was the dominant institutional form (De Vroey, 1984: 48-49; Lipietz, 1988b: 26; Dunford, 1990: 311).

The monopolistic MoR, on the other hand, was associated with the Fordist regime of accumulation, mediating mass consumption and mass production. In this MoR, individual contracts were superseded by collective bargaining agreements between unions and employers. Prices were more stable, being relatively insulated from market forces, enabled by a prevailing pattern of oligopolistic competition bolstered by national price agreements. The growing collective organization of workers provided the conditions for wages to be linked increasingly to productivity gains. This regulatory configuration was supported by the Bretton Woods regime at the international level, which served to restrict capital flows between countries, maintaining the U.S. dollar as the reserve currency, pegged to national currencies. The fact that core countries enjoyed some degree of economic autonomy allowed for the extensive development of welfare systems and social transfers, coupled with a strong role for the state in implementing countercyclical policies and moderating business cycles (De Vroey, 1984: 48-49, Lipietz, 1988b: 27; Tickell and Peck, 1992: 195). Amable (2000) argues that the wage-labour nexus sat atop the institutional hierarchy, setting the dominant tone for the monopolistic MoR.

## Contingency, emergency, crisis

Exploring the roles of the MoR and institutional forms in the governance of extended periods and patterns of growth are crucial elements in the régulationist research agenda, predicated on the question of the medium-term reproduction of advanced capitalist regimes. No less important, however, is the other side to this coin, relating to the contradictory and crisis-prone nature of capitalism. For régulationists, crisis is the process that "brutally restores the contradictory unity of the various stages of the accumulation process, (that) ought to be the rule, not the exception" (Boyer, 1990: 35). Indeed, contradiction lies at the heart of the régulationist conception of régulation. While institutional forms and structural couplings provide temporary cohesion to the MoR, they can never fully eradicate crisis tendencies, since these are intrinsic to the capitalist mode of production. As Jessop further suggests,

> regulation always operates in an ambivalent manner. On the one hand, it offers a relatively stable framework within which different groups can develop macro-strategies in the form of stylized models of macro-economic growth and corresponding forms of regulation. On the other hand, it also tends to block the fluidity or flexibility of market forces and thereby generates crisis tendencies (Jessop, 1990: 173).

Since crisis tendencies are a recurrent feature of the capitalist mode of production, the process of régulation can only be partial and incomplete; its institutional fixes are always incomplete, always come with their own limits and frailties. MoRs meet their theoretical purpose when those antagonisms that are intrinsic to capitalist social relations are transformed into mere differences and problematics of governance, which in turn establishes the space for social struggle, compromise, and institutional responses. Régulationists insist that both these provisional institutional fixes and the underlying crisis tendencies that periodically exceed and compromise them will tend to emerge in historically and geographically differentiated forms. Crisis tendencies, in other words, tend to arise within the framework of specific RoAs; they exhibit a conjunctural form. It is in this context that régulationists typically distinguish between three types of crises: micro, conjunctural, and structural crises.

Micro crises occur at the firm level and typically manifest in temporary fluctuations in demand and supply. This type of crisis might emanate from failures in supply chains or temporary or seasonal fluctuations resulting in short-run imbalances at the firm level. These are often contained by reorganizing supply chains, lowering prices, adjusting market shares, or recourse to state interventions that might help absorb the surplus or provide temporary reprieve for firms. While these crises are quite commonplace, and as such can be contained and managed within the prevailing MoR, there can be circumstances where an accumulation of micro-crises across firms and sectors might be symptomatic of looming crisis that may exceed the capacities of the MoR (De Vroey, 1984: 53).

More generalized crisis tendencies are described as conjunctural crises, which might involve a cyclical downturn at the macroeconomic level, or serious fluctuations in profitability, investment, and employment. While conjunctural crises can usually be accommodated through adjustments in the MoR, they may indicate a deeper, structural malaise. While the cyclical fluctuation of investment and employment under extensive accumulation were contained within modes of competitive régulation through adjusting prices and wages, creeping inflation under intensive accumulation was indicative of a looming crisis that would eventually expose the limits of the monopoly mode of régulation, in other words designating a structural crisis (De Vroey, 1984: 54-55).

A structural crisis is triggered when the requirements of a given accumulation process can no longer be accommodated within a prevailing MoR, culminating in its rupture. In these circumstances, the RoA itself will break down. This type of crisis is caused when an extant MoR reaches its "internal" limits, or when there are new tendencies and patterns of accumulation that cannot be accommodated within the MoR (Peck and Tickell, 1995: 22; De Vroey, 1984: 53-54; Boyer, 1990). Indications of structural crisis include large and secular declines in productivity, investment, output, employment, or profits; these conditions may also be expressed in large strikes and industrial actions, or the failure of institutions in the face of economic and social upheaval.

Structural crises nevertheless open up the space for struggle between political and social actors, in some cases instituting new structural forms, conventions, norms, habits, and behaviours. The resolutions of structural crisis are not immediate and certainly not automatic. They induce an open-ended search for alternative regulatory arrangements, not ably among the representatives of capital, labour and the state, sometimes resulting—in the absence of guarantees—in somewhat serendipitous "chance discoveries" (Lipietz, 1988a: 34). This implies that a coupling between an MoR "could have taken a different form, and it could have taken place elsewhere" and is not structurally inscribed by tendencies of the capitalist mode of production (Lipietz, 1987: 68). Jessop's (2001) notion of strategic selectivity pushes this agenda to specify "chance discoveries."

If resolutions are ultimately found this will be through institutionalized compromises forged at the nexus of political and economic forces. They will often involve experimentation (and by definition, the risk of failure) with different institutions, production techniques, and labour processes, the cumulative outcomes of which may or may not cohere into a reproducible growth model. As Jessop puts it, Lipietz's notion of "chance discoveries" as a source of cohesion can be expanded to include "a chance structural coupling or co-evolution of different partial modes of régulation" (Jessop, 1990:

192). For Boyer, co-evolution also plays a crucial role in the development of the MoR and is defined as "the process of trial and error through which a series of institutional forms that are initially disconnected and formally independent (since they result from institutionalized compromises among diverse agents in different fields) adjust to one another until a viable institutional configuration emerges" (Crouch et al, 2006: 367).

While this opens the theoretical space for some degree of voluntarism, some régulationists argue that particular conjunctures, understood as path-dependent condensates of social conflicts and structural forms, establish structuring contexts under which political struggle over (alternative) accumulation strategies take place in the face of structural crisis (Jessop, 1990: 196). In turn, structural tendencies in the capitalist mode of production interact with a range of historically and geographically contingent factors to provide the contextual conditions for any such regulatory fix.[12] These couplings are not functional to the needs of accumulation but dependent on the outcomes of class conflict at a given conjuncture.

### Régulationist transitions

Prior to the 1930s, competitive régulation was synchronized with an extensive RoA in much of North America and Western Europe. Fluctuations in output, investment and employment were contained with a MoR that was based on the expansion of new markets for leading sectors in steel, coal and other such capital-intensive industries, fueled to a significant degree by capitalist transitions taking place elsewhere in the (developing) world. This regime was predicated on individualized labour relations, themselves embedded in volatile circumstances of investment and uncertainty in the realization of profits for department I. This growth regime nevertheless suffered from crucial weaknesses. At one level, investment and profitability were directly linked to the expansion of markets, which were subject to periodic fluctuations. Moreover, labour-market conditions (including depressed wages), coupled with the imbalanced nature of growth between the two departments, impeded the growth of consumption (De Vroey, 1984: 47-49; Noel, 1987: 311-312; Lipietz, 1988b: 26)

These weaknesses came to the fore during the structural crisis of the 1930s. While productivity growth had begun to spread to department II, through the adoption of semi-automated assembly lines and other techniques of mass production, this was not accompanied by rising consumption, leading to a crisis of under-consumption that could not be reconciled within the prevailing MoR. In fact, the very principle of competitive régulation was predicated on the alignment of wages with price, positioning wage costs as a barrier to profits. In the wake of this structural crisis, the mobilization of social democratic parties and trade unions was integral to the development of a novel monopolistic form of régulation imbracated with the emergence of Fordism (Lipietz, 1988b: 27; Tickell and Peck, 1992: 194-195).

The monopolistic MoR that emerged after the Second World War would establish productive synchronicities between mass consumption with mass production. Collective wage agreements between unions and employers linked wages and productivity,

12 Tickell and Peck (1992: 208) and Noel (1987: 332-333) lay out three steps for identifying "historical transformation rules": identifying the constraints set by the declining growth regime, identifying coalitions or blocs that can organize a new "collective subject" and discerning the "logic of action and choice" of these blocs based on the values and ideals that they espouse. This agenda has been explored in theoretical terms by Jessop (1991) and has been further pursued by Amable (2017; Amable and Palomborini, 2009).

providing an institutional basis for generalized mass consumption and a broader pattern of wage- and demand-led growth. Combined with the growth of oligopolies and national price agreements, this arrangement led to a mutually reinforcing pattern of development between departments I and II. Furthermore, the Bretton Woods Agreement facilitated a measure of national economic autonomy in core countries, on which basis welfare entitlements were expanded, while treasury departments acquired new (Keynesian) capacities for the regulation of business cycles and the maintenance of aggregate demand (Aglietta, 2000: 71-72; Lipietz, 1988b: 27; De Vroey, 1984: 48-49; Dunford, 1990). Nevertheless, as De Vroey (1984: 54-55) suggests, inflation remained a looming threat, caused by the buildup of debt, secular growth in wages, and increasing consumer demand.

While there were family resemblances between various Fordist-Keynesian regimes, the particular pattern of regulatory arrangements differed between nation-states. While the United States maintained a policy of decentralized labour relations, coupled with the national régulation of competition, France saw the rise of indicative planning at the national level combined with a network of national and sectoral collective agreements, while in comparison, Germany witnessed a greater degree of strategic coordination between business and labour (Boyer, 2005: 513; Hall, 2022). Moreover, these arrangements rested on varying class alliances between different factions of capital and labour. Nevertheless, this family of institutional arrangements served to support the intensive RoA of Fordism, at the heart of which lay the wage-labour nexus.

Finally, the structural crisis of the 1970s involved both disruptions to the pattern of accumulation and growing evidence that the prevailing MoR was encountering its institutional and ideological limits. For more than three decades, a monopolistic MoR had been coupled to an intensive RoA in a fashion that supported virtuous cycles between mass production and mass consumption. By the late 1960s, these virtuous cycles were becoming exhausted. The crisis was triggered by a decline in productivity, coupled with declining investment in capital goods and increasing workplace strife, all of which was reflected in falling rates of profit. This created further incentives for firms to internationalize production, rendering wages as costs and as a drag of profitability, creating conditions of labour displacement and large-scale unemployment in some of the heartland regions of Fordism (Lipietz, 1988b: 30; Tickell and Peck, 1992: 195; De Vroey, 1984: 50). Rising unemployment, in turn, reduced aggregate demand, while also creating stresses on the welfare state. This resulted in an overdetermined crisis of Fordism.

The successor to Fordism was understandably a subject of much debate in the 1980s and 1990s. Some engaged the language of the régulation school in prospective theorizations of the rise of a new post-Fordist growth regime, observing the resurgence of craft production and localized production systems based on inter-firm cooperation, flexible work relations, and dynamic labour markets, especially in high-growth sectors like micro-electronics (see Harvey, 1987; Piore and Sabel, 1984; Scott, 1989; Schoenberger, 1989; Storper and Scott, 1989). Regulation school researchers themselves, however, tended to be more agnostic about post-Fordism, while others raised critical questions about the extent and character of the supposed "transition," including the role of large firms and the reorganization of industrial networks and labour markets (see Amin, 1989; Amin and Robbins, 1990; Amin and Thrift, 1992; Gertler, 1988). Others asked how the post-Fordist RoA was being regulated, given the limited evidence that ascendant modes of neoliberal regulation were actually associated with sustainable growth. This called attention to the generally productionist cast of theories of post-Fordism, which had less to say about articulations with an emergent MoR. In fact, it was argued that many of the new regulatory experiments seemed to be more indicative of an after-Fordist interregnum, or the politics of a continuing crisis, rather premonitions of a durable RoA (Leborgne and Lipietz, 1992; Peck, 1992; Peck and Tickell, 1992; 1994). Subsequent work developed the argument that neoliberalism, understood as a variegated process of state-initiated restructuring, would eventually become in its own way hegemonic, displaying complex connections with new patterns of accumulation centered around knowledge production and financialization (Boyer, 2000; Brenner and Theodore, 2002; Brenner et al, 2010; Jessop, 2013).

## Conclusion

This chapter has sought to sketch some of the underlying premises and key concepts associated with the French school of régulation. Forged as an alternative to general equilibrium economics, this approach to radical, institutionalist political economy entailed a distinctive focus on of the roles of crisis and contradiction in capitalist development, as well as with questions of medium-term reproduction and institutionalization. In its classic, first-generation form, the RA may have a less prominent role in contemporary scholarship, having had its moment perhaps, there is no doubt that its traces and echoes remain in other ways significant. Scholars like Bruno Amable and Robert Boyer have sustained long-term research programs on capitalist variety and institutional diversity, retaining some fidelity to the basic concepts of the RA. Other critics of neoclassical and neo-Keynesian models have turned to régulation theory as a way to center disequilibrium and crisis, animating new research programs on capitalist transformation and variegation (Baccaro and Pontusson, 2016; 2018; 2019; Blyth and Matthijs, 2017; Howell, 2016; Vidal, 2013). As the chapters in this volume by Schuldt and Gandalfo-Lucia also show, some radical political ecologists have also taken a page from the régulationist playbook to highlight the shifting relationship between accumulation, ecology, and institutions. As Bok shows in her chapter, urban geographers and political economists have used régulation-theoretic concepts and routines to highlight the macro-structuring of rule regimes and to contextualize experiments in urban governance. And as other chapters in the volume demonstrate, there is scope for engagement with a wide range of complementary approaches in heterodox and radical political economy, particularly concerning themes like uneven and combined development, financialization, state capitalism, and the law.

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## References

Aglietta M (2000) *A theory of capitalist regulation: the US experience*. London: Verso
Agnew J (1994) The territorial trap: the geographical assumptions of international relations theory. *Review of International Political Economy* 1(1): 53-80
Amable B (2000) Institutional complementarity and diversity of social systems of innovation and production. *Review of International Political Economy* 7(4): 645-687
Amable B (2003) *The diversity of modern capitalism*. Oxford: Oxford University Press
Amable B (2016) Institutional complementarities in the dynamic comparative analysis of capitalism. *Journal of Institutional Economics* 12(1): 79-103
Amable B (2017) *Structural crisis and institutional change in modern capitalism: French capitalism in transition*. Oxford: Oxford University Press
Amable B and Palombarini S (2009) A neorealist approach to institutional change and the diversity of capitalism. *Socio-Economic Review* 7(1): 123-143
Amin A (1989) Flexible specialisation and small firms in Italy: myths and realities. *Antipode* 21(1): 13-34
Amin A and Robins K (1990) The re-emergence of regional economies? The mythical geography of flexible accumulation. *Environment and Planning D: Society and Space* 8(1): 7-34
Amin A and Thrift N (1992) Neo-Marshallian nodes in global networks. *International Journal of Urban and Regional Research* 16(4): 571-587
Baccaro L and Pontusson J (2016) Rethinking comparative political economy: the growth model perspective. *Politics and Society* 44(2): 175-207
Boyer R (1987) *Formalizing growth regimes within a regulation approach: a method for assessing the economic consequences of technological change*. Paris: CEPREMAP
Boyer R (1990) *The regulation school: a critical introduction*. New York: Columbia University Press
Boyer R (2000) Is a finance-led growth regime a viable alternative to Fordism? A preliminary analysis. *Economy and Society* 29(1): 111-145
Boyer R (2005) How and why capitalisms differ. *Economy and Society* 34(4): 509-557
Boyer R and Saillard Y (2002) A summary of *régulation* theory. In R Boyer and Y Saillard (eds) *Régulation theory: the state of the art*. London: Routledge, 36-44
Brenner N (2004) *New state spaces: urban governance and the rescaling of statehood*. New York: Oxford University Press
Brenner N and Theodore N (2002) Cities and the geographies of "actually existing neoliberalism." *Antipode* 34(3): 349-379
Coriat B and Dosi G (1995) *The institutional embeddedness of economic change: an appraisal of the "evolutionary" and "regulationist" research programmes*. Laxenburg: International Institute for Applied Systems Analysis
Crouch C et al (2005) Dialogue on "Institutional complementarity and political economy." *Socio-Economic Review* 3(2): 359-382
De Vroey M (1984) A regulation approach interpretation of contemporary crisis. *Capital and Class* 8(2): 45-66
Dunford M (1990) Theories of regulation. *Environment and Planning D: Society and Space* 8(3): 297-321
Essletzbichler J and Rigby D (2007) Exploring evolutionary economic geographies. *Journal of Economic Geography* 7(5): 549-571
Glassman J (1999) State power beyond the "territorial trap": the internationalization of the state. *Political Geography* 18(6):669-696
Gertler M (1988) The limits of flexibility: comments on the post-Fordist vision of production and its geography. *Transactions of the Institute of British Geographers* 13(4): 419–432
Hall P (2022) The shifting relationship between post-war capitalism and democracy. *Government and Opposition*: 57(1): 1-30
Howell C (2021) Rethinking the role of the state in employment relations for a neoliberal era. *ILR Review* 74(3): 739-772
Jenson J (1989) "Different" but not "exceptional": Canada's permeable Fordism. *Canadian Review of Sociology/Revue Canadienne de Sociologie* 26(1): 69-94
Jenson J (1990) Representations in crisis: the roots of Canada's permeable Fordism. *Canadian Journal of Political Science/Revue Canadienne de Science Politique* 23(4): 653-684
Jessop B (1990) Regulation theories in retrospect and prospect. *Economy and Society* 19(2): 153-216
Jessop B (1991) Accumulation strategies, state forms and hegemonic projects. In S Clarke (ed) *The state debate.* Basingstoke: Palgrave Macmillan, 157-182
Jessop B (2001) Institutional re(turns) and the strategic-relational approach. *Environment and Planning A* 33(7): 1213-1235
Jones MR (1997) Spatial selectivity of the state? The regulationist enigma and local struggles over economic governance. *Environment and Planning A* 29(5): 831-864

Leborgne D and Lipietz A (1988) New technologies, new modes of regulation: some spatial implications. *Environment and Planning D: Society and Space* 6(3): 263-280
Leborgne D and Lipietz A (1992) Conceptual fallacies and open questions on post-Fordism. In A Scott and M Storper (eds) *Pathways to industrialization and regional development*. London: Routledge, 296-309
Lipietz A (1987) *Mirages and miracles: the crisis in global Fordism*. London: Verso
Lipietz A (1988a) Reflections on a tale: the Marxist foundations of the concepts of regulation and accumulation. *Studies in Political Economy* 26(1): 7-36
Lipietz A (1988b) Accumulation, crises, and ways out: some methodological reflections on the concept of "regulation." *International Journal of Political Economy* 18(2): 10-43
Lipietz A (1993) From Althusser to "regulation theory." In EA Kaplan and M Sprinker (eds) *The Althusserian legacy*. New York: Verso, 99-138
MacLeod G (1997) Globalizing Parisian thought-waves: recent advances in the study of social regulation, politics, discourse and space. *Progress in Human Geography* 21(4): 530-553
MacLeod G (2001) Beyond soft institutionalism: accumulation, regulation, and their geographical fixes. *Environment and Planning A* 3(7): 1145-1167
Mayer M (1994) Post-Fordist city politics. In A Amin (ed) *Post-Fordism*. Oxford: Wiley, 316-337
Moulaert F et al (1988) Spatial responses to Fordist and post-Fordist accumulation and regulation. *Papers in Regional Science* 64(1): 11-23
Nadel H (2005) Régulation and Marx. In R Boyer and Y Saillard (eds) *Regulation theory: the state of the art*. London: Routledge, 28-35
Noël A (1987) Accumulation, regulation, and social change: an essay on French political economy. *International Organization* 41(2): 303-333
Nelson RR and Winter SG (2002) Evolutionary theorizing in economics. *Journal of Economic Perspectives* 16(2): 23-46
Peck J (1992) Labor and agglomeration: control and flexibility in local labor markets. *Economic Geography* 68(4): 325-347
Peck, J and Tickell A (1994) Searching for a new institutional fix: the after-Fordist crisis and the global-local disorder. In A Amin (ed) *Post-Fordism*. Oxford: Wiley, 280-315
Peck J and Tickell A (1995) The social regulation of uneven development: "regulatory deficit," England's southeast, and the collapse of Thatcherism. *Environment and Planning A* 27(1): 15-40
Piletic A (2019) Variegated neoliberalization and institutional hierarchies: scalar recalibration and the entrenchment of neoliberalism in New York City and Johannesburg. *Environment and Planning A* 51(6): 1306-1325
Petit P (1999) Structural forms and growth regimes of the post-Fordist era. *Review of Social Economy* 57(2): 220-243
Schoenberger E (1988) From Fordism to flexible accumulation: technology, competitive strategies, and international location. *Environment and Planning D: Society and Space* 6(3): 245-262
Schoenberger E (1989) Thinking about flexibility: a response to Gertler. *Transactions of the Institute of British Geographers* 14(1): 98-108
Scott AJ (1988) Flexible production systems and regional development: the rise of new industrial spaces in North America and Western Europe. *International Journal of Urban and Regional Research* 12(2): 171-186
Storper M and Scott A J (1990) Work organisation and local labour markets in an era of flexible production. *International Labour Review* 129(5): 573-592
Tickell A and Peck J (1992) Accumulation, regulation and the geographies of post-Fordism: missing links in regulationist research. *Progress in Human Geography* 16(2): 190-218
Tickell A and Peck J (1995) Social regulation after Fordism: regulation theory, neo-liberalism and the global-local nexus. *Economy and Society* 24(3): 357-386
Van Der Pijl K (1984) *The making of an Atlantic ruling class*. London: Verso