

An Analytic Narrative Approach to Puzzles and Problems*

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The false dichotomy between problem-oriented and method-driven work is belied by most of the best extant social science research. Occasionally, there may be research motivated only by the desire to improve a technique, but virtually all work of significant interest is trying to untangle a theoretical or empirical puzzle. Not all are puzzles of general public or contemporary interest, however, and this may be what generates much of the current concern about the “relevance” of contemporary social science. But this, too, is often an issue that is more apparent than real.

Many of the major topical questions, especially the Big Problems, are not easily susceptible to social science analysis. We can speculate and postulate and write op eds about how to end racism, poverty, or dictatorship and how to improve the well-being and voice of the neglected. We can seldom offer definitive conclusions. Sometimes this is because the causes are distant and the outcomes cumulative and slow moving (Pierson 2003). Often it is because the problems themselves are inadequately specified and the information social scientists need for analysis unavailable or even unobtainable.

Despite these and other limitations, social scientists can inform public debate and policy. There are excellent examples of scholars who have, among them James Scott (1985; 1998) on the green revolution and on state actions, Frances Fox Piven and Richard Cloward (1977; 1993 [1971]) on welfare systems and other policies meant to aid the poor, Doug McAdam, Sidney Tarrow, and Charles Tilly, separately and together (2001) on contentious politics, Fritz Scharpf (1991; 1999) on governance and democracy in the new Europe, and David Laitin (1992; 1998) on language choice. What distinguishes their distinguished work is that they frame their research in terms of enduring theoretical issues and use rigorous analytic techniques—although of quite different kinds—to make

their case. They frame the puzzle in terms that make it possible, using their methods of choice, to actually provide compelling answers to the questions they raise. The variety of approaches they use suggests that “doubly engaged” (Skocpol 2003) social scientists emerge from all the competing methodological persuasions.

Their methods divide them, but they share some commonalities. All ground their arguments in a model of the interaction of actors given structural constraints. This model need be neither explicit nor formalized, and the key actors may be collectivities rather than individuals. They also identify causal mechanisms (even if only some of these authors label them as such) that are generalized from or generalizable to other cases. For example, in *Weapons of the Weak* (1985), Scott emphasizes how outrage at the injustice of the transformed social contract motivates behavior. In both *Regulating the Poor* (1993 [1971]) and *Poor Peoples' Movements* (1977), mass mobilizations generate electoral tensions that lead to policy concessions to the poor to achieve peace. For Scharpf and for Laitin, there are a variety of mechanisms, depending on the specific puzzle, actors, and structural constraints. McAdam, Tarrow, and Tilly (2001) are by far the most explicit and most developed in their use of a mechanisms-based approach.

All of these works focus on processes and develop qualitative case studies to explore them. In that sense all use narrative techniques, at least as understood by Tim Buth (2002: 481-2 and footnote 2), and all are analytic in their efforts to provide a model of action, to theorize about the relationships among the actors, institutions and structures that are the constituent parts of a complex phenomenon. Only Scharpf and Laitin, however, rely heavily on rational choice and game theory, which makes their work closest to that of rational choice analytic narrative. But this is only one of the flavors of

“analytic narratives.” Ira Katznelson (1997) frequently uses the label to describe the method for taking up large-scale macro-historical questions with a configurative approach derived from Barrington Moore (1966). Theda Skocpol and Margaret Somers (1980) label their preferred comparative method as “macro-analytic comparative history” and certainly rely both on narrative and on iteration in their research (also see Skocpol 2000). Others use the term “causal narrative” to describe a process by which the sequences and variables in an historical narrative are disaggregated in a way that allows cross-case comparisons (Mahoney 2003, 365-367; Sewell 1996). Most recently, Sidney Tarrow (2003) describes the *Dynamics of Contention* project as “‘analytic narratives’ more deeply rooted in context...than the parallel effort” of the approach presented here.

There are various routes to a social science ultimately capable of addressing the major problems of the day. However, this paper eschews the huge comparisons of big structures and large processes taken on by the earlier Charles Tilly (1984) in favor of single cases or small-n comparisons that permit the elaboration of precise models, which generate testable implications and whose domain of operation can be clearly delimited. Scholars who share this taste can still ask big questions but only certain kinds of big questions, ones that can be framed in ways that lend themselves to one form or other of methodological rigor (Geddes 2003). By analyzing language choice (Laitin 1998), the role of emotional mechanisms (Petersen 2002), electoral strategies (Chandra forthcoming), or social boundary mechanisms (Tilly forthcoming), it is possible to address important facets of ethnic conflict. By considering the relationship between rural and urban populations and their relative bargaining power with the state (Bates 1981; Bates 1983; 1991), the constraints bureaucrats impose on political reform (Geddes

1994), or the deals between long dead rulers and legislators (e.g., Hoffman and Norberg 1994; Hoffman and Rosenthal 1997; Kiser and Barzel 1991; Levi 1988; North and Weingast 1989; Root 1994), it is possible to speak to central issues of political and economic development.

Ultimately, social science should assist in the resolution of pressing problems. This is not to suggest that all social scientists must concern themselves with relevance. There is a division of labor in social science as in all else. Rather, the aim is to develop a social science built on solid enough theoretical and empirical foundations to ensure that applied research is in fact grounded in what we authoritatively know about the world.

Unfortunately, we still know relatively little. As many have long claimed, we are far from achieving even the level of science attained in physics or biology, which are themselves far from immune from contests and challenge. For some this signals the need to admit the impossibility of achieving anything more than sensible, reasonable judgments grounded in a sophisticated understanding of the world and the ways of power (Flyvbjerg 2001). For others it means that we should develop clear standards for good social science research and thus remain committed to scientific progress (Laitin 2003). Given the level of maturity of social science qua science, the steps may have to be small and incremental. The puzzles need not be tiny and esoteric, but they do need to be susceptible to solution with the finest analytic and methodological tools available. Moreover, in the best of all possible worlds, their resolutions should serve as building blocks for further and possibly more elaborate puzzle solving.

Another feature of pressing contemporary problems is that each tends to be unique. There may be and usually are comparable issues in the past or in other parts of the world,

but they take place at specific moments and in particular places that can make them distinct in quite important ways. A recent example is the terrorist attack on the U.S. on September 11, 2001. Comparisons with Pearl Harbor have a certain resonance but ultimately fall flat. The conflict between security and civil liberties recalls the Cold War, but we live under different threats with modified institutions and significant differences in political organizations and mobilization.

The analytic narratives project (Bates et al. 1998; Bates et al. 2000a; Bates et al. 2000b)—possibly better labeled the rational choice analytic narrative project—represents one attempt to improve explanations of unique events and outcomes, unravel particular puzzles, and at the same time construct the basis for a social science capable of addressing significant questions of the past and present. The approach is “...problem driven, not theory driven” or method driven (Bates et al. 1998, 11); the motivation for each of the studies is substantive interest by the author in what took place and why. However, our version of analytic narrative is clearly informed by theory, specifically rational choice theory, and by the conjoined methodologies of historical analysis and in-depth case studies.

THE ANALYTIC NARRATIVE APPROACH

The analytic narratives project attempts to make explicit the approach adopted by numerous scholars trying to combine historical and comparative research with rational choice models in order to understand institutional formation and change. It is important to be clear. These essays do not represent a methodological breakthrough. There are many comparativists engaged in similar enterprises. What distinguishes the essays in

Analytic Narratives is not the approach per se but rather the presentation of the material so as to emphasize the steps involved in assembling an analytic narrative. In the original book and in responses to critics, the authors have begun the process of outlining the key elements of a widely shared approach; there is systematization still to be done.

The book, *Analytic Narratives*, brings together five scholars who share a commitment to understanding institutional change and variation. Influenced by the work of Douglass C. North (1981; 1990; 1996 [1993]), to whom the book is dedicated, the aim is to use the tools of the new economic institutionalism to investigate such enduring questions of political economy as political order, governance of the economy and polity, and interstate relations. The pieces in the book represent an extension of North's conception of institutions as rules, both formal and informal, that influence behavior by means of constraints and incentives.

The authors emphasize a view of institutions derived from the theory of games, especially extensive form games and the associated equilibrium concept of subgame perfection. Choices are coordinated, regularized, stable, and patterned—institutionalized, if you will—because they are made in equilibrium. From this perspective, the key questions become how that particular equilibrium emerged in a world of multiple equilibria and why it changes. Relative price changes and variations in distributions of bargaining power and resources among the participating actors (Knight 1992; Levi 1990) suggest the outlines of answers that only a detailed investigation of the case can illuminate.

Thinking about institutional and other forms of social change as problems of multiple equilibria imposes certain boundaries on the scholarly endeavor. Whereas

North's programmatic books may consider the whole history of the western world, his research tends to take on more narrow questions, such as the origin of constitutional constraints on the English monarch following the Glorious Revolution (North and Weingast 1989). The essays in *Analytic Narratives* are similarly focused on specific institutions in particular times and places.

The project also reflects the recognition of the extent to which the authors combine rational choice with inductive practices. Even the formulation of the model is an inductive process, requiring some initial knowledge of the case; the refinement of the model depends on iteration with the narrative.

There are potential gains and losses from the combination of rational choice and game theory with historical analysis. The potential gains come from the capacity to model the sequencing and dynamics of the narrative, to have a technique for specifying the temporal ordering.¹ In addition, the reliance on game theory offers a means to model "constellation effects" (Mayntz forthcoming), that is the relationships and interactions among corporate actors whose individual choices have consequences at the macro level. The application to history and narrative provides a rich empirical account that allows for process tracing (George and Bennett forthcoming; George and McKeown 1985) and evaluation of the model.

The potential losses are of two sorts. The first is the danger (which the *Analytic Narrative* authors like to believe they have avoided) of failing to meet criteria of good research design. David Laitin (2002; 2003) advocates the "tripartite method of comparative research," which integrates statistical analysis, formal theory and narrative. However, for most of the studies undertaken as analytic narratives, statistics are either

unavailable or inadequate for getting at the key questions. Moreover, the number of observations is usually too few for anything approaching what most social scientists consider a test. While paying as much attention as possible to statistical rules of causal inference (King, Keohane, and Verba 1994), analytic narrativists are searching for a means to understand important instances of institutional change not susceptible to many, standard techniques. Generalization is more difficult, but satisfying causal explanation should be more possible.

The second limitation comes from the reliance on rational choice and game theory. Formal models may encourage a search for immediate causes that link the strategic behavior of the key individuals and groups, thus losing sight of the causes situated in the more distant past (Pierson 2003). Firm grounding in economic history and its sensitivity to the *longue durée* tends to obviate this problem, albeit sometimes making the modeling more difficult and complex. Increasingly, as behavioral economists and others (Jones 2001) have made us aware, assumptions of full rationality are problematic, but this need not mean, as Jon Elster (2000) claims, that there is little or no value in using rational choice models in studying complex processes. Such models still offer powerful accounts of certain kinds of phenomena--even if these models may one day, even soon, be superseded by better ones. Nor does it mean that uncertainty, contingency, unintended consequences and the like have no role to play in rational choice analytic narratives. This issue will be more fully addressed below.

There is a tendency for rational choice scholars to focus almost exclusively on cognitive mechanisms at the individual level. This can (but need not) lead to insufficient attention to emotional (Elster 2000: 692, 694) or to relational and environmental

mechanisms (McAdam, Tarrow, and Tilly 2001; Tilly 2001: 22-3). To some extent the emphasis on institutions and explicit elaboration of structural constraints permits some move in the direction of achieving an explanation concerned with macro- as micro-processes. Nonetheless, the analytic narrative project, at least in its current state of development, is less attentive to the whole range of mechanisms and processes than are others (see, esp., Mayntz forthcoming; Tarrow 2003; Tilly forthcoming) who also focus on developing an analytic but historically-grounded social science.

What rational choice analytic narratives promise are explanatory accounts of how structured choices arise in complex historical situations, how and why certain choices are made, and their consequences for actors and institutional arrangements. It is to the efforts to achieve these objectives that we now turn.

The Essays

The substantive chapters in *Analytic Narratives* explore institutional change in a wide range of places and times. All focus on a specific historic puzzle, sometimes taking place only in one country. The primary aim is to understand a particular set of institutions, but the combination of approach and findings do have implications for a wider set of issues. Because of the desire to systematize the approach of analytic narrative, the essays are written in a way that attempts to reveal the skeleton of the reasoning and decisions that the authors make in building their models, selecting what is essential from the larger history, and devising their explanations. This makes some of the writing more pedagogical than literary.² After all, it is the quality of the theory and its confirmation in the essays on which the project rests.

Avner Greif (1998) accounts for the origins of the 12th century Genoese *podestà*, a ruler with no military power. In explicating an exotic institution in an interesting moment of history, Greif constructs an argument with significant implications for theorizing the relationship between factional conflict and political order. Jean-Laurent Rosenthal (1998) compares rulers' capacities to raise revenue and wage wars in France and England in the seventeenth and eighteenth centuries. He argues that the distribution of fiscal authority is a major explanatory variable. Rosenthal speaks to the sources of regime variation and change as well as the relationship between domestic political structures and war making. Margaret Levi (1998) investigates the institutional bases for variation in government policies and citizen responses to conscription in France, the United States, and Prussia in the United States. Levi's finding that revised norms of fairness, resulting from democratization, influence the timing and content of institutional change suggests the importance of normative considerations and the institutional bases of legitimacy in accounting for citizen compliance with government and regulatory agencies more generally. Barry Weingast's (1998) focus is the balance rule, the compromise over the admission of slave states, how it promoted ante-bellum American political stability, and how its breakdown was a critical factor in precipitating the Civil War in the United States. Weingast advances the program of understanding the institutional foundations and effects of federalism. Robert Bates (1998) also addresses one specific institution, the International Coffee Agreement. He explains why it rose and fell and why the United States, a principal coffee consumer, cooperated with the cartel to stabilize prices during World War II and the Cold War. Bates offers a significant contribution to understanding

the circumstances under which a political basis for organization will trump economic competition in an international market.

Of Analytics and Narratives

Analytic narratives involve choosing a problem or puzzle, then building a model to explicate the logic of the explanation and to elucidate the key decision points and possibilities, and finally evaluating³ the model through comparative statics and the testable implications the model generates. As an approach, analytic narrative is most attractive to scholars who seek to evaluate the strength of parsimonious causal mechanisms. The requirement of explicit formal theorizing (or at least theory that could be formalized even if it is not) compels scholars to make causal statements and to identify a small number of variables.

Analytics here refers to the use of models derived from rational choice, particularly the theory of extensive form games. The narrative refers the detailed and textured account of context and process, with concern for both sequence and temporality. It is not used in the post-modern sense of a master- or meta- narrative. Rather, it refers to research grounded in traditional historical methods.

The approach requires, first, extracting from the narratives the key actors, their goals, and their preferences and the effective rules that influence actors' behaviors. Second, it means elaborating the strategic interactions that produce an equilibrium that constrains some actions and facilitates others. The emphasis is on identifying the reasons for the shift from an institutional equilibrium at one point in time to a different institutional equilibrium at a different point in time. By making the assumptions and reasoning clear

and explicit, it is then possible to pose a challenge that might produce new insights and competitive interpretations of the data.

The model must also entail comparative static results. The comparative statics are crucial for comparative research since they are the basis for hypotheses of what could have taken place under different conditions. Comparative statics clarify the effects of the key exogenous variables on the endogenous variables and offer yet another source of hypothesis building. The consideration of off the equilibrium path behavior can reveal the reasoning behind why actors took one path and not another. Indeed, what actors believe will happen should they make a different choice might determine what choices they do make.

The narrative of analytic narratives establishes the actual and principal players, their goals, and their preferences while also illuminating the effective rules of the game, constraints, and incentives. Narrative is "...a useful tool for assessing causality in situations where temporal sequencing, particular events, and path dependence must be taken into account (Mahoney 1999, 1164). The narrative provides the necessary information for causal assessments.

First, it offers a means to arbitrate among possible explanations for instances of observational equivalence, when either of two distinct processes could be producing the outcome under investigation. For example, in the illustrative game in the Appendix of *Analytic Narratives* (Bates et al. 1998), in equilibrium the opposition does not attack a country with a large army. Is having a large army when there is no attack the very reason for peace or is it a waste of resources? Different people have different beliefs that can only be understood contextually:

...the observationally equivalent interpretations rest on markedly different theories of behavior. To settle upon an explanation, we must move outside the game and investigate empirical materials. We must determine how the opponent's beliefs shape their behavior. This blend of strategic reasoning and empirical investigation helps to define the method of analytic narratives... (241)

In Levi's chapter (1998), for example, democratization changes both norms of fairness and institutions. The first alters the ranking of preferences by key actors and the second their beliefs about the effects of their actions.

Sometimes the narrative is insufficient to arbitrate between two alternative explanations, and the theory specifies the conditions that must obtain to ascertain which is correct. This was the case in Greif's analysis of political order in pre-1164 Genoa (1998, 35-6). The narrative then offers the key for causal assessment.

CASE SELECTION

The analytic narrative authors combine a commitment to rational choice, a deep interest in a particular case, and desire to elaborate more general conditions for institutional change. The standard approaches to case selection emphasize the bases for choice among a sample of cases which are informative about the causal chain of interest, either because of the absence, presence, or extreme values of key variables (Van Evera 1997: 49-88) . While these may be critical criteria for selecting cases to test or generate a general theory, the criteria used by the analytic narrativists are sometimes closer to that of the historians than of generalizing social scientists. There is attention to the properties of

causal inference embodied in statistical analysis (King, Keohane, and Verba 1994), but the choice of cases is not drawn from the conceivable sample but because of actual puzzles that have attracted the authors.

Sometimes these puzzles are generated by the availability of exciting new data set. This was part of what started Greif in his explorations of the Maghribi traders; his interest in the Genoese derived from that initial enterprise, which generated additional questions about the changing bases of international trade and commerce, cultural beliefs, and institutional arrangements for coordinating social order (Greif 1989; Greif 1993; Greif 1994a; Greif 1994b; Greif 1995a; Greif 1995b). Sometimes the motivation comes from long-term commitment to understanding a particular part of the world in a particular era. Bates' interest in the coffee cartel arose from his investigations of post-colonial African markets (Bates 1981; Bates 1983; Bates 1997). Rosenthal's focus on French and English absolutism builds on his years of scholarship on the development of markets in France, prior to and after its Revolution (Hoffman, Postel-Vinay, and Rosenthal 2000; Rosenthal 1992). Sometimes the case is inherently interesting and significant; the limited success of the huge literature on the timing of the Civil War inspired Weingast to reconsider the evidence from a new perspective. Sometimes the puzzle is generated by a larger theoretical project, in which a particular case provides a particularly nice window. Levi was not attracted to questions of conscription because of their inherent interest to her or a long-term investment in their investigation. She chose that subject because it allows her to investigate the conditions under which citizens give or withdraw consent from government's extractive demands. To some extent such a motivation existed for all the authors, for all have a long-term theoretical project.

Reliance on analytic narratives can occur because there is no way to accumulate the kind of data required for good statistical analysis; either the problem itself or the period under study is not amenable to quantitative research. Analytic narratives may also complement statistical evidence; the construction of analytic narratives is not an alternative to Laitin's tripartite method. However, all analytic narrative cases must include features that make them amenable to modeling, which not all puzzles or problems are. In addition, they must provide an opportunity to get at an important process or mechanism not easily accessible through other means. Finally, the causal mechanisms and the structures or relationships must be generalizable to other cases, once they are modified for the specifics of the new case.

Strategic choice situations

Essential to the model building is the choice of cases in which there are strategic interactions among the key actors. That is, the choice of one depends on the choice of the other. By considering situations that can be modeled as extensive form games in which there is a subgame-perfect equilibrium, self-enforcement of the institution becomes a matter of credible commitments. In the equilibrium of a game, it is in the interest of the players to fulfill their threats or promises against those who leave the equilibrium path.

This does not mean that the game—and its incentives—cannot change. The comparative static results suggest where it might. Indeed, understanding sources of change is critical to understanding institutional transformation. However, it is also important to comprehend the reasons for institutional stability. Thus, Weingast's analysis of the balance rule accounts for the mechanics of how actors, with conflicting interests in

the perpetuation of slavery, benefited from a compromise on slavery, why they stopped benefiting, and therefore why the institution changed and with what consequences.

Contingency and uncertainty

The existence of multiple equilibria makes both contingency and uncertainty crucial features of analytic narratives. If the starting point is fortuitous, then the resulting equilibrium is effectively determined by contingency. Whatever the starting point, there is uncertainty about the outcome. It is indeterminate *ex ante* since it depends on the strategic choices of actors, who vary in the kind of information they possess, their discount rates, and other constraints acting upon them. The narrative is key to unraveling the probable choices of the actors, but the narrative also reveals the range of characterizations of the situation and conceptualizations of their positions that key individuals possess.

Levi's research on labor union leadership (in process) illuminates the contingency of the starting point. She finds that union members have a dominant preference for competent representation, leaders who can solve the initial strategic dilemmas of organizing a union, winning strikes, attaining the right to bargain collectively, and winning decent contracts. They tend to give their support to whoever effectively solves those problems, whoever happens to be in the right place at the place time. The Teamsters of the 1930s offer an example. In Minneapolis, members coordinated around Farrell Dobbs, a Trotskyite. In Detroit, they turned to James S. Hoffa, who was relative conservative politically. Both Hoffa and Dobbs, who mentored Hoffa, were effective in gaining employer compliance to their demands for union recognition and improved pay

and hours, but Hoffa also relied on strong-arm tactics and third party enforcers, such as the *Cosa Nostra*. The choice of the leader had consequences for the governance arrangements of the union. If members knew and understood all the implications of their original choice, they might make a different one—if they could.

The cases must include problems of randomness or contingency but not if they are too extreme. Again, the example of the unions makes the point. Members solved their leadership problem in the face of uncertainty about the occurrence of strikes and only partial information about the reaction of employers to their demands. Because the interactions between unions and managers are unpredictable and leaders cannot always deliver what they promise, members might have responded by regularly replacing leaders. Where that is true, union leadership is not as good a subject for an analytic narrative. It might make more sense to treat each election independently and thus use quantitative methods to develop and test models of leadership selection and retention.

Even when uncertainty about outcomes appears to be minimal, as in instances where there are clear focal points and strategies, factors in the situation can change unexpectedly. Some contextual changes may have clear and significant consequences, others have butterfly effects, and others little or no effect. The narrative is crucial here for sorting out what matters for what. In Rosenthal's chapter, the potential birth of a Catholic heir to James II affects the calculations of both monarch and elites, but its importance lies in how it changes the strategies of the elites even unto the point of revolution (92). Why they had to resort to revolution rather than peaceful institutional change becomes apparent through the narrative.

BUILDING MODELS

The analytic narratives privilege parsimonious models, ones where the number of exogenous factors are sufficiently few that it is possible to know how changes in their value can affect the institutional equilibrium. This affects the narrative by reducing the importance of other variables for the story. For instance, for Bates one sort of uncertainty was critical: movements in the price of coffee. Variations in US economic activity-- however important they may be to the world economy-- were much less salient. All narratives have to have an anchor (or set of anchors). Analytic narratives make the theoretical anchor more explicit (and thereby easier to criticize) than in more configurative accounts. Analytic narratives require a thicker account than a formal model alone, but the use of game theory ensures that the account will be as thin as is essential to produce an explanatory story.

In building a model, it is advisable to avoid using off the shelf models unless they demonstrably enhance the explanatory project. Empirical social scientists often appeal to one of a small number of models (prisoner's dilemma, battle of the sexes, principal agent with moral hazard, principal agent with adverse selection), even when these models do no more than redescribe the situation in slightly different terms or illuminate only a small part of what is under investigation. Their analysis depends on the context; each of these models can either lead to an efficient or inefficient solution, to a problem solved or to a problem not solved. Which it is depends on detailed knowledge of the context. Once the context is sufficiently understood, the researcher can build a model that fits the particular case better and that captures actual institutional constraints. The institutional constraints

illuminate the set of possible outcomes are possible, and they suggest how the particular problem faced by a society can be solved.

Deduction, induction, and iteration

In analytic narratives the narrative and the analytics are very intertwined. For analytic narratives the models used to elucidate the causal connections among variables are iterative and inductive although the initial intuitions may have been deduced. This is a different strategy than the establishment of a general model from which are derived testable hypotheses, explored with appropriate cases.⁴ The assumptions of rational choice and the logic of game theory generate hypotheses, but the models are refined in interplay with the detailed elements of the narrative. While the claim to generalizability of findings is clearer when hypotheses are deduced from general theory, the explanations of specific instances may be less compelling and realistic. This has long been a critique of the rational choice program in comparative and historical politics and one the analytic narrative project attempts to address.

All of the *Analytic Narrative* authors rely on rational choice to derive hypotheses and provide theoretical leverage, and each has training and experience in historical research, fieldwork, or both. The research began with some basic information and some theoretical priors, but the next step is to accumulate new information and formulate new models. In his chapter, Bates' chapter exemplifies this process; in moving from a model of oligopoly to a model of political economy. He started from one clearly articulated vantage point, confronted it with the evidence, and then selected a new one.

Iteration between theory and data also has implications for the conduct of research. Each new model adopted should be consistent with the facts on hand and real what new data still needs to be acquired. When constructing the theory, social scientists often already know a lot about the data/problem/case that they study. While this is true generally in social science, it is even more obvious in an approach like analytic narrative where the theory must be imbedded in the narrative.

Path dependence and critical junctures

Attention to the narrative ensures that, to the extent possible, the authors can reconstruct the points in the strategic interactions when contingency and uncertainty have an impact on the outcome. The model suggests and the narrative explicates why certain paths were chosen, others purposely foregone, and some not considered at all. The analytic narrativist generally selects cases where there is path dependence (David 1985; David 1994) but not necessarily complete certainty about the outcome. There is nothing about the approach that limits its use to cases of certainty or modest uncertainty, despite Elster's claim otherwise (2000: 693). Extensive form games have long been useful in studying settings of high uncertainty and contingency. Path dependence requires more than identifying the constraints that derive from past actions or the incentives that are built into new institutions. The sequence in which events occur is causally important; events in the distant past can initiate particular chains of causation that have effects in the present. Game theory is particularly well suited to modeling path dependence since so many of its outcomes depend on the sequence of moves.

Path dependence, as understood through the prism of the paths not taken, means more than “history matters.” This is trivially true. The starting point of the game affects and often determines the end point but only once the proper payoffs are incorporated. Certain institutions in certain contexts become self-enforcing in the sense that the alternatives continue to appear unattractive. Beliefs by the players then matter as much as history. While beliefs are certainly affected by historical experience, they also are affected by what actors know of the other players within the current context.

Path dependence in analytic narratives also implies that once certain institutional arrangements are in place—and with them certain distributions of power and authority—it becomes more difficult to reverse or change course. Rosenthal makes this very clear in accounting for the divergence between French and English political institutions in the seventeenth century. Are these the feedback effects that Paul Pierson (2000) emphasizes in his influential article (also, see Thelen 1999, 392-6)? This is not so clear. The analytic narratives approach shares features with this formulation, but the extent of difference and similarity remains to be fully explored.

Greif’s (1996) research on the Commercial Revolution is illustrative. Greif identifies various forms of expectations that coordinate action and, in some instances, give rise to organizations that then influence future economic development. The expectations arise out of the complex of economic, social, political and cultural—as well as technological—features of a society. The existence of a coordination point in itself makes change difficult since it requires considerable effort to locate and then move enough others to a different coordination point (Hardin 1999). When organization develops, the path is even more firmly established, for organization tends to bring with it

vested interests who will choose to maintain a path even when it is not or is no longer optimal.

Comparative statics generate hypotheses about the relationship between exogenous changes and endogenous variables. They provide a way to understand why institutions shift and change. At a minimum comparative statics helps us understand the choice of path within a given context by spelling out how a shock or other external variable will alter the choices of the actors. The Weingast and Levi essays in *Analytic Narratives* use comparative statics to help account for the switch from one equilibrium to another within a given society, creating a new starting point for institutional evolution. There remains a question about the extent to which comparative statics can capture the big foundational moments,⁵ which the historical institutionalist literature on critical junctures⁶ attempts to explain. However, comparative statics may also illuminate even those big one off events labeled as critical junctures (see, e.g., Bates, de Figueiredo, and Weingast 1998; de Figueiredo and Weingast 1999; Weingast in-process).

EVALUATION

There are a variety of criteria for evaluating implementations of the analytic narrative approach. Several of these are logical, but others involve issues of confirmation and generalizability. Most are in the standard toolbox of the well-trained social scientist and are used in evaluation of virtually all research. James Mahoney (2000: 86) claims “...advocates of the new rational choice theory have still not said enough about their methods of hypothesis testing.” What follows below is only the humblest of beginnings of a corrective.

Logic

One of the advantages to analytic narratives is the possibility of assessing the argument according to rigorous and, often, formal logic. Conclusions must follow from the premises. If the reasoning is wrong or even insufficiently precise, then the account lacks credibility. Logical consistency disciplines both the causal chain and the narrative. This is especially true where there is explicit formal and mathematical reasoning employed. The math is either right or wrong.

However, correct math is hardly the only criterion of assessment. A given narrative suggests a model which, when explicated, should have implications for choices, behaviors, and strategic interactions among the players. Those implications force the scholar to reconsider the narrative and then to reevaluate the extent to which key elements of the narrative lie outside of the proposed theory. If one must appeal too often to forces outside the model, then the theory must be rejected. At the same time, the model clarifies those issues that cannot be resolved logically and can only be resolved through narrative materials.

Confirmation

There are various means to assess the extent to which the authors have offered an account confirmed by the data and superior to the alternatives. Not only must the assumptions and causal mechanisms fit the facts, but the model must also have generated testable implications that no alternative would.

Explicit assumptions assist appraisal. However, explicitness puts a burden on the analyst to demonstrate that the assumptions are reasonable. Are the actors identified as the key players in fact the key players? Have the authors provided a plausible and defensible definition of the content and order of preferences as well as to the nature of the beliefs and goals of the actors? The reliance on simplifying assumptions tends to prompt challenges from those who are steeped in the history and the context of the place and period, but it also provokes challenges from those who do not find the assumptions logical or consistent with the material presented in the narrative. The logic embedded in analytic narratives and the empirical material used to create, on the one hand, and evaluate, on the other soon become enmeshed. Both must meet high standards.

Producing testable implications from the model and then subjecting them to disconfirmation is as critical to the evaluation of the analytic narrative as it is for other means of generating hypotheses and implications. However, the iterative feature of analytic narratives adds another dimension. As the authors of *Analytic Narratives* note,

We stop iterating when we have run out of testable implications. An implication of our method is that, in the last iteration, we are left uncertain; ironically perhaps, we are more certain when theories fail than when they fit the case materials. (17)

Analytic narratives share with process tracing (George and Bennett forthcoming) the commitment to modification of the models and explanations as the data reveals new possibilities. There is a difference, however. By explicitly using rational choice and especially when relying on extensive form games, there is an even clearer and more rigorous delineation of the process. Both process tracing and analytic narratives easily

degenerate into curve fitting exercises if improperly done. One of analytic narratives greatest strengths may be that the combination of game theory and iteration compels the researcher to search for novel facts that the old model neither recognized nor captured. This then makes the refinement of the model part of a progressive research program in the Lakatosian sense.⁷

The final criterion of adequate confirmation is the extent to which the theory offers a more powerful account than other plausible explanations. Sometimes, there are alternatives against which an author is contesting or subsuming. This was true for the issues Weingast and Levi study. Sometimes, there are obvious alternatives that derive from a general framework. For example, Greif demonstrates that his political economic theory is superior to a cultural theory. To some extent, the comparative static results offer some competitive explanations. However, often, the generation of an alternative account must come from someone on the other side of the scholarly debate and not from the author of the original analytic narrative. Authors usually become committed to their own interpretations and their own ways to discipline the narrative even when they engage in very strenuous efforts to remain objective. Thus, real social scientific progress comes when different scholars with different perspectives attempt to offer more powerful explanations of the same phenomenon (Buthe 2002: 489; Fiorina 1995).

Generalizability

The Achilles' heel of analytic narratives, indeed of most historically specific accounts and small n-case study research (Rueschemeyer 2003), is in the capacity to generalize. These are, after all, efforts to account for a particular puzzle in a particular place and time

with a model and theory tailored to that situation. Even so, it is possible to use the cases to make some more general points.

The reliance on rational choice, which is after all a general theory of how structures shape individual choices and consequently collective outcomes,⁸ assists in the portability of findings. The additional reliance on game theory highlights certain properties of the structure and strategic choices that then arise. "...whereas the specific game may not be portable...they may yield explanations that can be tested in different settings" (Bates et al. 1998: 234). By identifying the specific form of collective action problems, principal-agent issues, credible commitments, veto points, and the like, analytic narratives provide a way to suggest the characteristics of situations to which these apply and in what ways. For example, the models of federalism, as initially developed by William Riker (1964) and developed by Barry Weingast and his collaborators (Weingast 1995; Weingast, Montinolo, and Qian 1995), are useful in explicating a large number of problems in a wide range of countries, including the case Weingast addresses in his *Analytic Narrative* chapter.

What makes possible the application of the logic of one setting to another is the existence of identifiable causal mechanisms, one of the strengths of rational choice. Roger Petersen (1999, 66) offers a primer for linking mechanisms and structures by means of game theoretic analyses:

When the structures can be identified a priori, that is independently from outcomes, prediction becomes possible. Secondly, the decision structures may connect individual actions to aggregate level phenomena. Through its specification of causal linkages across levels of analysis, game theory can provide individual level prediction from existing aggregate level theory.

Mechanisms than do the work Stinchcombe (1991) wants of them; they “...generate new predications at the aggregate or structural level.”

Conceptions of path dependence, an attribute of nearly all institutional approaches, also rely on causal mechanisms to account for the adaptations and reproduction of institutions. There is a tension here, however, and it takes a similar form for both historical comparative and rational choice institutionalists. If the presumption is that different societies encounter similar problems, it is possible to posit a limited set of mechanisms and solutions. Context influences the outcome but is not totally determinative, and some level of generalization is possible. However, if the presumption is that in some cases the micro details of the situation matter a lot for the form of institutional evolution and in other cases not at all, then generalization is far less viable.⁹

The literature on mechanisms is currently in a state of development; there is little consensus on the definition of mechanisms, let alone how to best use them in explanatory accounts (see, e.g. Hedstrom and Swedberg 1998; Johnson 2002; Mahoney 2001; Mayntz forthcoming; McAdam, Tarrow, and Tilly 2001; Tarrow 2003; Tilly 2001; Tilly forthcoming). However, if they are to be useful as a tool of causal assessment, they cannot be simply what Elster suggests (1998; 1999): a list of the repertoire of

mechanisms, such as emotions, resentment, and the like, that offer a fine-grained explanation of the link between actions and alternatives. Elster himself admits his enterprise borders on “explanatory nihilism” (Elster 1999, 2). A more useful view is that mechanisms are processes that causally connect initial conditions and the outcomes of interest and which may occur at the macro and at the relational as well as the cognitive or emotional levels (Mayntz forthcoming; McAdam, Tarrow, and Tilly 2001).

To further establish the generalizability of the theory out-of-sample tests are necessary. The presumption today in social science research is that the authors will provide those tests themselves, and many attempt to, including Levi and Rosenthal in their chapters in the book. However, seldom does the level of knowledge for the out of sample case rival the detailed understanding of the original case that puzzled the author. While it can be argued that it is incumbent upon an author to have equal authority over a wide range of cases, this is seldom realistic for area specialists, historians, and others who must conquer languages, archives, and other sources to acquire the in depth authority over the subject matter and the narrative detail essential for an analytic narrative. The demonstration of generalizability may rest on a larger community of scholars who take the findings applicable to one place and time to illuminate a very different place and time.

CONCLUSION

The rational choice analytic narrative approach stands in sharp opposition to views of history that would make the outcomes of events totally systematic or unsystematic in the extreme. It is the claim of the analytic narrativists that understanding the institutional context within which events occurs can explain outcomes in certain (but not all)

important historical situations: where structured choices have significant consequences.¹⁰

This is an ideological position rather than a methodological position because there is nothing per se in game theory that rules out complete uncertainty. However, it is not a claim that the approach reveals all the effects of that structured choice; unintended consequences and unforeseen contingencies are beyond the scope of the enterprise.

Use of the rational choice analytic narrative approach has implications for developing a social science capable not only of explaining the past but also for the far more difficult task of advising about the present. By providing a way to model and explicate a complex but relatively unique event, the combination of rational choice and narrative offers a plausibility test for some kinds of proposed policies. By focusing on the institutional details that affect strategic interactions, choices, and outcomes, it can be useful in suggesting likely outcomes under given initial conditions. In using comparative statics, it can help predict the likely consequences of certain kinds of changes and shocks. The analytic narrative approach is applicable only for a relatively narrow range of problems, perhaps, but it offers some promise of revealing important relations and probable outcomes for those kinds of problems for which it is suited. It may provide insight into a piece of a larger puzzle.

It is only one of many tools, however, available to social scientists and not always the most appropriate one. As we progress towards a social science better capable of diagnostics and prediction, we may find better and more powerful tools. In the meantime, we must use what we have to do what we can.

REFERENCES

- Bates, Robert H. 1981. *Markets and States in Tropical Africa*. Berkeley: University of California Press.
- Bates, Robert H. 1983. *Essays on the Political Economy of Rural Africa*. Berkeley: University of California Press.
- Bates, Robert H. 1991. *Beyond the Miracle of the Market*. New York: Cambridge University Press.
- Bates, Robert H. 1997. *Open Economy Politics: The Political Economy of the World Coffee Trade*. Princeton: Princeton University Press.
- Bates, Robert H. 1998. "The International Coffee Organization: An International Institution." In *Analytic Narratives*, edited by R. H. Bates, A. Greif, M. Levi, J.-L. Rosenthal and B. Weingast. Princeton: Princeton Univ. Press.
- Bates, Robert H., Jr. de Figueiredo, Rui J. P. , and Barry R. Weingast. 1998. "The Politics of Interpretation: Rationality, Culture and Tradition." *Politics & Society* 26 (4):603-642.
- Bates, Robert H., Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry R. Weingast. 1998. *Analytic Narratives*. Princeton, N.J.: Princeton University Press.
- Bates, Robert H., Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry R. Weingast. 2000a. "The Analytic Narrative Project." *American Political Science Review* 94 (3):696-702.
- Bates, Robert H., Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry R. Weingast. 2000b. "Analytic Narratives Revisited." *Social Science History* 24 (4):685-696.
- Buthe, Tim. 2002. "Taking Temporality Seriously: Modeling History and Use of Narratives as Evidence." *American Political Science Review* 96 (3):481-493.
- Carpenter, Daniel P. 2000. "What is the Marginal Value of Analytic Narratives?" *Social Science History* 24 (4):653-668.
- Chandra, Kanchan. forthcoming. *Why Ethnic Parties Succeed: A Comparative Study*. New York: Cambridge University Press.
- David, Paul. 1985. "Clio and the Economics of QWERTY." *American Economic Review* 75 (2):332-337.
- David, Paul. 1994. "Why are Institutions the 'Carriers of History'? Path Dependence and the evolution of Conventions, Organizations, and Institutions." *Structural Change and Dynamics* 5:205-220.
- de Figueiredo, Jr., Rui J. P., and Barry R. Weingast. 1999. "The Rationality of Fear: Political Opportunism and Ethnic Conflict." In *Civil Wars, Insecurity and Intervention*, edited by B. Walter and J. Snyder. New York: Columbia University Press.
- Elster, Jon. 1998. "A Plea for Mechanisms." In *Social Mechanisms*, edited by P. Hedstrom and R. Swedberg. New York: Cambridge University Press.
- Elster, Jon. 1999. *Alchemies of the Mind: Rationality and the Emotions*. New York: Cambridge University Press.
- Elster, Jon. 2000. "Rational Choice History: A Case of Excessive Ambition." *American Political Science Review* 94 (3):685-695.
- Fiorina, Morris P. 1995. "Rational Choice, Empirical Contributions, and the Scientific Enterprise." *Critical Review* 9 (1-2):85-94.
- Flyvbjerg, Bent. 2001. *Making Social Science Matter: Why Social Science Inquiry Fails and How It Can Succeed Again*. London: Cambridge University Press.
- Geddes, Barbara. 1994. *The Politicians' Dilemma*. Berkeley: University of California Press.

- Geddes, Barbara. 2003. *Paradigms and Sand Castles in Comparative Politics of Developing Areas*. Ann Arbor: University of Michigan.
- George, Alexander, and Andrew Bennett. forthcoming. *Case Study and Theory Development*. Cambridge: MIT Press.
- George, Alexander, and Timothy McKeown. 1985. "Case Studies and Theories of Organizational Decision Making." *Advances in Information Processing in Organizations* 2:21-58.
- Golden, Miriam. 1997. *Heroic Defeats: The Politics of Job Loss*. New York: Cambridge University Press.
- Greif, Avner. 1989. "Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders." *Journal of Economic History* XLIX (4):857-882.
- Greif, Avner. 1993. "Contract Enforceability and Economic Institutions in Early Trade: Evidence on the Maghribi Traders' Coalition." *American Economic Review* 83 (3):June.
- Greif, Avner. 1994a. "Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies." *Journal of Political Economy* 102 (5):912-950.
- Greif, Avner. 1994b. "On the Political Foundations of the Late Medieval Commercial Revolution: Genoa During the Twelfth and Thirteenth Centuries." *Journal of Economic History* 54 (4):271-287.
- Greif, Avner. 1995a. "The Institutional Foundations of Genoa's Economic Growth: Self-Enforcing Political Relations, Organizational Innovations, and Economic Growth During the Commercial Revolution."
- Greif, Avner. 1995b. "Micro Theory and Recent Developments in the Study of Economic Institutions Through Economic History." In *Advances in Economics and Econometrics: Theory and Applications*, edited by D. M. Kreps. New York: Cambridge University Press.
- Greif, Avner. 1996. "On the Study of Organizations and Evolving Organizational Forms Through History: Reflections from the Late Medieval Firm." *Industrial and Corporate Change* 5 (2):473-502.
- Greif, Avner. 1998. "Self-Enforcing Political Systems and Economic Growth: Late Medieval Genoa." In *Analytic Narratives*, edited by R. Bates, A. Greif, M. Levi, J.-L. Rosenthal and B. Weingast. Princeton: Princeton University Press.
- Hardin, Russell. 1999. *Liberalism, Constitutionalism, and Democracy*. Oxford: Oxford University Press.
- Hechter, Michael. 1990. "On the Inadequacy of Game Theory for the Solution of Real-World Collective Action Problems." In *The Limits of Rationality*, edited by K. S. Cook and M. Levi. Chicago: University of Chicago Press.
- Hechter, Michael. 1992. "The Insufficiency of Game Theory for the Resolution of Real-World Collective Action Problems." *Rationality & Society* 4:33-40.
- Hedstrom, Peter, and Richard Swedberg, eds. 1998. *Social Mechanisms: An Analytical Approach to Social Theory*. London: Cambridge University Press.
- Hoffman, Philip T., and Kathryn Norberg. 1994. *Fiscal Crises and the Growth of Representative Institutions*. Stanford: Stanford University Press.
- Hoffman, Philip T., Gilles Postel-Vinay, and Jean-Laurent Rosenthal. 2000. *Priceless Markets: the political economy of credit in Paris, 1660-1870*. Chicago: University of Chicago Press.
- Hoffman, Philip T., and Jean-Laurent Rosenthal. 1997. "The Political Economy of Warfare and Taxation in Early Modern Europe: Historical Lessons for Economic Development." In *The Frontiers of the New Institutional Economics*, edited by J. N. Drobak and J. V. Nye. San Diego: Academic Press.
- Johnson, James. 2002. "How Conceptual Problems Migrate: Rational Choice, Interpretation, and the Hazards of Pluralism." *Annual Review of Political Science* 5:223-248.

- Jones, Bryan D. 2001. *Politics and the Architecture of Choice*. Chicago: University of Chicago Press.
- Katznelson, Ira. 1997. "Structure and Configuration in Comparative Politics." In *Comparative Politics: Rationality, Culture and Structure*, edited by M. Lichbach and A. Zuckerman. New York: Cambridge University Press.
- King, Gary, Robert Keohane, and Sidney Verba. 1994. *Scientific Inference in Qualitative Research*. Princeton, New Jersey: Princeton University Press.
- Kiser, Edgar. 1994. "Markets and Hierarchies in Early Modern Tax Systems: A Principal-Agent Analysis." *Politics & Society* 22 (3):285-316.
- Kiser, Edgar, and Yoram Barzel. 1991. "The Origins of Democracy in England." *Rationality & Society* 3:396-422.
- Kiser, Edgar, and Michael Hechter. 1991. "The Role of General Theory in Comparative-Historical Sociology." *American Journal of Sociology* 97:1-30.
- Kiser, Edgar, and Michael Hechter. 1998. "The Debate on Historical Sociology." *American Journal of Sociology* 104 (3):785-816.
- Knight, Jack. 1992. *Institutions and Social Conflict*. New York: Cambridge University Press.
- Laitin, David D. 1992. *Language Repertoires and State Construction in Africa*. New York: Cambridge University Press.
- Laitin, David D. 1998. *Identity in Formation : The Russian-speaking Populations in the Near Abroad*. Ithaca, NY: Cornell University Press.
- Laitin, David D. 2002. "Comparative Politics: The State of the Discipline." In *The State of the Discipline: Power, Choice, and the State*, edited by I. Katznelson and H. Milner. New York: W. W. Norton.
- Laitin, David D. 2003. "The Perestroika Challenge to Social Science." *Politics & Society* 31 (1):163-184.
- Levi, Margaret. 1988. *Of Rule and Revenue*. Berkeley: The University of California Press.
- Levi, Margaret. 1990. "A Logic of Institutional Change." In *The Limits of Rationality*, edited by K. S. Cook and M. Levi. Chicago: University of Chicago Press.
- Levi, Margaret. 1998. "The Price of Citizenship: Conscription in France, the United States, and Prussia in the Nineteenth Century." In *Analytic Narratives*, edited by R. H. Bates, A. Greif, M. Levi, J.-L. Rosenthal and B. Weingast. Princeton, N.J.: Princeton University Press.
- Levi, Margaret. 2002. "Modeling Complex Historical Processes with Analytic Narratives." In *Akteure, Mechanismen, Modelle: Zur Theoriefähigkeit makrosozialer Analyse*, edited by R. Mayntz. Frankfurt/Main: Campus Verlag.
- Levi, Margaret. in process. "Inducing Preferences within Organizations: The Case of Unions." In *Preferences in Time*, edited by I. Katznelson and B. Weingast. New York: Russell Sage Foundation.
- Mahoney, James. 1999. "Nominal, ordinal, and narrative appraisal in macrocausal analysis." *American Journal of Sociology* 104 (4):1154-1196.
- Mahoney, James. 2000. "Rational Choice Theory and the Comparative Method: An Emerging Synthesis?" *Studies in Comparative International Development* 35 (2):83-94.
- Mahoney, James. 2001. "Beyond Correlational Analysis: Recent Innovations in Theory and Method." *Sociological Review* 16 (3):575-593.
- Mahoney, James. 2003. "Strategies of Causal Assessment in Comparative Historical Analysis." In *Comparative Historical Analysis in the Social Sciences*. New York: Cambridge University Press.
- Mayntz, Renate. forthcoming. "Mechanisms in the Analysis of Macro-Social Phenomena.
- McAdam, Doug, Sidney Tarrow, and Charles Tilly. 2001. *Dynamics of Contention*. New York: Cambridge University Press.

- Moore, Barrington. 1966. *Social Origins of Dictatorship and Democracy*. Boston: Beacon Press.
- North, Douglass C. 1981. *Structure and Change in Economic History*. New York: Norton.
- North, Douglass C. 1990. *Institutions, Institutional Change, and Economic Performance*. New York: Cambridge University Press.
- North, Douglass C. 1996 [1993]. "Economic Performance Through Time." In *Empirical Studies in Institutional Change*, edited by L. J. Alston, T. Eggertsson and D. C. North. New York: Cambridge University Press.
- North, Douglass C., and Barry R. Weingast. 1989. "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth Century England." *Journal of Economic History* 49 (4):803-832.
- Petersen, Roger. 1999. "Mechanisms and Structures in Comparisons." In *Critical Comparisons in Politics and Culture*, edited by J. Bowen and R. Petersen. New York: Cambridge University Press.
- Petersen, Roger. 2002. *Understanding Ethic Violence*. New York: Cambridge University Press.
- Pierson, Paul. 2000. "Path Dependency, Increasing Returns, and the Study of Politics." *American Political Science Review* 94 (2):251-267.
- Pierson, Paul. 2003. "Big, Slow-Moving, and...Invisible." In *Comparative Historical Analysis in the Social Sciences*, edited by J. Mahoney and D. Rueschemeyer. New York: Cambridge University Press.
- Piven, Frances Fox, and Richard Cloward. 1977. *Poor People's Movements*. New York: Vintage Books.
- Piven, Frances Fox, and Richard Cloward. 1993 [1971]. *Regulating the Poor*. New York: Pantheon.
- Riker, William. 1964. *Federalism*. Boston: Little, Brown.
- Root, Hilton L. 1994. *The Fountain of Privilege: Political Foundations of Markets in Old Regime France and England*. Berkeley: University of California Press.
- Rosenthal, Jean-Laurent. 1992. *The Fruits of Revolution*. New York: Cambridge University Press.
- Rosenthal, Jean-Laurent. 1998. "The Political Economy of Absolutism Reconsidered." In *Analytic Narratives*, edited by R. H. Bates, A. Greif, M. Levi, J.-L. Rosenthal and B. Weingast. Princeton: Princeton Univ. Press.
- Rueschemeyer, Dietrich. 2003. "Can One or a Few Cases Yield Theoretical Gains?" In *Comparative Historical Analysis in the Social Sciences*, edited by J. Mahoney and D. Rueschemeyer. New York: Cambridge University Press.
- Scharpf, Fritz W. 1991. *Crisis and Choice in European Social Democracy*. Ithaca, NY: Cornell University Press.
- Scharpf, Fritz W. 1999. *Governing in Europe: Effective and Democratic?* New York: Oxford University Press.
- Scott, James C. 1985. *Weapons of the Weak*. New Haven: Yale University Press.
- Scott, James C. 1998. *Seeing Like a State*. New Haven, Conn.: Yale University Press.
- Sewell, William H., Jr. 1996. "Three Temporalities: Toward an Eventful Sociology." In *The Historic Turn in the Human Sciences*, edited by T. J. McDonald. Ann Arbor: University of Michigan.
- Skocpol, Theda. 2000. "Commentary: Theory Tackles History." *Social Science History* 24 (4):669-676.
- Skocpol, Theda. 2003. "Doubly Engaged Social Science: The Promise of Comparative Historical Analysis." In *Comparative Historical Analysis in the Social Sciences*, edited by J. Mahoney and D. Rueschemeyer. New York: Cambridge University Press.

- Skocpol, Theda, and Margaret R. Somers. 1980. "The Uses of Comparative History in Macrosociological Inquiry." *Comparative Studies in Society and History* 22 (2):174-197.
- Stinchcombe, Arthur L. 1991. "On the Conditions of Fruitfulness of Theorizing about Mechanisms in the Social Science." *Philosophy of the Social Sciences* 21:367-388.
- Tarrow, Sidney. 2003. "Confessions of a Recovering Structuralist." *Mobilization*.
- Thelen, Kathleen. 1999. "Historical Institutionalism in Comparative Politics." *Annual Review of Political Science* 2:369-404.
- Tilly, Charles. 1984. *Big Structures, Large Processes, and Huge Comparisons*. New York: Russell Sage Foundation.
- Tilly, Charles. 2001. "Mechanisms in Political Processes." *Annual Review of Political Science* 4:21-41.
- Tilly, Charles. forthcoming. "Social Boundary Mechanisms." *Philosophy of the Social Sciences*.
- Van Evera, Stephen. 1997. *Guide to Methods for Students of Political Science*. Ithaca, NY: Cornell University Press.
- Weingast, Barry R. 1995. "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development." *International Political Science Review* 11 (Spring):1-31.
- Weingast, Barry R. 1998. "Political Stability and Civil War: Institutions, Commitment, and American Democracy." In *Analytic Narratives*, edited by R. H. Bates, A. Greif, M. Levi, J.-L. Rosenthal and B. R. Weingast. Princeton: Princeton Univ. Press.
- Weingast, Barry R. in-process. *Institutions and Political Commitment: A New Political Economy of the American Civil War Era*.
- Weingast, Barry R., Gabriella Montinolo, and Yingyi Qian. 1995. "Federalism, Chinese Style: The Political Basis for Economic Success in China." *World Politics* 48:50-81.

ENDNOTES

- * This paper draws on earlier work (Bates et al. 1998; Bates et al. 2000a; Bates et al. 2000b) co-authored with my *Analytic Narrative* collaborators: Robert Bates, Avner Greif, Jean-Laurent Rosenthal, and Barry Weingast and on an earlier published paper (Levi 2002). For their tough, smart, and helpful critiques I thank them, Turan Kayaoglu, Kevin Quinn, Renate Mayntz, Sidney Tarrow, Charles Tilly, and the two commentators at the Yale Conference, Arjun Appadurai and James Scott.
- ¹ Buthe makes this point while also criticizing game theory for being “based on a truncated conception of temporality” (2002: 485).
- ² This produces the criticism (Carpenter 2000: 656-657) that the analytic narrative project authors tell a story in the way that fails to fit the aesthetic criteria claimed by some historical institutionalists.
- ³ In *Analytic Narratives*, the authors use the language of theory testing. However, as Kevin Quinn has pointed out, it is not really clear that testing is at issue in most analytic narratives, where the number of observations is so few. This is an issue that deserves considerable further exploration. But see Buthe (2002) for a different perspective.
- ⁴ This is a common practice among rational choice scholars and one that has led to some very important insights and findings (Golden 1997; Kiser 1994; Levi 1988).
- ⁵ This is a somewhat contested point among the five authors of *Analytic Narratives*.
- ⁶ For an excellent review of the literature on critical junctures, see Thelen (1999, 388-392).
- ⁷ Turan Kayaoglu suggested this point to me.

⁸ This is not quite the same claim as that made by Kiser and Hechter (1991; 1998), who are rigorously deductive. The difference lies not only in the emphasis on the relative roles of deduction and induction but equally on the extent of portability of the findings. Nor they find game theory useful in their practice or their theory (Hechter 1990; Hechter 1992).

⁹ Jean-Laurent Rosenthal made this point to me. He used North (1981) as exemplar of a conception of path dependence that permits generalization and North (1992) as exemplar of a conception that does not. This distinction is, however, widespread among comparative and historical scholars.

¹⁰ I thank Chuck Tilly for urging me to be clearer about the ontological claims of the approach. Further elaboration of the status of this claim and specification of the conditions under which it can operate will have to await for a future paper, however.