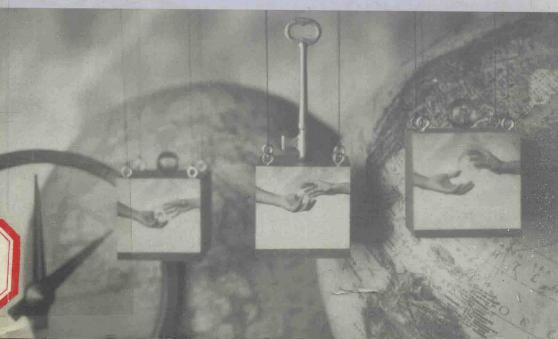


evolutionary interpretations

of WORLD POLITICS

edited by william r. thompson



Evolutionary Interpretations

of WORLD POLITICS

Edited by William R. Thompson

ROUTLEDGE
New York and London

Published in 2001 by Routledge 29 West 35th Street New York, NY 10001

Published in Great Britain in 2001 by Routledge 11 New Fetter Lane London EC4P 4EE

Routledge is an imprint of the Taylor & Francis Group

Copyright © 2001 by Routledge

Printed in the United States of America on acid-free paper Design and typography: Jack Donner

All rights reserved. No part of this book may be reprinted or reproduced or utilized in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording or in any information storage or retrieval system without permission in writing from the publishers.

10 9 8 7 6 5 4 3 2

Library of Congress Cataloging-in-Publication Data

Evolutionary interpretations of world politics / William R. Thompson, editor.

). cm.

Rev. versions of papers originally presented at conference held Dec. 1998, Indiana University, Bloomington, Ind.

Includes bibliographical references and index.

ISBN 0-415-93058-8 — ISBN 0-415-93059-6 (pbk.)

- 1. World politics—Congresses. 2. International relations—Philosophy—Congresses.
- 3. International cooperation—Congresses. 4. Power (Social sciences)—Congresses.
- 5. Political psychology—Congresses. I. Thompson, William R.

D32 .E98 2001

327.1—dc21

00-066485

Acknowledgments

Earlier versions of the papers presented in this volume were first presented at a December 1998 conference on evolutionary approaches to international relations theory held at Indiana University in Bloomington under the auspices of the IU Center for the Study of International Relations. We are grateful to the Center for its 1998 support. But it should also be noted that this conference followed two earlier ones held in Seattle in the mid-1990s under the leadership of George Modelski. The attempt to construct evolutionary IR paradigms thus has a lineage within which this volume is only the most recent manifestation. The lineage should also underscore the work-in-progress nature of this undertaking. As in other evolutionary processes, there is a great deal of experimental trial and error in constructing new IR frameworks and theories. Hopefully, we will get it right some day and when we do, that product, too, will also need to continue to evolve. Along the way, it should be recognized that a number of other people participated in the 1998 conference but for various reasons were unable to participate in this volume: Emmanuel Adler, Fulvio Attina, Lars-Erik Cederman, Tanisha Fazal, Robert Jervis, Miles Kahler, Scott Sagan, and John Vasquez. We have all benefited from their contributions to the 1998 conference. We are equally grateful to Eric Nelson and Routledge for making possible the wider circulation of our arguments, for it will not be possible to judge whether this particular effort is successful until or unless other IR scholars choose to join our search for evolutionary interpretations of world politics. Hopefully, the publication of this edited volume will encourage precisely that outcome.

Contents

Acknowledgments				
Evolv	ving Toward an Evolutionary Perspective William R. Thompson	1.		
par	t I: Central Paradigmatic Questions About Interpretation			
1.	Evolutionary World Politics: Problems of Scope and Method George Modelski	16		
2.	Evolutionary World Politics Enriched: The Biological Foundations of International Relations Vincent S. E. Falger	30		
3.	Obstacles to an Evolutionary Global Politics Research Program David P. Rapkin	52		
раг	t II: Bridges to Other Perspectives			
4.	Evolutionary Tendencies in Realist and Liberal IR Theory Jennifer Sterling-Folker	62		
5.	Diversity or Uniformity in the Modern World? Answers from Evolutionary Theory, Learning, and Social Adaptation Hendrik Spruyt	110		
6.	The Evolution of International Norms: Choice, Learning, Power, and Identity Stewart Patrick	133		

此为试读,需要完整PDF请访问: www.ertongbook.com

part III:	Applications	to Conflict	and (Cooperation
-----------	--------------	-------------	-------	-------------

Evolution in Domestic Politics and the Development of Rivalry: The Bolivia-Paraguay Case Paul R. Hensel	176	
Expectancy Theory, Strategic Rivalry Deescalation, and the Evolution of the Sino-Soviet Case William R. Thompson	218	
Political Shocks and the Deescalation of Protracted Conflicts: The Israeli-Palestinian Case	240	
March II. Maser		
t IV: Applications to International Political Economy		
Egalitarian Social Movements and New World Orders Craig N. Murphy	262	
Technological Capacity as Fitness: An Evolutionary Model of Change in the International Political Economy Sangbae Kim and Jeffrey A. Hart	285	
Continuity versus Evolutionary Shift: Global Financial Expansion and the State Brian M. Pollins	315	
About the Contributors		
x	341	
	The Bolivia-Paraguay Case Paul R. Hensel Expectancy Theory, Strategic Rivalry Deescalation, and the Evolution of the Sino-Soviet Case William R. Thompson Political Shocks and the Deescalation of Protracted Conflicts: The Israeli-Palestinian Case Karen A. Rasler It IV: Applications to International Political Economy Egalitarian Social Movements and New World Orders Craig N. Murphy Technological Capacity as Fitness: An Evolutionary Model of Change in the International Political Economy Sangbae Kim and Jeffrey A. Hart Continuity versus Evolutionary Shift: Global Financial Expansion and the State Brian M. Pollins	

Evolving Toward an Evolutionary Perspective

William R. Thompson

Students of international relations (IR) are familiar with realist, liberal, marxist, and, more recently, constructivist paradigms. Each has a set of assumptions that reflects a singular perspective on how international relations work. A perspective that is less familiar—in large part, because it is only now emerging—is the evolutionary paradigm. There is no one evolutionary paradigm, just as other IR paradigms also possess multiple variations. But the core assumptions go well beyond the most minimal meaning, and perhaps most common employment, of evolution, that is an emphasis on change. The most critical assumptions involve variation and selection. The principal unit of analysis, whether it be states, regime types, economic innovations, ideologies, strategies, or policies, exists in different formats. For instance, at a given point in time, there may be variation in the types of states (city-states, empires, nation-states) or the types of ideologies (fascism, communism, liberal democracy, socialism) that exist. At a subsequent point in time, some of the state types and ideologies will have disappeared. Nation-states, by and large, have been selected over city-states. Liberal democracy has been selected over fascism and communism. The question is then why one approach is selected and others abandoned or ignored. The general answer is found in the interaction between changing environments and actors. As environments and actors change, so too do the probabilities that some approaches will survive and flourish while others wither and may even disappear.

An emphasis on variation and selection goes beyond the minimalist emphasis on mere change. Most evolutionary paradigms in IR, however, stop short of emulating a maximal approach, which could be described as emulating biology's emphasis on genetic combinations, success in sexual reproduction, and blind and slow reactions to external change. Ironically, evolutionary biology initially borrowed some of its conceptualization from the social sciences. But it is not necessary to treat human actors as if they were plants or simple organisms incapable of modifying their environments. Human actors do react to external and internal changes in their environments. They are also capable of anticipating and bringing about environmental change. While there is no need to exalt

humans above other species, their behavior can certainly be more complex. Paradigmatic treatments need to reflect this additional degree of complexity.

But is there a need for still another set of paradigms in the study of international relations? Different people will respond differently to this question. Evolutionary interpretations offer a number of advantages over alternative frameworks. Most obviously, evolutionary arguments cannot evade the need to examine historical change. It may well be that analysts drawn to questions involving long-term, historical change are most likely to be drawn to this type of analysis. But, evolutionary analyses offer considerable flexibility in foci on units of analysis and problematiques. One can focus on states, groups, firms, ideas, or individuals, or all of the above—as long as one anticipates evolutionary processes at multiple levels. One can study processes related to war, inequality, technological change, and identity formation and, conceivably, all at the same time. The point is that the evolutionary paradigm does not privilege a type of actor or a type of problem as the core foci. The other IR paradigms do. Moreover, evolutionary approaches allow the analyst to mix attractive elements from various paradigmatic approaches without betraying the coherence of the analysis. Thus, an evolutionary approach to world politics and political economy is highly flexible.

Other advantages of an evolutionary approach include the analysis of increasing complexity, interdependencies, and coevolving subsystems. World politics and international political economy are not just about diplomatic exchanges and war. Nor is it solely about the exchange of trade and interstate financial flows. It does not focus exclusively on technological change in industries or military practices. Rather, students of world politics and international political economy attempt to deal with all of these topics (and others) simultaneously. If one allows for variable influence patterns over time, changes in one subsystem influence changes in others. Processes and structures are not givens in these interactions, they emerge and, in some cases, eventually disappear. Evolutionary interpretations facilitate the analysis of the life cycles of various topics ranging from norms to hegemonic dominance.

Another advantage of an evolutionary approach is its modesty in forecasting the future. Some level of prediction is feasible for the relatively near-term. Longrange forecasts are made more dubious by contingencies, chance, and increasing complexity. The emphasis is placed on explanation and not on a linear and often mechanistic extrapolation of past values into the future.

Nevertheless, the ultimate advantage of an evolutionary interpretation is whether it leads to better theories than we currently possess. That is a process still very much in its infancy. We are still struggling with alternative visions of how an evolutionary paradigm might or should appear, and in so doing, we have directed little energy to developing competitive theories based on evolutionary assumptions. This edited volume does not resolve this problem but it does break

new ground in bringing together a number of focused debates about different dimensions of evolutionary theorizing in international relations. Specific theories are also advanced. Beginning with the most general questions, successive chapters move toward increasingly specific applications to conflict/cooperation and the international political economy.

Before plunging into the details of evolutionary arguments, however, it makes sense first to spend a bit more time introducing the vocabulary of the evolutionary world politics paradigm. Paradigms are a bit like soups: The key terminology performs the role of the broth. Within the broth swim chunks of meat or vegetables, that is, the theories associated with the paradigm. At this point in time, though, we have more broth than paradigmatic meat and vegetables. Nevertheless, wouldn't it help to know something about the soup's ingredients before tasting it.

SOME TERMINOLOGY FOR AN EVOLUTIONARY WORLD POLITICS PARADIGM

When major changes take place in world politics, they are apt to be interpreted differently by various observers. One reason for this propensity toward conflicting interpretations is that interpretation proceeds within the parameters of more or less explicit perspectives or paradigms. Paradigms are basic frameworks for analysis. They alert us to what we should look for and give us some clues about how processes are related. For instance, the demise of the Soviet Union is unlikely to be viewed in the same way by realists, liberals, or marxists. A realist might regard it as a temporary respite from U.S.-Soviet tensions, with a revived Russia or China likely to resume where the Soviet Union left off. A liberal might see the collapse of the Soviet bloc as dramatic evidence of the triumph of liberal ideas. A marxist might interpret the demise of the Soviet Union as a major impediment in moving toward a world governed by socialist instead of capitalist principles.

The problem is that they might all be at least partially right. Each set of paradigmatic blinders has its liabilities, just as each possesses inherent advantages and insights, Realists handle conflict with ease but are less comfortable with cooperation. Their view of world politics is rather static because the important features do not change. States remain the critical actors; conflict, competition, and rivalry are and will always be the predominant modes of interstate interaction. Liberals are the opposite. They are comfortable with cooperation and less so with conflict. Their bias is toward progressive change leading to a fundamentally altered world politics in which states and conflict become less important. One difficulty is determining how to view reality in the interim as one moves away from the old system toward the new one. Marxists have been good at stressing the existence of inequalities but think that the direction of progressive evolution is clear, inevitable, and much different from the liberal version. Consequently, they are

uncomfortable with the possibility that the progression may be moving along a different trajectory.

These very brief observations imply that there may well be room for still another paradigm—preferably one that does not force analysts to choose among unit foci, assumptions about trends in conflict and cooperation, or the progressiveness of movements toward a better future. An evolutionary paradigm that focuses on the ubiquity of change, at all conceivable levels of analysis and does not prejudge the normative desirability of the changes should hold obvious attractions. Moreover, the evolutionary paradigm enables analysts to take what they want from one or more of the other perspectives without also being forced to assume their individual liabilities.

What are the important components of an evolutionary paradigm for world politics? First, there is a very strong emphasis on *change*. Change is not viewed as something extraordinary. Rather, it is the norm. This perspective reverses prevailing tendencies to theorize about equilibrium states. From an evolutionary perspective, equilibrium is never quite attained. We may be moving away from or toward equilibrium, but such a state is never attained. Things are always in motion and rarely at rest. The expression "after the dust settles" is appropriate. A commotion raises dust and we are cautioned to wait for the dust to settle before evaluating what has taken place. From an evolutionary perspective, the dust never settles. Dust in motion is the norm.

Flux as a norm does not imply that change is a constant. Constants make explanation extremely awkward, if not impossible. But changes can be minor or major in significance. Change can come about gradually or abruptly. Its scope, or the degree to which it is diffused throughout the system, can be extensive or negligible. The basic point is that different types of changes, or, alternatively, changes in different circumstances, are likely to lead to different outcomes. To the extent that *evolution* is about patterned change, the questions raised concern how changes come about and what difference, if any, they make.

For many people, evolution and change are completely interchangeable terms. If that is all that is involved here, we would be talking about a vocabulary for analyzing world politics, as opposed to a new paradigm for its analysis. The crux of an evolutionary paradigm's interpretation of how evolution occurs looks something like the following diagram:

(fitness) (diffusion, imitation, and reinforcement)

Environmental Change —> innovation —> variation —> selection ———> evolution

The classical source of change in evolutionary models is *environmental*. In classical Darwinian models, environmental impacts alter subjects in an involuntary fashion. The subjects have no say in the process. Species either adapt and reproduce successfully or they die. If their food source is high to reach, some giraffes with longer necks may be more successful at survival than giraffes with shorter

necks. Over time, the longer-necked giraffes survive and the shorter-necked giraffes become less common. Whether this story explains how giraffes developed long necks is an awkward example to apply to social science situations involving human decision-makers and populations. People can do things giraffes cannot do. They can make artificial long necks to reach otherwise inaccessible places. They can develop new food sources that grow in accessible areas to replace the vegetation that has been overconsumed. Perhaps like the giraffes, humans can also be held responsible for changes in their environment, namely, overconsumption of accessible food sources. Whatever the case, the bottom line is that humans can remake their environment as opposed to being mere passive reactors to the changes that affect it. However, this does not make human populations immune to environmental change. It just means that the weight given to it as a causal agent or source of causality should be less in social science situations than in biology or geology. The impact of environmental change is much more likely to be mediated by human manipulation (in either direction).

Environmental change can generate variation without human intervention. For instance, climate change appears to have altered the likelihood of early urbanization in the Middle East. Warmer climates melted glaciers leading to increased water levels in rivers and oceans. The location of coastlines, swamps, and deserts all changed as a consequence, which, then created new challenges and opportunities for people in Mesopotamia and Egypt six thousand years ago. Therefore, in the evolutionary figure presented earlier, we might have an arrow connecting environmental change directly to variation. Nevertheless, one working hypothesis is that the environmental changes with which we are most likely to be interested are mediated by human innovations. These mediations have some potential for overcoming the substantial inertia that comes to be associated with the customary way people do things.

Innovations are like mutations in biology except that they do not necessarily occur randomly or blindly. They represent new ways of doing things. They may be adaptations encouraged by environmental change. They may have been introduced in advance of environmental change and their potential only belatedly realized. Or, they may have been introduced in order to bring about environmental change. In biology, animal are conventionally viewed as being acted upon by the environment; human animals, however, are capable of anticipating and creating environmental changes—as opposed to simply adapting to radical changes for survival purposes should such changes occur. An evolutionary paradigm cannot duck the agent-structure question. Structure and structural change influence the agents but the agents are capable of making structural changes.

Once innovations are introduced to a field of routine ways of doing things and characterized by substantial propensities toward inertia, variation exists. Variation simply means that the inventory of available strategies encompasses multiple ways of performance. Given variation, the critical questions then become, which strategies emerge as the predominant method of function? Which strategies are chosen and become successful in that they have been selected over the alternatives available? *Selection* mechanisms or processes for determining successful strategies are thus rather central to this perspective.

The concept of *fitness* is not identical to the message implicit in the "survival of the fittest" phrase. Fitness is about suitability in specific contexts. Actors are fit to the extent that they possess attributes that facilitate the successful adoption of innovations. Strategies are fit to the extent that they correspond to the problems that they are supposed to address, and they generate successful outcomes when applied.

But how do actors choose strategies? From an evolutionary perspective, the rational assessment of costs and benefits associated with alternative approaches is one possibility but not the most likely choice. *Trial and error* searches more likely involve actors groping experimentally (and with changing versus fixed *preferences*) for paths to survival and success, perhaps without full awareness of what they are doing when they are doing it. The consequences of their experimental searches are unlikely to have been fully anticipated and unintended consequences, in general, are often as important as the ones that were intended. Accordingly, short-term futures may be predictable but the future becomes increasingly less certain because of the complexities associated with getting there.

The *level of analysis* that needs to be privileged according to an evolutionary paradigm is variable. Other paradigms in international relations are fixed on individuals, ideas, states, international institutions, or systems. Yet all are capable of evolving and, therefore, all are suitable foci for analytical emphasis. To complicate matters further, it is also possible to view evolution as ongoing in nested circumstances. *Nesting* refers to the probability of simultaneous (but not necessarily identical) evolution ongoing at multiple levels of analysis. The question is whether it is feasible analytically to ignore other evolutionary developments while choosing to focus only on one level at a time. Alternatively, the interactive *coevolution* of different subsystems of action affords a different take on how things work. How do long-term changes in, for example, international politics influence long-term changes in international economics and vice versa?

Undoubtedly a premium is placed on *history* and historical processes because the most interesting evolution at whatever level tends to be characterized by *long-term* processes. If *path dependency* makes a difference to understanding how something has evolved into its present form, it is necessary to trace its transformation over time and often back to its beginning points. Which trajectories or paths evolution takes (that is, which innovations are selected) is presumably sensitive to initial conditions and alternatives. *Learning* is another important historical process. Learning occurs to the extent that actors adjust their strategies based on perceptions about the success or failure of earlier prevailing strategies.

Note that the above terms delineated in italicized type do not tell us in what circumstances inertia will be overcome, how actors learn, when nesting or coevolution cannot be ignored, or how the specifics of fitness or selection oper-

ate. These signify tasks for theory construction. Paradigms offer only broad frameworks that alert us to look for some dimensions of reality and to ignore others. Paradigms provide us with general assumptions about what is most important. The evolutionary paradigm suggests that the basic process at work is the occasional tendency for inertia to be overcome by innovation within a context of internal and external environmental change. But only some innovations are selected. This leads to the fundamental question of why some innovations are selected and others are rejected, ignored, or defeated. Theories developed within this general paradigm are then expected to carry the explicit burden of explaining the more specific processes of innovation, selection, and diffusion.

CENTRAL QUESTIONS

One would not expect a consensus on how to most definitively conceptualize about political evolution. Evolutionary Interpretations of World Politics, the first explicit and focused discussion of evolutionary approaches to IR, is no exception to this generalization. The authors of the various chapters do not agree on how best to proceed, either in terms of constructing a new paradigm or how to situate comprehensively their own interests within such a paradigm. In the lead chapter, George Modelski rejects approaches that he describes as "extra light" (historicaldescriptive analyses employing the term evolution in the title alone), "light" (analyses employing some evolutionary concepts outside of an explicit evolutionary theoretical framework), or "heavy" (analyses that conceptualize everything as being susceptible to the same explanatory framework). The first two approaches may yield substantive information but stop short of advancing an explicit understanding of evolutionary processes. The "heavy" approach has yet to emerge. Instead, Modelski promotes a "strong" variant (an explanatory theory of a particular problem utilizing evolutionary concepts and tracing processes of change). He provides as example his own previous work on evolutionary world politics (EWP) that focuses on competing strategies for global problem management. The evolution of these particular processes are characterized by a sequence of phases and an alteration in the leadership structure that is the principal carrier of innovation.

Vincent Falger views Modelski's approach as a "top-down" explanation. He focuses on institutions and strategies at the global level. Falger prefers a "bottomup" emphasis on biological evolution. Put another way, the EWP perspective is all macro, with no micro. The sort of micro Falger has in mind is illustrated in discussions of in-group/out-group formation, gender biases, and generational change. The bottom line remains that macro processes must be explained ultimately by micro factors even though micro factors cannot account for all the variation in macro phenomena. To omit evolutionary psychology from the equation is to stop short of a comprehensive explanation. Yet evolutionary psychology needs EWP.

Somehow, we need to find a way to merge bottom-up and top-down perspectives on evolutionary change.

While Modelski and Falger are committed to different versions of evolutionary approaches, David Rapkin raises fundamental problems that characterize both top-down and bottom-up interpretations. Four questions are emphasized. What are the units that evolve? Do actors respond to the environment or can they also sometimes influence the environment? How does the environment serve as a selection mechanism? Must evolutionary change be directed? Rapkin does not have comprehensive answers for his questions, but he does offer some suggestions on how to answer the questions he poses. His solution divides paradigmatic questions into core and non-core components. Within the core, it should be assumed that different elements or populations are capable of evolving and serving as units of analysis. Environmental selection operates on variations in knowledge and is both Darwinian (environments influence actors) and Lamarckian (actors influence their own environment). All other inquiries should be regarded as auxiliary to an evolutionary paradigm's core.

BRIDGES TO OTHER PERSPECTIVES

The first three papers on paradigms address the most general questions. A second set of three chapters continue a similar line of investigation but with a somewhat less exclusively evolutionary point of view. While the first set of chapters focuses on evolutionary questions per se, the second set builds explicit bridges to alternative frameworks. One chapter looks at existing IR theory and asks about current evolutionary realist and liberal arguments. A second examines the implications of the question of state convergence. If all actors must adopt to environmental changes or perish, should we expect all states to eventually assume the same form? The answer is no. Darwinian arguments must be qualified by strong doses of organizational and learning theory. Finally, a third chapter rejects existing IR theory as satisfactory in dealing with changes in ideas and norms and demands a new and more explicitly evolutionary approach.

Jennifer Sterling-Folker suggests that IR theory already has considerable experience with evolutionary theorizing. In contrast to the assumption that rational choice predominates IR theoretical assumptions, Sterling-Folker contends that both realist and liberals accept the idea of evolutionary adaptation as a central premise but disagree over how adaptation comes about. Realists stress competitive survival in an anarchic environment that cannot be altered substantially. Liberals stress the role of technological change and consequent institutional adaptations that do alter anarchic contexts. If realists emphasize structural continuity and the persistence of successful coping strategies, then liberals emphasize structural discontinuities and the need for innovative strategies. Seen from this light, some of the debates within IR theory might be ameliorated if the evolutionary element is

made more explicit, rather than left largely implicit as it is now. Reality probably lies somewhere in between what realists and liberals choose to emphasize. An explicitly evolutionary perspective might offer a more balanced point of view.

Hendrik Spruyt counsels caution in adopting an evolutionary perspective. He is particularly concerned that social scientists will adopt biology's emphasis on unintentional natural selection and, as well, the mistaken notion that there is only one fit solution to be selected. He employs as example the likelihood that all states will converge into a single form. But this is only likely to be the case if we omit the possibilities for actor intent, learning, and anticipation of environmental change. If actors are permitted to choose different niches (or institutional strategies), convergence in state form is not particularly likely. Spruyt's argument is not so much antagonistic to evolutionary theorizing as it is suggestive of the need to be careful of how we construct evolutionary paradigms for IR problems. If we appropriate the wrong insights from other disciplines already committed to evolutionary perspectives, we may end up with analytical structures that do more harm than good.

Stewart Patrick disagrees with the idea that realist and neoliberal perspectives are up to the task of dealing with the role of identities, norms, and values in international relations. For realists, rules and institutions constitute only a thin veneer for the all-important distribution of power. The possibilities of innovation and novelty are ignored. Norms are only complied with if it happens to be expedient. Yet while neoliberals concede a greater independent role for ideas and institutions, they fail to allow ideas and institutions to change actor identities and goals. Even constructivists are taken to task for overemphasizing the prevailing distribution of ideas and norms without accounting for how that distribution changes over time. The solution for Patrick involves an analysis of normative evolution through a cycle of conception to their eventual disappearance. Change encourages the search for new ideas. With the help of entrepreneurs, some take hold, out compete their rivals, and become embedded and legitimized via socialization and institutionalization. Eventually, the old winners are challenged by change and new ideas. They may or may not give way. Existing IR theory is not designed to handle this conceptualization of normative life cycles. Therefore, a new and explicit emphasis on normative evolution is not only desirable, it is the only way-or so it is contended—to deal with the phenomena in question.

APPLICATIONS TO CONFLICT AND COOPERATION

The next set of three papers focuses on one type of conflict and cooperation intergroup rivalry relationships. Why do rivalries form? Why do they terminate? These processes are argued to be central to understanding conflict and cooperation in IR and yet we have few answers to how the processes work. All three authors argue that these problems can be best addressed in evolutionary modes even though they may not agree exactly on how best to construct an evolutionary interpretation. Still, the underlying common denominator is how actors choose strategies to cope with changes in their environment and/or how they proceed to change their security environments in which they are attempting to survive and remain competitive.

Paul Hensel takes issue with one argument that claims that interstate rivalries are predetermined by structural conditions. Rather, he believes they evolve as a consequence of domestic parties and groups choosing to emphasize antagonistic relations with an external adversary. Territory, already in dispute, that experiences an abrupt upward adjustment in its perceived value is especially helpful in encouraging these changes in emphasis. A history of previous conflict is also facilitative. Hence, interstate rivalries emerge not strictly as international phenomena but rather as a function of coevolutionary change in domestic politics as well as changes in the interactions of two international antagonists. This point of view is illustrated by an examination of the emergence of the Bolivian-Paraguayan rivalry.

The chapters written by William Thompson and Karen Rasler are not entirely independent; that is, they both focus on the same, new theory of rivalry deescalation and termination. Thompson applies the theory to an interstate rivalry (the Sino-Soviet dispute) while Rasler applies the theory to what so far has been an intrastate rivalry (the Israeli-Palestinian conflict). The theory, laid out in more detail in the Thompson chapter than in the Rasler contribution, focuses on the interaction of shocks, expectational change, policy entrepreneurship, reciprocity, and reinforcement. Both papers use the opportunity to explore the fit of the theory to their cases. However, the linkage to evolutionary arguments is made by focusing on strategic adaption to changing environments. The question is not whether some actors adapt their strategies but how they do so. By examining changes in strategies, an explicit link is made between Thompson and Rasler's approach and Modelski's paradigmatic arguments made in chapter 2. Yet whereas Modelski's emphasizes the most restrictive level of world politics—how world powers rise, fall, and create order for short periods of time-both Thompson and Rasler extend the scope of the evolutionary interpretation to more "mundane" actors in international relations. They both also find that their new deescalation theory not only has considerable powers of synthesizing a variety of older interpretations of conflict resolution, the theory also seems to have considerable explanatory utility in the cases they examine.

APPLICATIONS TO INTERNATIONAL POLITICAL ECONOMY

The last set of papers stresses topics pertaining to various aspects of international political economy (IPE). In IPE, evolutionary arguments tend to emphasize the role of innovations in altering the range of variation and how actors choose to respond to the variation (and the changes therein) from which they must select their coping strategies. One chapter focuses on the reciprocal relationship between

11

major changes in economic frameworks and social movement behavior. The economic changes make some types of social movement behavior more probable and, in turn, the social conflict facilitates the shifts in economic structure. The second chapter also looks at the succession of industrial paradigms but asks whether a new one centered on the soft- and hardware of computer architecture is emerging. If a new paradigm is indeed emerging, which firms and states are most likely to adapt to it, and why? The third chapter in this trio shifts the focus away from radical technological change and its implications in order to stress the acceleration of capital movements and its implications for global political economy. While the emphasis is placed on financial flows as opposed to industrial production, the argument is still about how political-economic actors create and respond to changes in economic practices and political regulation strategies.

Craig Murphy argues that industrial change and social conflict coevolve. Major technological innovations usher in new economic eras centered on the new ways of doing things. Each era goes through a cycle of building, thriving, and clashing. In the building phase, the emergence of new leading industries is facilitated by significant investment that, in turn, is encouraged by relative social calm. The thriving phase is one of peak prosperity as the new industries maximize their profit potential. Things begin to unravel in the clashing phase. Prosperity is reduced as the marginal returns of one-time new industries declines. Firms seek ways to cut costs. At the same time, social movements organized against prevailing inequalities are likely to become more active. What happens next depends in part on new economic innovations and the outcomes of political conflict between social movements and defenders of the status quo. These outcomes depend in part on the success of sociopolitical innovations in resolving social conflict. To the extent that the conflict is resolved, a conducive environment for investing in a new wave of economic innovation will have been created.

Sangbae Kim and Jeffrey Hart argue that we have moved through several industrial paradigms in the past two centuries, with Fordism and Toyotism dominating in the twentieth century. The next paradigm is called "wintelism," and reflects the success of Microsoft (Windows) and Intel in defining how most personal computers operate. If industrial paradigms represent a solution to technical problems that becomes increasingly diffused throughout the economy in time, what drives the process of firm adaptation to the new practices? Which countries are best suited for adapting new practices? The latter question is addressed primarily in terms of types of national governance structures while insulation from competition is stressed in regard to the firm-level adaption question. The general point, though, remains that each successive industrial paradigm favors certain patterns of government-corporate interaction. The nature of wintelism, it is argued, favors decentralized governance structures that engage in regulatory practices in coordination with or through horizontal corporate linkages. While new paradigms pressure firms and