

SELECTED READINGS

Producing Security

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OVERVIEW

Brooks observes that the issue of the relation between international commerce and war and peace goes back several thousands of years. The traditional focus and debate has been on economic interdependence defined in terms of trade between states. Realists such as Kenneth Waltz debated liberals such as Richard Rosecrance on this issue. In an era of economic globalization, however, the key focus of analysis should be the impact of the globalization of production, in particular the international production strategies of multinational corporations. According to Brooks, there are three mechanisms by which the international economy can influence security—by changing capabilities, incentives, and the nature of the actors.

The issue is to what extent the globalization of production acts as a significant force for stability among great powers, between great powers and other states, and among states with secondary international power capabilities. He directly takes on John Mearsheimer's pessimistic view of international relations among great powers.

Questions to Keep in Mind

1. What was Alexander Hamilton's rebuttal to the arguments of Smith, Bentham, Kant, Paine, Rousseau, Montesquieu, and Mill that international commerce made war among states more costly and hence peace more likely?
2. What is meant by the key concept "globalization of production"?
3. What specifically are the key puzzles associated with shifting capabilities, incentives, and nature of the actors?
4. What is the relation between increased geographic dispersion of MNC production and stability among great powers? What is the rebuttal posed by Brooks to realist John Mearsheimer's pessimistic assessment of the future of great-power security relations?
5. Does the optimistic view offered by Brooks of relations among great powers extend to state interaction among lesser powers? Why or why not?

Scholars and statesmen have debated the influence of international commerce on war and peace for thousands of years. Around A.D. 100, Plutarch maintained that international commerce brought about “cooperation and friendship” and that the cessation of commercial exchange would cause the life of man to be “savage and destitute.”¹ This line of reasoning became particularly prominent in the eighteenth and nineteenth centuries with the writings of philosophers such as Adam Smith, Jeremy Bentham, Immanuel Kant, Thomas Paine, Jean-Jacques Rousseau, Montesquieu, and John Stuart Mill.² These men were united in their belief that enhanced international commerce made war among states more costly and, thus, that “the natural effect of commerce is to lead to peace,”³ as Montesquieu maintained in 1748. Many of them also believed that commerce was a dynamic force having a progressively stronger stabilizing effect over time. In the eyes of Kant, “the spirit of commerce, which is incompatible with war, sooner or later gains the upper hand in every state.”⁴

This sanguine view of commerce as having a strong, positive effect on interstate relations has not been universally embraced. Indeed, many have argued the opposite is true. Perhaps the most prominent early pessimistic statement in this regard was advanced by Alexander Hamilton. Writing in 1787, he devotes most of Federalist 6 to critiquing the notion that the “spirit of commerce has a tendency to soften the manners of men and to extinguish those inflammable humors which have so often kindled into wars.” After running through a series of historical examples, Hamilton ultimately concludes that numerous wars were “founded upon commercial motives” and that “spirit of commerce in many instances administered new incentives” for conflict.⁵ Another prominent early pessimist is Frederick List, who argued during the middle of the nineteenth century that reducing participation in international commerce is, in the absence of a universal republic, the surest route to enhancing a state’s security.⁶ At the dawn of the twentieth century, John Hobson famously maintained that the business activities of firms led to imperialism; a few years later, Lenin then took one step further, emphasizing that not just imperialism but eventually war among capitalist states would be the inevitable result of capitalism.⁷

The belief that international commerce can strongly shape security relations is reflected not just in the writings of scholars over the centuries, but in policy discussions and governmental decisions. Over the years, the optimistic perspective on commerce and security has most strongly and directly shaped policy. David Lloyd George, Cordell Hull, Woodrow Wilson, Richard Cobden, William Gladstone, and Bill Clinton are prominent examples of politicians who have advanced policies premised on the notion that international commerce can promote peace.⁸ As we move into the twenty-first century, this view continues to significantly influence important aspects of policy. In the United States, the decision to push for China’s entry into the World Trade Organization is the most prominent recent example. In his 28 January 2000 State of the Union Address, President Bill Clinton exhorted: “Congress should support the agreement we negotiated to bring China into the WTO, by passing Permanent Normal Trade Relations with China as soon as possible . . . [because] it will plainly advance the cause of peace in Asia.” While the foreign policy approaches of the Clinton and George W. Bush administrations differ greatly on many issues, a key common theme is the notion that promoting economic globalization throughout the world can foster a stable security environment.⁹

Despite the prominence of the view among scholars and policymakers that international commerce significantly influences security relations, up until the 1990s essentially no empirical analysis of this issue existed.¹⁰ In the final phase of the Cold War, prominent scholars such as Richard Rosecrance and Kenneth Waltz continued the centuries-old debate on the effects of commerce on peace, but this discussion was confined to the level of theory.¹¹ The rapidly growing scope of international economic integration, termed “globalization,” has over the past decade led international relations scholars to renew their attention to how shifts in the international economy affect states’ security behavior. Unlike almost all previous scholarship on this general subject, the most recent wave of investigations was empirically focused.¹² The general finding emerging from this literature—that trade linkages between states reduce the likelihood of conflict—is important in its own right and, more generally, indicates that the centuries-old contention that the business activities of firms can significantly shape security affairs is, in fact, valid.¹³

Bringing in the Globalization of Production

Given the great importance of economic globalization in the international environment, it is crucial to carefully evaluate its influence on security. The recent literature examining how the international economy influences security has produced important new insights, but it suffers from a major limitation: it neglects the most significant feature of today's global economy. Over the centuries, scholars have generally treated the questions "Does international commerce influence security?" and "Do trade flows influence security?" as synonymous. Not surprisingly, virtually all studies in this recent wave of scholarship examine the security repercussions of international trade flows.¹⁴ In the past, such an overarching focus on the security implications of trade made sense. It no longer does. Until recently, trade was "the primary means of organizing international economic transactions."¹⁵ Today, however, trade is a second-order phenomenon: where and how multinational corporations (MNCs) organize their production activities is now the key integrating force in global commerce.¹⁶

MNC international production strategies have changed in a variety of fundamental ways over the past three decades. These new strategies are characterized by an increased cross-border dispersion of production. For this reason, analysts commonly use the short-hand term *globalization of production* as a descriptor of these recent changes in MNC production—a practice I will also adopt here.¹⁷ As will be shown, MNCs are geographically dispersing production activities both internally and externally—that is, within the firm itself as well as through the development of more extensive interfirm linkages across borders. More specifically, MNCs have greatly enhanced the intrafirm international division of the production process through a new role for foreign affiliates: at the same time, they have pursued deeper relationships with foreign suppliers and cooperative partners located abroad through international subcontracting and international interfirm alliances.

Although analysts use the language of globalization in describing these shifts, the geographic dispersion of MNC production activities is not truly global in scope. These shifts in MNC production have had powerful effects on some states, but

have largely bypassed many others. Specifically, it is among the economically most advanced states that the geographic dispersion of MNC production has been most prominent; the rise of international interfirm alliances, for example, is a trend largely restricted to North America, Western Europe, and Japan. It is also important to recognize that the geographic dispersion of MNC production is not occurring equally across all industries. . . . [I]nternationalization strategies have become prominent only in certain sectors.

The unprecedented nature of the globalization of production is a key feature distinguishing it from international trade. Many analysts argue that what we call economic globalization resembles the international economy during the "golden age" of capitalism from 1870 to 1914. However, this similarity is strong only if we treat economic globalization as an aggregate; when we break economic globalization into its constituent parts, we reach a very different answer. The globalization of production clearly represents an ongoing qualitative change in the international economy; trying to advance the same claim about the other two economic globalization trends—of international trade and international financial markets, respectively—is more problematic. In the end, the geographic dispersion of MNC production is the most historically novel aspect of contemporary economic globalization.

Despite the substantive significance and historical novelty of the globalization of production, there has so far been no systematic empirical analysis of its implications for security relations among states. The last detailed empirical examination of how international production by MNCs can influence security affairs was written in 1935.¹⁸ A number of prominent analysts have recently noted that changes in MNC production strategies may have significant repercussions for security affairs, but this is not a primary focus of their analysis, and they do not empirically evaluate the notions they advance.¹⁹ Because systematic data on the geographic dispersion of MNC production does not exist, there is a dearth of quantitative studies of international conflict that use measures of this global production shift.²⁰ A significant literature did develop in the middle and late 1980s that analyzed the United States' increased reliance upon foreign suppliers for parts and components of military weapons systems.²¹ However, this literature, as well as the studies following in

its wake, focuses almost exclusively on the consequences of the globalization of production for U.S. defense policy or the structure of the U.S. economy rather than upon the repercussions for international security more generally. This literature also centers upon increases in international subcontracting, which is only one element of the geographic dispersion of MNC production.

Empirical analyses of the security repercussions of trade flows can no longer eclipse examinations of how the globalization of production affects security relations. This book is the first systematic study of how this unprecedented change in the global economy influences international security. Since the geographic dispersion of MNC production is a novel and dramatic shift in the international environment, it is critical to know how it changes the prospects for peace. This analysis shows that the globalization of production has led to major changes in the global security environment that collectively improve the security climate in some regions while decreasing it in others.

The Globalization of Production Leads to Changes in Capabilities, Incentives, and Actors

Within the literature that examines how the international economy can influence security, scholars outline a wide variety of arguments. In practice, these disparate arguments can be boiled down to three general mechanisms: the global economy can influence security by changing capabilities, incentives, and the nature of the actors. “*Producing Security*” shows that the globalization of production has reshaped the global security environment via each of these three general mechanisms.

Regarding capabilities, the key puzzle is whether the globalization of production has fundamentally changed the parameters of weapons production. As Richard Bitzinger notes, throughout history, “most countries traditionally have preferred to be self-sufficient in arms production.”²² The reasons are straight-forward: “going it alone” in defense production makes it possible to guard against vulnerability to supply interruptions and to ensure that strategic competitors do not have easy access to the same vital military technologies. States continue to have a preference for relying on their own resources for weapons production; the key question is how capable they are of pursuing this strategy.

Analysts agree that going it alone has become harder in defense production in recent years.²³ Until now, however, we have lacked an understanding of exactly how much more difficult it has become. The analysis in this book reveals that the scales have decisively shifted against a strategy of autarkic defense production: no state, including the great powers, can now effectively remain on the cutting edge in military technology if it does not pursue significant internationalization in the production of weaponry.

Concerning incentives, the key unanswered question is whether the geographic dispersion of MNC production has changed the economic benefits of conquest. Economic gain has historically been a significant motivating force for conflict, and wars of conquest unfortunately still occur, as is demonstrated by Iraq’s 1991 invasion of Kuwait and the occupation of western Congo by Uganda, Burundi, and Rwanda from 1998 to 2002. Irrespective of the motivation for war, the prospects for stability—that is, peacefulness—will decrease if aggressors are able to extract significant economic resources from newly occupied territory. The current benchmark study of the economic benefits of conquest concludes that conquerors are still in a position to effectively extract economic resources from vanquished wealthy countries.²⁴ In order to determine whether this is truly the case, we need to investigate how recent economic transformations within the most advanced countries affect the economic benefits of conquest. Until now, this key issue has been neglected in the literature. This analysis reveals that while conquerors are still in a position to effectively extract economic resources from a subset of wealthy countries, they can no longer do so from most. Specifically, I find that the globalization of production has greatly reduced the economic benefits of military conquest among the most advanced countries.

With respect to shifts in the nature of the actors, the primary puzzle is whether the geographic dispersion of MNC production can reshape security by influencing the prospects for regional economic integration. Because regional integration can alter the interests of the group’s respective members, scholars conclude that such institutions can play a significant role in the development of stable, peaceful security relationships.²⁵ Although this line of argument is compelling, a key question remains: under what conditions will states with security tensions be able to consolidate integration in the first place? All the

theory we have indicates that it is the consolidation of deep regional economic integration, and not simply the formation of an agreement, that has significant positive security repercussions. And yet, scholars who study international co-operation generally agree that states with security tensions will be least likely to engage in deep economic cooperation.²⁶ We need to examine whether the globalization of production can exert sufficient pressure to induce even those states with a history of security rivalry to consolidate regional integration. The analysis here shows that it can. I find that this global production shift can, under certain conditions, enhance the prospects for peace by contributing to the consolidation of deep regional economic integration among long-standing security rivals.

The globalization of production has significant ramifications for security affairs by virtue of the fact that it has altered the parameters of weapons development, the economic benefits of conquest, and the prospects for regional economic integration among security rivals. These three mechanisms are the focus of this book both because of their significance in the literature and because they can be directly examined empirically. However, these mechanisms are not the only means by which the geographic dispersion of MNC production can potentially influence security; in total, there are five other mechanisms, all of which I analyze in this book. . . . [T]hese five other mechanisms are all prospective in nature: they have the potential to influence security relations in the future, but do not appear to have yet played a role. The bottom line is that the globalization of production has already reshaped the international security environment in dramatic ways and may have an even greater influence in the years ahead.

The Globalization of Production Acts as a Significant Force for Great Power Stability

The influence of the globalization of production on security is clearest and also most consequential with respect to great power relations. A massive amount of literature within international relations is devoted to examining the most dangerous potential outcome in the system: a great power that attempts to fundamentally upset the territorial status quo and is successful in doing so because the gains of military conquest are cumulative. The possibility of this outcome has cast a long shadow over researchers

working within every different approach and method in the field.²⁷ This focus is not surprising. Although great power war is not an everyday occurrence, it is one that holds great peril: in World War II, over 50 million were killed, and the possibility that the nature of the system could be transformed by the Axis powers was far from remote. Moreover, the mere threat of great power revisionism is grave and consequential: the U.S. effort to contain the Soviet threat to the system during the Cold War was incredibly expensive in economic terms (for decades America committed between 5 and 14 percent of its GDP to defense spending), and U.S. presidents repeatedly engaged in brinkmanship that ran the risk of escalation to global thermonuclear destruction.

Many different factors influence the prospects for great power stability.²⁸ What is crucial is to identify which factors are important and whether they are likely to have a positive or negative influence. The findings of this book collectively indicate that the globalization of production now acts as a force for stability among the great powers. Put most precisely, the conclusion of this book is that the increased geographic dispersion of MNC production will, *ceteris paribus*, increase the stability of great power relations.

Of course, some say that the rise of what we now call economic globalization is partly due to the “long peace” that emerged among the great powers after 1945.²⁹ This is true. There are many different sources of this long peace, which, in turn, provided a favorable environment for the onset and acceleration of economic globalization. This book is not about the causes of the long peace, nor the genesis of economic globalization. Instead, the motivation for this book is to understand the repercussions of the globalization of production for security relations throughout the world in recent years and in the years to come. With the fading of Cold War security structures, a number of prominent analysts now see an increased threat of security competition among great powers.³⁰ This is where the geographic dispersion of MNC production enters in. As this book will show, now that the globalization of production is here, it works independently to reinforce stability among the great powers in a positive feedback loop via a specific set of mechanisms.

This analysis, in short, greatly strengthens the argument that international commerce now acts as a force for peace among the great powers. This book’s conclusion—that the production activities

of MNCs contributes to stability in a way that is different from and stronger than trade—undercuts those who advance pessimistic projections about the great powers in the years ahead. Significantly, these analysts all maintain that international commerce now provides no reason for optimism about the future. The most forceful proponent of this gloomy perspective, John Mearsheimer, certainly does recognize that economic globalization is a significant force in world politics that has the potential to dramatically influence security affairs, but ultimately concludes that it does not reduce the force of his pessimistic predictions. Mearsheimer asserts there is essentially no difference between the nature and extent of international commerce in today's global economy and that of the pre-1914 era; he then reasons that if extensive international commerce did not prevent World War I, "a highly interdependent world economy does not make great-power war more or less likely" and that we ultimately have no reason to think that the current wave of economic globalization will act as a significant constraint on the severity of conflict among the great powers in the years ahead.³¹

Mearsheimer's treatment of economic globalization suffers from the standard problem in the security field at large: an overly narrow and static conceptualization of international commerce. Trade linkages before World War I were very extensive, to be sure. But trade comprises only one part of what international commerce now consists of, a minority portion at that. Before World War I, there was nothing like the geographic dispersion of MNC production that exists today. Given that the globalization of production is historically novel and is now the pivotal driver of international commerce, analyses such as Mearsheimer's that dismiss the current security repercussions of economic globalization of parallels with pre-World War I trade make no sense. Indeed, they are biased.

It turns out that once we factor in the globalization of production, Mearsheimer's pessimistic argument concerning the future of great power security relations loses steam. In his analysis, whether substantial power gains can be accrued through military conquest has a fundamental influence on the prospects for great power conflict.³² Much of the basis for Mearsheimer's overall pessimism is a reflection of this in combination with his assessment that great power conquerors can, in fact, still effectively extract the economic wealth of those societies they

vanquish on the battlefield and forcibly occupy.³³ As recently as World War II, it appears that great powers were in a position to conquer other great powers and effectively extract economic benefits from occupation.³⁴ This is no longer the case: a key finding of this book is that the globalization of production has greatly lowered the economic benefits of conquest in the most economically advanced states, and hence among all of the current and future great powers. This alone significantly undercuts Mearsheimer's pessimistic portrait of great power security relations in the years ahead.

The reasons why Mearsheimer places great stress on the economic benefits of conquest as an influence on great power stability are, of course, in particular to his specific analysis. However, we need not agree with his particular theory of world politics to appreciate why the reduction in the economic benefits of conquest among the most advanced countries caused by the globalization of production significantly enhances stability among the great powers. Numerous other scholars employing approaches very different from Mearsheimer's similarly emphasize the economic benefits of conquest as a key influence on great power stability.³⁵ Irrespective of why a state seizes territory beyond its borders, the prospects for stability are greatly reduced when a great power can use one military conquest as a springboard for the next. During World War II, for example, the Nazis achieved great initial success and were hard to defeat in large part because they were able to effectively extract economic resources from the territory they occupied; these resources provided capacity that the Nazis could use to protect captured territory and acquire more. Had the Nazis been unable to effectively extract economic resources from vanquished territory, then their strategic vulnerability would have increased as they extended themselves militarily. This example makes it evident why a reduction in the economic benefits of conquest among the most advanced countries would enhance stability among the great powers.

Through its influence on the economic benefits of conquest, the geographic dispersion of MNC production acts as a force for continued peacefulness among the great powers. Although significant, this is not the only reason why this global production shift promotes great power stability. This book's finding that great powers can no longer effectively go it alone in defense-related production points in the same direction. While the consequences of a

change in the benefits of conquest for great power stability has received extensive scholarly treatment, the potential significance of a shift in the ability of states to pursue an autarkic defense production strategy has not yet been examined. There is good reason for this, since until very recently great powers retained the ability to be self-sufficient in defense production.

To put it simply for now, this book's finding that an autarkic defense production strategy has been fundamentally undermined augurs well for peaceful security relations among the great powers for two basic reasons.³⁶ First, consider what would happen if a great power were to go it alone in defense production in the current environment. Any state that pursues this course will not have leading-edge military equipment and will thus be in a weaker position to pursue revisionist aims. Modern history makes clear the significance of this development: the three main revisionist great powers from the past 75 years (imperial Japan and Nazi Germany in World War II, and the Soviet Union during the Cold War) were largely closed off from the international economy at the time they challenged the status quo.

Second, the finding that states can no longer effectively produce leading-edge military technologies on their own means that any great power that makes a fundamental challenge to the territorial status quo will be easier to subdue; this is the case irrespective of which defense production strategy is pursued. The great powers that have made fundamental challenges to the status quo over the past century all acted largely on their own and provoked a counterbalancing coalition that imposed a supply cutoff upon them. The problem is that these supply cutoffs were far from effective in reducing the ability of the revisionist great power to develop and produce competitive military weaponry.³⁷ The world of today is much less threatening in this regard: the globalization of production greatly magnifies the degree to which a supply cutoff like those imposed in World War II would degrade the military capacity of a revisionist great power that acts alone.

The marked reduction in the benefits of conquest among the most advanced countries and the change in the parameters of weapons development caused by the globalization of production are both stabilizing for security relations among the great powers on their own. Of key importance, however, is that these changes overlap and reinforce each other: . . . these two shifts in combination make

less acute the most dangerous threat in the system. Significantly, this is true regardless of what motivates great powers. No matter whether the ultimate goal is power, security, prestige, or wealth, the geographic dispersion of MNC production has structurally shifted the scales against any great power that tries to overturn the fundamental nature of the system through force. Given that the globalization of production is a major, historically novel shift in the international environment, we are fortunate that it has a stabilizing influence on great power relations.

Is the Globalization of Production Leading to Universal Peace?

The view that economic shifts can influence the political world is one of the most enduring notions within political science and the social sciences more generally. Although sometimes viewed as being exclusively associated with Marxist theory, it is an intellectual project of incredible diversity. Unfortunately, many analysts go so far as to advance economic determinist arguments.³⁸ A prominent example of this tendency with respect to international security is John Stuart Mill's argument in 1848: "It is commerce which is rapidly rendering war obsolete, by strengthening and multiplying the personal interests which are in natural opposition to it. . . . [Commerce is] the principal guarantee of the peace of the world."³⁹

Mill's optimistic forecast that international commerce was rendering war obsolete, like many similar predictions that followed in its wake, proved to be greatly in error.⁴⁰ His understanding was not simply wrong at the time; it necessarily will always be wrong.⁴¹ The simple reason is that international commerce is only one of the variables that influences the likelihood of war. This book is motivated by the need to better understand whether international commerce now has a positive or negative influence on security relations; in pursuing this goal, I recognize that it does not serve as a master variable.

Although the globalization of production does not provide any guarantee of peace among the great powers, it does act as a force for stability among them. This raises a key question: does this global production shift have beneficial repercussions for security throughout the world or only in certain regions? For many, the term *globalization* connotes a system or process that encompasses all countries and industries. As stressed above, the globalization

of production is not, in fact, 'global' but instead remains bounded in important respects: it is an ongoing process, not an end point.⁴² It is, consequently, vital to examine the nature of this production change in its current form rather than to speculate about some hypothetical future international economy that is perfectly globalized.⁴³ Once we do so, it becomes clear that there is no reason to expect that the geographic dispersion of MNC production will have a uniform effect on security relations throughout the world.

The unfortunate conclusion of this book is that while the geographic dispersion of MNC production is stabilizing among the great powers, it will not promote peace elsewhere in the world. Indeed, the analysis . . . shows that this global production shift is likely to have a net negative influence on security relations among developing countries. This is partly because developing countries have not yet participated in the globalization of production to nearly the same extent that the great powers have. Far from acting as a general force for improved security relations, as some prominent analysts aver is the case, the positive influence of the globalization of production, I conclude, will be geographically circumscribed for the foreseeable future.

Notes

1. Irwin 1996, 11.
2. See the discussion in Silberner 1946; and Doyle 1997, chap. 7.
3. Montesquieu 1989, 338.
4. Kant 1957, 32.
5. Hamilton 1961, 56, 57.
6. See Silberner 1946, chaps. 8 and 9.
7. Hobson 1902; and Lenin 1917.
8. See Way 1998, chap. 1.
9. On this point, see Rose 2003.
10. On this point, see, for example, Levy 1989, 261–62.
11. Rosecrance (1986) argues that commerce promotes stability, whereas Waltz (1979, esp. 138) advances the opposite position.
12. For useful reviews of this recent literature, see McMillan 1997; Barbieri and Schneider 1999; and Mansfield and Pollins 2001.
13. This is not to say that there is uniform agreement concerning how trade linkages influence security behavior. The prevailing view is that higher levels of trade interdependence lower the likelihood of conflict (on this point, see, for example, the discussion in Mansfield and Pollins 2001).
14. A partial list of these studies includes Oneal and Russett 1997, 1999; Russett and Oneal 2000; Oneal et al. 1996. For a full set of citations, see the bibliographies in Barbieri and Schneider 1999; McMillan 1997; and Mansfield and Pollins 2001.
15. Kobrin 1995, 26.
16. A multinational corporation is a firm that owns, coordinates, or controls value-adding activities in more than one country.
17. See, for example, Dunning 1992, 128–32. The “geographic dispersion of MNC production” is a more accurate, but also more cumbersome, short-hand descriptor that I will also sometimes use.
18. See Staley 1935.
19. See, for example, Rosecrance 1999.
20. For useful discussions of the limitations of data on the international production activities of MNCs, see OECD: Economic Outlook 71, 2002, 159.
21. Much of this literature is discussed in Moran 1990.
22. Bitzinger 1994, 172.
23. See, for example, Moran 1990; Bitzinger 1994.
24. See Liberman 1996.
25. See, for example, Wendt 1994; Deutsch et al. 1957; Nye 1971; and Russett and Oneal 2000, chap. 5.
26. See, for example, Grieco, Powell, and Snidal 1993.
27. Mearsheimer 2001; Rosecrance 1999; and Stam and Smith 2001 are recent examples.
28. The most significant recent empirical analysis emphasizing this point is Bennett and Stam 2003.
29. For this argument, see, for example, Buzan 1984. On the long peace, see Gaddis 1987.
30. See Mearsheimer 2001; Kupchan 2002; Waltz 2000; and Huntington 1993.
31. See Mearsheimer 2001, 371. This is the same line of argument advanced in Waltz 2000; and Kupchan 2002, esp. 103. Huntington goes one step further, arguing that commerce is now destabilizing among the great powers; see Huntington 1993, 25–27.
32. Of the four strategies Mearsheimer identifies for states to enhance their power, it is conquest that plays by far the most significant role in his account and in the historical record: see Mearsheimer 2001, esp. 147–55.
33. Mearsheimer 2001, esp. 148–50.
34. See Liberman 1996, chap. 3.
35. Three of the strongest recent statements in this regard are Van Evera 1999, chap. 5; Stam and Smith 2001; and Rosecrance 1999, esp. 17, 81.
36. A more detailed version of this argument is presented in chapter 7 *Producing Security*.
37. For a useful overview, see Mearsheimer 2001, 90–96.
38. Here, economic determinism is taken to mean that “the tendencies, forces, and outcomes of economic processes exert an independent, determining influence on other aspects of social development, such as political organization and cultural beliefs” (Bimber 1994, 91).
39. Mill 1920, 582.

40. The most famous of these forecasts was advanced by Norman Angell; Angell 1910.
41. See the discussion in Keohane and Nye 1998, 81.
42. On this point, see Dicken 1998, 5.
43. Some globalization proponents are more extreme in this respect; see, for example, Reich 1991; and Ohmae 1995.

References

- Angell, Norman. 1910. *The Great Illusion: A Study of the Relationship of Military Power in Nations to Their Economic and Social Advantage*. London: William Henemann.
- Barbieri, Katherine, and Gerald Snyder. 1999. Globalization and Peace: Assessing New Directions in the Study of Trade and Conflict. *Journal of Peace Research* 36.
- Bennett, D. Scott, and Allan Stam. 2003. *The Behavioral Origins of War*. Ann Arbor: University of Michigan Press.
- Bimber, Bruce. 1994. Three Faces of Technological Determinism. In *Does Technology Drive History?* edited by M. Smith and L. Marx. Cambridge: MIT Press.
- Bitzinger, Richard A. 1994. The Globalization of the Arms Industry: The Next Proliferation Challenge. *International Security* 19 (2).
- Buzan, Barry 1984. Economic Structure and International Security: The Limits of the Liberal Case. *International Organization*, 38.
- Deutsch, Karl, et al. 1957. *Political Community and the North Atlantic Area*. Princeton: Princeton University Press.
- Dicken, Peter. 1998. *Global Shift: Transforming the World Economy*. 3rd ed. New York: Guilford Press.
- Doyle, Michael W. 1997. *Ways of War and Peace: Realism, Liberalism, and Socialism*. New York: Norton.
- Dunning, John. 1992. *Multinational Enterprises and the Global Economy*. Reading, Mass.: Addison Wesley.
- Gaddis, John. 1987. *The Long Peace: Inquiries Into the History of the Cold War*. New York: Oxford University Press.
- Grieco, Joseph, Robert Powell, and Duncan Snidal. 1993. The Relative Gains Problem for International Cooperation. *American Political Science Review* 87.
- Hamilton, Alexander (Publius). 1961. The Federalist No. 6 in *The Federalist Papers*.
- Hobson, John. 1965. *Imperialism: A Study*. Ann Arbor: University of Michigan Press.
- Huntington, Samuel. 1993. The Clash of Civilizations? *Foreign Affairs* 72 (3).
- Irwin, Douglas. 1996. *Against the Tide: An Intellectual History of Free Trade*. Princeton: Princeton University Press.
- Kant, Immanuel. 1957. *Perpetual Peace*. Translated by Lewis White Beck. New York: Bobbs-Merrill.
- Keohane, Robert O., and Joseph S. Nye Jr. 1998. Power and Interdependence in the Information Age. *Foreign Affairs* 77 (5).
- Kobrin, Stephen. 1995. Regional Integration in a Globally Networked Economy. *Transnational Corporations* 4 (2).
- Kupchan, Charles. 2002. *The End of the American Era: U.S. Foreign Policy and the Geopolitics of the Twenty-first Century*. New York: Knopf.
- Lenin, Vladimir. 1917. *Imperialism: The Highest Stage of Capitalism*. New York: International Publishers.
- Levy, Jack S. 1989. The Causes of War: A Review of Theories and Evidence. In *Behavior, Society, and Nuclear War*, edited by P. Tetlock et al. New York: Oxford University Press.
- Lieberman, Peter. 1996. *Does Conquest Pay? The Exploitation of Occupied Industrial Societies*. Princeton: Princeton University Press.
- Mansfield, Edward, and Brian Pollins. 2001. The Study of Interdependence and Conflict: Recent Advances, Open Questions, and Directions for Future Research. *Journal of Conflict Resolution* 45 (6).
- McMillan Susan M. 1997. Interdependence and Conflict. *Mershon International Studies* 41.
- Mearsheimer, John J. 2001. *The Tragedy of Great Power Politics*. New York: Norton.
- Mill, John Stuart. 1920. *Principles of Political Economy*. London: Longman, Green.
- Montesquieu, Charles de Secondat. 1989. *The Spirit of the Laws*. Cambridge: Cambridge University Press.
- Moran, Theodore H. 1990. The Globalization of America's Defense Industries. *International Security* 15(1).
- Nye, Joseph S., Jr. 1971. *Peace in Parts: Integration and Conflict in Regional Organization*. Boston: Little Brown.
- Ohmae, Kenichi. 1995. *The End of the Nation State: The Rise of the Regional Economies*. New York: Free Press.
- Oneal, John, France Oneal, Zeev Maoz, and Bruce M. Russett. 1996. The Liberal Peace: Interdependence, Democracy, and International Conflict, 1950–85. *Journal of Peace Research* 33 (1).
- . 1999. Assessing the Liberal Peace with Alternative Specifications: Trade Still Reduces Conflict. *Journal of Peace Research* 36 (4).
- Reich, Robert. 1991. *The Work of Nations*. New York: Alfred A. Knopf.
- Rose, Gideon. 2003. Imperialism: The Highest Stage of Capitalism. *National Interest*, spring.
- Rosecrance, Richard. 1986. *The Rise of the Trading State*. New York: Basic Books.
- . 1996. The Rise of the Virtual State. *Foreign Affairs* 75 (4).
- . 1999. *The Rise of the Virtual State: Wealth and Power in the Coming Century*. New York: Basic Books.

- Russett, Bruce M., and John R. Oneal. 2000. *Triangulating Peace: Democracy, Interdependence, and International Organizations*. New York: Norton.
- Silberner, Edmund. 1946. *The Problem of War in Nineteenth Century Economic Thought*. Princeton: Princeton University Press.
- Staley, Eugene. 1935. *War and Private Investor*. Garden City, New York: Doubleday, 1935.
- Stam, Allan C., and Alastair Smith. 2001. Issues, Stakes, and the Nature of War. Paper presented to the Annual Meeting of the American Political Science Association, San Francisco.
- Van Evera, Stephen. 1990–91. Primed for Peace: Europe after the Cold War. *International Security* 15.
- Vernon, Raymond, and Ethan B. Kapstein. 1991. National Needs, Global Resources. *Daedalus* 120 (4).
- Waltz, Kenneth N. 1979. *Theory of International Politics*. Reading, Mass.: Addison-Wesley.
- . 1993. The Emerging Structure of International Politics. *International Security* 18.
- . 2000. Globalization and American Power. *National Interest*, spring.
- Way, Christopher. 1998. Manchester Revisited: A Theoretical and Empirical Evaluation of Commercial Liberalism. Ph.D. dissertation, Stanford University.
- Wendt, Alexander. 1992. Anarchy Is What States Make of It: The Social Construction of Power Politics. *International Organization* 46.
- . 1994. Collective Identity Formation and the International State. *American Political Science Review* 88.

Beyond the Tragedy of the Commons

ROBERT O. KEOHANE

OVERVIEW

*Elinor Ostrom was awarded the Nobel Prize in Economics, a singular achievement for a political scientist. Her best-known work is *Governing the Commons: The Evolution of Institutions for Collective Action* (1990). While she utilizes the rational-choice approach in her analysis, her work is also known for placing individual choice within social and cultural contexts. Her focus of research is on how self-governing institutions at the local level come to surmount collective action problems to sustain and manage common-pool resources (CPR) such as forests, fisheries, water, and farmlands.*

Robert Keohane argues that the questions posed by Ostrom concerning the local commons are equally applicable to the global commons. At both levels of analysis common-pool resources are subject to the collective goods challenge—the underprovision or overuse of a good as no individual actor independently has an interest in preserving it. Keohane is particularly qualified to comment on Ostrom’s work given his own efforts in analyzing international collaboration and the fact that he coedited a book with her on climate and collection action in the mid-1990s.

Questions to Keep in Mind

1. According to Keohane, why is Ostrom's work even more relevant today than when it was published in the 1980s?
2. How does the traditional literature on the local village commons and recent work on the earth's atmosphere parallel and reflect the conceptual and methodological approaches of Keohane's neoliberal institutionalism as developed in *After Hegemony* (1984) and summarized in the text?
3. Keohane notes that his own work and the literature on international political economy in general stress the value of heterogeneity of actor interests and capabilities in terms of facilitating cooperation. As an example he references the literature on hegemonic stability theory. Ostrom's empirical case studies conducted at the local or village level, however, suggest heterogeneity of actors' interests and capabilities inhibits cooperation. What do these different perspectives lead Keohane to conclude?
4. Keohane argues that Ostrom's work on the challenge of heterogeneity in terms of achieving cooperation among actors is also relevant in terms of global cultural heterogeneity and political violence. How can this conceptual point be related to the conflict and tension today between segments of Islam and Christianity?

As all readers of *Governing the Commons* know, Elinor Ostrom's focus in that work is on local communities engaged in activities such as fishing and agriculture, and on metropolitan areas such as Los Angeles. She is critical of many interventions from national and regional authorities as interfering with locally organized cooperation, and she hardly mentions international issues. Yet I will argue here that this book is potentially an important contribution to the study of world politics.

All life depends on a larger commons: the earth and its atmosphere. In the 1980s, when Ostrom wrote her great work, human beings were unaware of the dangers to the atmosphere posed by climate change; most of us now have been exposed to the enormous amount of evidence indicating that the earth's atmosphere is becoming warmer as a result of human emissions of carbon dioxide and other greenhouse gases.¹ So should we now not be asking the questions that Ostrom asks about local commons about the global commons? Analytically, these questions are equally interesting, and in policy terms they are important to all human beings and other forms of life, rather than just to people in small communities scattered around the globe. Her work may travel even farther—to issues of conflict generated by cultural differences—if we take into account its arguments about how differences in interests among actors can affect cooperation. But we begin with the commons questions.

What is striking about these commons questions—local and global—is how much analytic

resemblance they bear to each other. In both cases, what is at stake is a common-pool resource (CPR) that is subject to underprovision or overuse because no individual actor independently has an interest in preserving it. This malady of underprovision/overuse equally afflicts the traditional village commons and the earth's atmosphere. It should not be surprising, therefore, that there is a striking convergence between the literatures in political science that focus on these issues, even though they are entirely independent of one another in their origins.² In neither arena—world politics nor local governance of CPRs as studied by Ostrom—are there effective rules enforced hierarchically from above. Yet in both arenas, actors—principally states in world politics, individuals at local levels—seek to build rules that enable them to cooperate, by generating incentives to behave in collectively desired ways. The global and local literatures both focus on how institutions can provide information and reduce transaction costs; in both arenas actors rely on reciprocity to generate incentives, and in both arenas credibility is a crucial resource for actors involved in bargaining and rule making.³

Comparisons between different literatures dealing with analytically somewhat similar domains may be most valuable when they make conflicting arguments. In this brief comment, therefore, I wish to focus on the homogeneity or heterogeneity of actor *capabilities* and *interests*. What is the impact on a potentially cooperative system—in which there are potential gains to all participants from cooperation—of

heterogeneity of actor capabilities and interests? Should we expect more cooperation among similar actors, or among different ones?

The literature in international economics and international political economy stresses the value of heterogeneity of interests for cooperation: gains from trade. Among self-sufficient small farmers, there may be little scope for economic cooperation in the form of economic exchange, precisely because their interests are so similar. Introduce a railroad linked to a city and rural–urban trade will increase dramatically, as a result of the complementary interests of producers and purchasers. The political economy literature of the 1970s also emphasized the value of heterogeneity in capabilities for cooperation. It developed the notion of “hegemonic stability theory”: that systems dominated by a hegemon would be more peaceful and orderly than those in which a balance of power among roughly equal great powers prevailed.⁴ Although the strong version of this view—that hegemony alone is necessary or sufficient for order—has been discredited, there remains considerable evidence that powerful states, with long time horizons, may be particularly willing to build institutions for cooperation, on their terms. As Lisa L. Martin says, “If a hegemonic state can afford to take the long view, the institutions it helps create will promote gains from cooperation.”⁵

So the international relations literature has leaned toward the view that at least some types of heterogeneity in interests and capabilities generate cooperation. Indeed, bargaining linkages may result from heterogeneity, as actors seek political gains from trade. But the IR literature has never held that heterogeneity as such is order-producing: indeed, the literature on conflict suggests that certain forms of similarities in domestic structure—in particular, the presence of democracy in both members of a pair of states—facilitate cooperation.⁶ The types of heterogeneity and issue domains seem to matter.⁷

Work by Ostrom and other students of small-scale CPRs, by contrast, stresses how heterogeneity *inhibits* cooperation. Ostrom has studied irrigation systems in Nepal, where there are strong differences in interest and in capabilities between farmers at the head of the canal and those below them. The head-enders have interests in taking water until its net marginal productivity is zero, even if it would be more valuable to the tail-enders. Unless they need the tail-enders (for example, for labor to maintain the canals), they will capture the bulk of the water,

cooperation will be nonexistent or minimal, and the results will be economically inefficient.⁸ Similarly, Gary Libecap has studied the common-pool problem in oil fields. He finds that heterogeneities in size of plots, in location relative to the center of the pool, and in information inhibit cooperation, as opposed to situations in which leases are homogeneous and the information available to participants is the same.⁹

These differences in view should make us think about the conditions under which heterogeneity or homogeneity of interests and capabilities promotes cooperation in situations characterized by an absence of hierarchical rule.

Climate change is obviously amenable to CPR analysis, since it is a common-pool resource. Furthermore, efforts to construct a single integrated and comprehensive international regime to limit the magnitude of emissions have clearly failed. Instead, there is a decentralized “regime complex” for climate change, which in many ways looks more like Ostrom’s decentralized local institutions for the commons than like either a national state or a coherent, integrated international regime.¹⁰ Ostrom and her colleagues have studied how particular changes—such as in the need for labor to repair irrigation ditches—alter the dynamics of such decentralized systems. It would be valuable to do the same at the global level. For instance, how would a dramatic reduction in the costs of reducing power plant emissions affect the complex linkages between developed and developing countries created by a global cap-and-trade system? And what would be the impact of large heterogeneities—in information, or in costs—between developed and developing countries involved in a system of climate mitigation?

In the world of 2010, there is another salient problem, farther from Ostrom’s field of study but to which its emphasis on heterogeneity is relevant: the relationship between cultural heterogeneity and political violence. The attacks of 9/11, the wars waged by the United States and its allies in Islamic countries (Afghanistan and Iraq), and the reports of attempted *jihad* by American citizens who have become radical Islamists, have all focused attention on nonstate actors and violence in world politics. “Billiard-ball” game-theoretic models with homogeneous states as units seem quite irrelevant to these issues. In contrast, local CPR models that emphasize the conflict-inducing impact of heterogeneity seem increasingly relevant. Asymmetries in information,

a topic addressed by the literature on commons problems, seem particularly intriguing. Asymmetries in information can motivate attacks—when the “information” in question concerns holy duties or alleged attacks on Islam by Christianity—but can also create opportunities for combating terrorism. And homogeneity in information—common knowledge among adherents to Islam who are committed to peaceful coexistence with members of other cultures that jihadists are dangerous to themselves as well as to peace more generally—could be crucial in generating cooperation in order to control organized nonstate violence. It seems to me that we could generate some interesting hypotheses about the impact of cultural homogeneity and heterogeneity from the theories of Ostrom and her colleagues, and from experiments or observations informed by this literature.

Ostrom’s work has been more systematic than most of the parallel work in international relations, partly because she has studied isolated communities in fieldwork, and partly because experimental work can model the conditions of individuals in local communities better than the more complex interactions between governments, themselves responsible in very different ways to their constituencies. But Ostrom has, by and large, not been very interested in applying her insights to world politics. As a result, there are, it seems to me, unexploited opportunities for investigators who seek to understand such issues as the spread and control of international terrorism, or how heterogeneities affect responses to climate change.

Ostrom has made major contributions to political science and to our understanding of cooperation and institutions, and it would be unfair to demand of her that she extend her vision to world politics. But we can ask why none of her students or followers seems to have had the imagination and boldness to think about applying her theory and methods to this domain. Experimental work is just beginning to make an impact on the study of world politics; to make more of an impact, it needs to tackle important questions and to build on a rich theoretical literature as well as experimental method.¹¹ Ostrom’s theory, as noted here, builds on a number of assumptions—in particular, lack of hierarchy—that are more applicable to world politics than to studying the modern bureaucratic state. It could “leap the gap” between local and global without the investigators worrying about whether it can “scale up” to the national level in between.

Creative political science is not principally about applying new techniques—whether borrowed from economics, statistics, or other branches of our own field—to old problems. More fundamental innovations involve thinking in new ways about problems that have stumped former generations. Ostrom has thought in new ways about politics, institutions, and cooperation under nonhierarchical conditions. It is high time that both investigators working out of her tradition, and students of international relations in general, paid more attention to the implications of her work for the study of world politics. If they do, and the results are fruitful, Elinor Ostrom may yet be seen as a major theorist, even if implicitly, of world politics.

Notes

1. Metz et al. 2007; Stern et al. 2006; Aldy and Stavins 2007; Aldy and Pizer 2009.
2. Elinor Ostrom and I have made this point in joint work, which, however, has not received much attention. See Keohane and Ostrom 1995.
3. Keohane 1984; *Governing the Commons*.
4. Kindleberger 1973; Krasner 1976.
5. Martin 1995, 75.
6. There is a huge literature on the “democratic peace.” See, for instance, Maoz and Russett 1993; Bueno de Mesquita et al. 1999.
7. Martin 1995.
8. Ostrom 1995.
9. Libecap 1995: 171–72.
10. Keohane and Victor 2009.
11. For an example of experimental work applied to problems of civil war, see Tingley and Walter 2010.

References

- Aldy, J. E., and W. A. Pizer. 2009. *The Competitive Impacts of Climate Change Mitigation Policies*. Arlington, VA: Pew Center on Global Climate Change.
- Aldy, J. E., and R. N. Stavins. 2007. *Architectures for Agreement: Addressing Global Climate Change in the Post-Kyoto World*. New York: Cambridge University Press.
- Bueno de Mesquita, Bruce, James D. Morrow, Randolph M. Siverson, and Alastair Smith. 1999. “An Institutional Explanation of the Democratic Peace.” *American Political Science Review* 93 (December): 791–807.
- Keohane, Robert O. 1984. *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton: Princeton University Press.