

## The End of the Cold War: Assessing the Pressures from Outside History's Mainstream

### Unarmed Forces: The Transnational Movement to End the Cold War

▶ Matthew Evangelista  
Cornell U. Press, Ithaca, N.Y.,  
1999. 406 pp. \$39.95 hc  
ISBN 0-8014-3628-1

Reviewed by Herbert L. Abrams

That we survived this past half century without a massive nuclear exchange—between the former Soviet “evil empire” and the American “imperial hegemonists”—is a blessing for which we must all be thankful. How did we do it? Was it American restraint? Soviet fear? The wisdom of the leaders? Deterrence? Or was it nothing more than sheer luck?

An important ingredient of the conservative mythology distilled from the 1980s is that Ronald Reagan’s “hard line” was the vital element in the collapse of the Soviet empire and the “winning” of the cold war. Running up a 3-trillion-dollar deficit in military spending and creating the specter of “Star Wars” were said to be part of a shrewd strategy designed to force the USSR into bankruptcy in its effort to compete militarily. Mikhail Gorbachev’s “new thinking,” then, was prompted by *Chapter 11*’s staring him in the face!

To interrupt this extravagant chain of thought: To suggest that Linus Pauling, Joseph Rotblat, or Andrei Sakharov, or the countless others who supported their effective opposition to the nuclear arms race, might have radically affected the policies of the USSR, if not of the US, is to court an accusation of revisionism and a distorted view of modern history.

To his credit, Matthew Evangelista, a professor of political science at Cornell University, has developed in *Unarmed Forces* a powerful argument that transnational movements of the past half century were able to influence the policies and decisions of a

rigid, totalitarian USSR and a bureaucratized US foreign policy establishment. In both countries, the institutional framework was intuitively dismissive of the scientists as “amateurs” whose thrust for “peace” was at odds with reality and realism. Evangelista takes us in extraordinary detail through the evolution of Nikita Khrushchev’s approach to the test ban and the ultimate signing of the treaty to ban atmospheric nuclear tests. He traces the advances in antiballistic missile research and development and the growing comprehension that defensive missile systems might heighten instability and intensify the nuclear arms race. A major subject of his historical analysis of the Leonid Brezhnev era is the mechanism whereby this understanding culminated in the antiballistic missile treaty of 1972. The final section of the book deals with the Gorbachev years and the radical changes in Soviet foreign policy that were initiated.

On both sides of the East–West divide, and bridging it, there were important networks outside government that contributed science- and humanitarian-based ideas and programs designed to control the arms race and reduce the threat of nuclear war. Consideration of their ideas was possible because of the credibility of the individuals and organizations, which won them an audience and a hearing, so as to translate ideas into action.

In each section of the book, the roles of such groups as the Pugwash movement, International Physicians for the Prevention of Nuclear War, Parliamentarians for Global Action, and others working transnationally are meticulously evaluated and compared with alternative explanations for significant developments. Evangelista carefully marshalls his arguments and provides a wealth of source material as an important dividend for the interested reader.

In a period when the complexity of society and government is such that individuals feel increasingly isolated from the decisions that will affect their lives and futures, it is helpful to be reminded that a small group of concerned and public-spirited citizens

may affect the course of human history. The unilateral test moratorium declared by Gorbachev in July 1985, like his later proposal to eliminate nuclear weapons, at the meeting with Reagan at Reykjavik, Iceland, did not emerge from a vacuum. Nor did they reflect the Soviet defense and foreign ministries’ creative thinking. Those Soviet positions were—at least in part—a product of the actions of a mix of individuals and international groups who were able to convey both their deep concerns and their pragmatic thinking at a period of extraordinary change in Soviet history. Evangelista has made a strong case for recognition of the depth and breadth of the contributions of these groups at a critical period and of the lessons to be learned from their intervention. Sometimes “unarmed forces” can make quite as much difference as state military power or diplomacy.

### Quantum Chaos: An Introduction

▶ Hans-Jürgen Stöckmann  
Cambridge U. Press, New York,  
1999. 368 pp. \$85.00 hc  
ISBN 0-521-59284-4

Quantum chaos is the study of the quantum dynamics of systems that are classically chaotic. Contrary to the impression left by most textbooks, almost all conservative dynamical systems are at least partly chaotic in the range of their behavior. This applies to molecules, nuclei, quantum dots, acoustical systems, and dozens of other systems. The field of quantum chaos is still young, growing fast, and rich in conceptual, computational, and experimental challenges. The mathematical questions having a direct bearing on the field are as deep as you care to go, including the Riemann conjecture, convergence of trace formulas, and the intricacies of chaotic Hamiltonian dynamics.

People joining in the fun of studying quantum chaos seem to come from all over physics and chemistry; in the past, most had already established themselves in related fields before turning to quantum chaos. That is

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