

DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.

Throughout history, man has attempted to understand world events and the relationships between countries in order to craft foreign policy as well as predict future interactions. The end of the Cold War was no different. As the Berlin Wall fell and the USSR's communist ideology dissolved, the United States no longer viewed the Russians as its enemy. Capitalism and liberal democracy had triumphed over communism. US foreign policy makers and academia grappled with what the new world political stage would look like.

Who was the US's new enemy and how would the world respond to this new unipolar world? Many researchers developed theories to answer that very question. Three notable theories included Francis Fukuyama's 'end of history', the 'Democratic Peace' theory, and the 'Commercial Peace' theory. The 'end of history' theory did not, as it sounds, believe that the end of the Cold War signaled Armageddon, but that the defeat of communism was "the end point of mankind's ideological evolution and the universalization of western liberal democracy would be the final form of human government."¹ Democracy had triumphed over Communism and would now be the only form of government found throughout the world. The 'democratic peace' theory's fundamental belief was that "democracies never...go to war with one another."² Thus, democratic countries should democratize the world. Every state that is converted to a democratic form of government would increase the security of the world. Basically, "to enlarge the number of democracies is to enlarge the zone of peace."³ Instead of democracy, the 'Commercial Peace' theory recognized a "relationship between economic independence and the spread of peace."⁴

Assessment of the Clash of Civilizations Debate
Maj Amy Rammel

The more interconnected the world became through globalization's expanded trade and markets, the more peaceful the entire world would become. Each of these theories fueled the discussion.

These theories are not the focus of this paper, however. They merely provide an understanding of the free thinking that was occurring in the late 1980s/early 1990s and set the stage for a fourth theory, the 'clash of civilizations'. The purpose of this paper is to determine if the 'clash of civilizations' is a relevant paradigm to examine post-Cold War conflicts. This paper will explain the 'clash of civilizations' theory, discuss its impacts on the research community, appraise some of the 'clash of civilizations' studies to date, and will assess the usefulness of the 'clash of civilizations' theory. Regrettably, such a short paper can only highlight a select portion of the debate.

In 1993, Samuel Huntington published his 'clash of civilizations' theory in *Foreign Affairs* as his "interpretation of the likely evolution of global politics after the Cold War."⁵ The theory was expanded in his 1996 book, *The Clash of Civilizations and the Remaking of World Order*. He maintained that future sources of conflicts would be cultural, not ideological, political, or economic. At the most basic level, people identify with a civilization. Huntington defined a civilization as:

...the highest cultural grouping of people and the broadest level of cultural identity people have short of that which distinguished humans from other species. It is defined both by common objective elements, such as language, history, religion, customs, institutions and by the subjective self-identification of people.⁶

He recognized nine major civilizations: Sinic, Japanese, Hindu, Islamic, Orthodox, Western, Latin American and possibly African and Buddhism.⁷ Huntington overlaid the nine civilizations across the world map showing where each of the world's countries fit into his civilization schema.⁸ Note that "religion seems to be the primary criterion, but geographical location also plays a major part in defining a few civilizations."⁹

Assessment of the Clash of Civilizations Debate
Maj Amy Rammel

Furthermore, Huntington claimed that “the fault lines between civilizations are replacing the political ideological boundaries of the Cold War as the flash points for crisis and bloodshed.”¹⁰ “Civilizations unite and divide mankind.”¹¹ He believed that the majority of future conflicts would occur between civilizations instead of between nation states. “Conflicts between groups in different civilizations will be more frequent, more sustained and more violent than conflicts between groups in the same civilization.”¹² Huntington did not believe that nation states would no longer fight, but that state to state conflicts would be the exception rather than the rule. “The question, ‘Which side are you on?’ has been replaced by the much more fundamental one, ‘Who are you?’”¹³ Notably, most of the conflicts Huntington highlighted were between the West and Islam. He believed that “Islam and the West are on a collision course that will largely define 21st century global conflict.”¹⁴

Huntington’s intermixing of political science with culture created a lively intellectual debate. His theory was thought-provoking and seductive. According to Everett Roger, “an idea must fulfill some social need and be compatible with the existing social system to catch on.”¹⁵ ‘Clash of civilizations’ must have contained both--academia and researchers were inspired to respond. His article “generated more discussion in three years than any other article they [*Foreign Affairs*] had published since the 1940s”.¹⁶ Hundreds of articles and books were written to both praise and refute his theory. Most responses were overwhelmingly critical of the ‘clash of civilizations’ theory, but offered no alternative to replace it. Bruce Russert cautioned that ‘clash of civilizations’ “had the potential to become not just an analytical interpretation of events, but-if widely believed-a shaper of events.”¹⁷

The worst outcome would be for ‘clash’ to become a **self-fulfilling prophecy**, intensifying conflicts or bringing about some that otherwise would not have occurred. In the best case, it would be a **self-defeating prophecy**, providing early

Assessment of the Clash of Civilizations Debate
Maj Amy Rammel

warning to policymakers who could take steps to defuse the danger it anticipates.¹⁸

Jonathon Fox “argued that the events of 9/11 changed the dynamics of world politics and conflict causing the prediction of the ‘clash of civilizations’ theory to come to fruition”.¹⁹ Huntington caused much consternation in the political science and policy making disciplines.

Next, the author will examine some of the studies that have been conducted on the ‘clash of civilizations’ theory. There was no pre-selection method used to identify or locate these research studies. Most of the studies had the term ‘clash of civilizations’ within either their title or their abstract. That stated, the author grouped these studies into three types: 1) quantitative studies that test actual conflict data, 2) quantitative and qualitative studies that test components of a civilization (i.e. religion, language, ethnicity), and 3) qualitative studies of how the theory affects a subject (i.e. international terrorism, immigration, a country).

Numerous researchers have conducted quantitative studies using data sets that incorporate statistics from past conflicts. Unfortunately, conflict data sets for post-1989 are but a small sample which casts reasonable suspicion on any results. Giacomo Chiozza empirically tested conflicts within the post-Cold War period (1989-1997) to see if civilizations were the primary cause of international conflict. His conclusion failed to support the ‘clash of civilizations’ thesis and that Huntington’s theory “has not yet garnered the empirical support to make it a basis for foreign policy.”²⁰ Yet other researchers, Errol Henderson and Richard Tucker, conducted a quantitative study testing conflicts from 1816 to 1992.²¹ They used three control variables: geographical proximity, regime type, and power capabilities. They concluded that “civilizational difference is not significantly associated with an increased likelihood of interstate war” when controlling for the three control variables of the state.²² Contemptuously, they assert that the

Assessment of the Clash of Civilizations Debate
Maj Amy Rammel

‘clash of civilizations’ theory is not Kennan’s Long Telegram, but instead Germany’s WWII Schlieffen Plan.²³

Jonathan Fox conducted several quantitative studies testing the validity of Huntington’s ‘clash of civilizations’ thesis. In 2001, Fox’s study tested three perspectives of conflicts: global, Western and Islamic. His results “lend support to Huntington’s thesis that Islam is one of the greatest participants in civilizational conflicts.”²⁴ In 2002, Fox tested “fault line conflicts within states that contain groups of different civilizations” concluding “civilizational conflicts constitute a minority of ethnic conflicts.”²⁵ In 2005, Fox tested a newer set of conflict data finding that “civilizational conflicts were less common than non-civilizational ones.”²⁶ Interestingly, he also implied that “Huntington’s concept of civilization may be a surrogate variable for religion.”²⁷ Unlike other studies, Andrej Tusicisny tested Huntington’s statement “conflict between groups in different civilizations will be more frequent, more sustained and more violent than conflicts between groups of the same civilization” with a conflict dataset.²⁸ Tusicisny found that conflicts were not more frequent or more sustained, but that the conflicts did have more battle deaths, and like Fox’s 2001 study, that “the majority of intercivilizational conflict –years during the post-Cold War period have involved Islamic groups”.²⁹ Interestingly, Tusicisny was unable to prove that civilization clashes began on or after the 1989 transition point.

The next study type tests components of a civilization such as religion, language, or ethnicity. Arshin Adib-Moghaddam study examined the ‘us versus them’ mentality in the Western versus Islam construct concluding that the ‘clash of civilizations’ is a “questionable ontology” that has “served particular political interests and...it is not inevitable.”³⁰ Another researcher, Gabriel Acevedo conducted a quantitative study of the fatalism of the Islamic religion. He found that Islam fatalism could be misread and is “best interpreted as a greater

Assessment of the Clash of Civilizations Debate
Maj Amy Rammel

acceptance for central authority and a relinquishment of life's outcomes to an omnipotent deity.”³¹

The final type of studies evaluate how the ‘clash of civilizations’ theory affects a subject such as international terrorism, immigration, or a country. Eric Neumayer and Thomas Plumper’s study tested for post-Cold War anti-West terrorism ultimately determining that if “foreign countries support the government of the terrorists’ home country with economic aid, arms transfers, military alliances and intervention in civil wars, then domestic terrorist leaders have a strategic incentive to attack nationals from that foreign country.”³² John Coughlan proposed that grievances, not cultures, is alienating the minorities, immigrants and refugees in Europe. He contends that Europe is not suffering from the ‘clash of civilizations’, but rather a ‘crisis of integration’.³³ Focusing on the US only, Pat Buchanan and Ben Wattenberg take a demographic approach to the ‘clash of civilizations’ debate straight from Huntington’s statement that migration is “the central issue of our time.”³⁴ Buchanan argues that immigration could cause the demise of the US; whereas, Wattenberg suggests that immigration is the only way to keep America growing and strong enough to defend herself. John Gray made the argument that states no longer control war. “Today wars are often not fought by agents of sovereign states but waged by political organizations, irregular armies, ethnic or tribal militias and other bodies that may owe allegiance to no sovereign state.”³⁵ Finally, Dennis Sandole qualitatively studied the country Turkey and how its composition of both Western and Muslim influences could bridge the divide between Islam and the West. In the process, Turkey could “contribute to transforming the civilizational clash into a dialogue of equals.”³⁶

All researchers were quick to point out flaws in Huntington’s theory. Huntington’s ‘clash of civilizations’ theory is “difficult to operationalize.”³⁷ Testing created deadlocks between

Assessment of the Clash of Civilizations Debate
Maj Amy Rammel

theorist and researcher unable to be proven definitely correct or incorrect. His theory is “often too vague to address many specific situations.”³⁸ The “concept of civilizations is oversimplified, unclear, and not sufficiently systematic.”³⁹ The theory also had a few oversights and inconsistencies that researchers were quick to capitalize on. One, the theory “ignores the persistent role of nationalism in world politics.”⁴⁰ An inconsistency is whether ‘Africa’ is a civilization or not? Buddhism is defined as a civilization on the map, but nowhere else in his articles or book does he state a clear, consistent answer. Also, where does Israel or Judaism fall—in the Western civilization (due to its religion or democratic institution) or the Islamic civilization (due to its geography)? This highlights another confusion—some of the civilizations are places (Japan, Latin America, Africa) while others are religions (Hindu, Islamic, Buddhism).⁴¹ Ironically, Russett also notes, “many of the conflicts he [Huntington] identifies at the fault lines of civilizations are those between neighboring states where conflict would be expected whether or not there were civilizational or cultural differences.”⁴²

Researchers have conducted hundreds of studies attempting to dispel Huntington’s ‘clash of civilizations’ theory, but have been unable to unequivocally reject his theory. To be sure, conflict data for post-1989 is still being tabulated and in time, researchers will have a large enough data set to call the game. As Thomas Kuhn aptly stated in *The Structure of Scientific Revolutions* “to be accepted as a paradigm, a theory must seem better than its competitors, but it need not, and in fact never does, explain all the facts with which it can be confronted.”⁴³ As Huntington himself commented, the ‘clash of civilizations’ proved “a useful starting point for understanding and coping with the changes going on in the world.”⁴⁴ Furthermore, “a paradigm is disproved only by the creation of an alternative paradigm that accounts for more crucial facts in equally simple or simpler terms.”⁴⁵ It has been sixteen years since “The Clash of

Assessment of the Clash of Civilizations Debate
Maj Amy Rammel

Civilizations?” was published. If Huntington is off mark, where is the new paradigm that can displace ‘clash of civilizations’? “If Not, Civilizations, What?”⁴⁶

This paper has examined the ‘clash of civilizations’ theory, discussed the reverberations the theory has caused within the research community, and evaluated a handful of ‘clash of civilizations’ studies. In the author’s opinion, due to the lack of formal thesis rejection and the substantial dialogue and research the theory continues to stimulate, the ‘clash of civilizations’ theory remains a useful paradigm to examine post-Cold War conflicts. In closing, “ideas matter most when they fit the circumstances or nature of the times.”⁴⁷



Assessment of the Clash of Civilizations Debate
Maj Amy Rammel

Endnotes

-
- ¹ Francis Fukuyama, "The End of History?" *The National Interest* (Summer 1989).
- ² Piki Ish-Shalom, "The Civilization of Clashes: Misapplying the Democratic Peace in the Middle East." *Political Science Quarterly* 122, No 4 (2007-2008), 543.
- ³ Ibid, 545.
- ⁴ David Patrick Houghton, "The Role of Self-Fulfilling and Self-Negating Prophecies in International Relations" *International Studies Review* 11, iss. 3 (September 2009), 558.
- ⁵ Giacomo Chiozza, "Is There a Clash of Civilizations? Evidence from Patterns of International Conflict Involvement, 1946-97" *Journal of Peace Research* 39, no. 6 (November 2002), 712.
- ⁶ Samuel P. Huntington, "The Clash of Civilizations?" *Foreign Affairs* 72, no. 3 (Summer 1993), 24.
- ⁷ Huntington, *The Clash of Civilizations and the Remaking of World Order* (New York: Simon & Schuster, 1996), 45-47.
- ⁸ Ibid, 26-27.
- ⁹ Bruce M. Russett, John R. Oneal, and Michaelene Cox, "Clash of Civilizations, or Realism and Liberalism Déjà Vu? Some Evidence" *Journal of Peace Research* 37, no. 5 (Sep 2000), 592.
- ¹⁰ Huntington, "The Clash of Civilizations?", 29.
- ¹¹ Samuel P. Huntington, "Response: If Not Civilizations, What? Paradigms of the Post-Cold War" *Foreign Affairs* 72, no. 5 (Nov/Dec 1993), 194.
- ¹² Huntington, "The Clash of Civilizations?", 48.
- ¹³ Huntington, *The Clash of Civilizations and the Remaking of World Order*, 125.
- ¹⁴ Gabriel A. Acevedo, "Islamic Fatalism and the Clash of Civilizations: An Appraisal of a Contentious and Dubious Theory" *Social Forces* 86, no. 4 (June 2008), 1718.
- ¹⁵ Everett Rogers, *The Diffusion of Innovations* (New York: Free Press, 2003), 267.
- ¹⁶ Chiozza, "Is There a Clash of Civilizations? Evidence from Patterns of International Conflict Involvement, 711.
- ¹⁷ Russett, Oneal, and Cox, "Clash of Civilizations, or Realism and Liberalism Déjà Vu? Some Evidence", 589.
- ¹⁸ Ibid, 589.
- ¹⁹ Jonathan Fox, "Paradigm Lost: Huntington's Unfulfilled Clash of Civilizations Prediction into the 21st Century" *International Politics* 42, no. 4, (December 2005), 447.
- ²⁰ Chiozza, "Is There a Clash of Civilizations? Evidence from Patterns of International Conflict Involvement, 1946-97", 732.
- ²¹ Errol A Henderson and Richard Tucker, "Clear and Present Strangers: The Clash of Civilizations and International Conflict" *International Studies Quarterly* 45, no. 2 (June 2001), 317.
- ²² Ibid, 334.
- ²³ Ibid, 335.
- ²⁴ Jonathan Fox, "Two Civilizations and Ethnic Conflict: Islam and the West Source" *Journal of Peace Research* 38, no. 4 (July 2001), 463.

Assessment of the Clash of Civilizations Debate
Maj Amy Rammel

- ²⁵ Jonathan Fox, "Ethnic Minorities and the Clash of Civilizations: A Quantitative Analysis of Huntington's Thesis" *British Journal of Political Science* 32, no. 3 (July 2002), 415-416.
- ²⁶ Fox, "Paradigm Lost: Huntington's Unfulfilled Clash of Civilizations Prediction into the 21st Century", 428.
- ²⁷ Ibid, 449.
- ²⁸ Andrej Tusicisny, "Civilizational Conflicts: More Frequent, Longer, and Bloodier?" *Journal of Peace Research* 41, no. 4 (July 2004), 486.
- ²⁹ Ibid, 484.
- ³⁰ Arshin Adib-Moghaddam, "A (Short) History of the Clash of Civilizations" *Cambridge Review of International Affairs* 21, no.2 (June 2008), 217.
- ³¹ Acevedo, "Islamic Fatalism and the Clash of Civilizations: An Appraisal of a Contentious and Dubious Theory", 1740.
- ³² Eric Neumayer and Thomas Plümper, "International Terrorism and the Clash of Civilizations" *British Journal of Political Science* 39, iss. 4 (Oct 2009), 733.
- ³³ John Coughlan, "Clash of Civilizations or Crisis of Integration?" *America* 194, iss. 13, 10 April 2006, 12.
- ³⁴ Pat Buchanan and Ben Wattenberg, "Immigration: A Cause of the Clash of Civilizations...Or a Solution to It?" *American Enterprise* 13, iss. 2 (March 2002), 19.
- ³⁵ John Gray, "Global Utopias and Clashing Civilizations: Misunderstanding the Present" *International Affairs* (Royal Institute of International Affairs 1944-) 74, no. 1 (January 1998), 155.
- ³⁶ Dennis J.D. Sandole, "Turkey's Unique Role in Nipping in the Bud the 'Clash of Civilizations'" *International Politics* 46 no. 5 (June 2009), 649.
- ³⁷ Fox, "Ethnic Minorities and the Clash of Civilizations: A Quantitative Analysis of Huntington's Thesis", 415.
- ³⁸ Ibid, 424.
- ³⁹ Ibid, 424.
- ⁴⁰ Henderson and Tucker, "Clear and Present Strangers: The Clash of Civilizations and International Conflict", 333.
- ⁴¹ Bernard Lewis, *Cultures in Conflict: Christians, Muslims, and Jews, in the Age of Discovery* (New York: Oxford University Press, 1995), 9.
- ⁴² Russett, Oneal, and Cox, "Clash of Civilizations, or Realism and Liberalism Déjà Vu? Some Evidence", 588.
- ⁴³ Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962), 17-18.
- ⁴⁴ Huntington, "Response: If Not Civilizations, What? Paradigms of the Post-Cold War", 194.
- ⁴⁵ Ibid, 187.
- ⁴⁶ Ibid, 186.
- ⁴⁷ Houghton, "The Role of Self-Fulfilling and Self-Negating Prophecies in International Relations", 557.

Bibliography

- Acevedo, Gabriel A. "Islamic Fatalism and the Clash of Civilizations: An Appraisal of a Contentious and Dubious Theory." *Social Forces* 86, no. 4 (June 2008), <http://web.ebscohost.com/ehost/pdf?vid=31&hid=107&sid=2dd5b0fc-84d1-4629-b502-117978251841%40sessionmgr112>.
- Adib-Moghaddam, Arshin. "A (Short) History of the Clash of Civilizations" *Cambridge Review of International Affairs* 21, no.2 (June 2008).
- Benthall, Jonathan. "Imagined Civilizations?" *Anthropology Today* 18, no. 6 (December 2002), <http://www.jstor.org/stable/3695177>.
- Buchanan, Pat and Ben Wattenberg. "Immigration: A Cause of the Clash of Civilizations...Or a Solution to It?" *American Enterprise* 13, iss. 2 (March 2002), <http://web.ebscohost.com/ehost/detail?vid=28&hid=107&sid=2dd5b0fc-84d1-4629-b502-117978251841%40sessionmgr112&bdata=JnNpdGU9ZWWhvc3QtbGl2ZQ%3d%3d#db=f5h&AN=6176993>.
- Chiozza, Giacomo. "Is There a Clash of Civilizations? Evidence from Patterns of International Conflict Involvement, 1946-97." *Journal of Peace Research* 39, no. 6 (November 2002), <http://www.jstor.org/stable/1555255>.
- Coughlan, John. "Clash of Civilizations or Crisis of Integration?" *America* 194, iss. 13, 10 April 2006.
- Fox, Jonathan. "Ethnic Minorities and the Clash of Civilizations: A Quantitative Analysis of Huntington's Thesis." *British Journal of Political Science* 32, no. 3 (July 2002), <http://www.jstor.org/stable/1555255>.
- Fox, Jonathan. "Paradigm Lost: Huntington's Unfulfilled Clash of Civilizations Prediction into the 21st Century." *International Politics* 42, no. 4, (December 2005), <http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=9136746&site=ehost-live>.
- Fox, Jonathan. *Religion, Civilization, and Civil War : 1945 through the Millennium*. Lanham, MD: Lexington Books, 2004.
- Fox, Jonathan. "Two Civilizations and Ethnic Conflict: Islam and the West Source." *Journal of Peace Research* 38, no. 4 (July 2001), <http://www.jstor.org/stable/424897>.
- Fukuyama, Francis. "The End of History?" *The National Interest* (Summer 1989).
- Fukuyama, Francis. *The End of History*. New York, NY: Free Press, 1992.
- Gray, John. "Global Utopias and Clashing Civilizations: Misunderstanding the Present." *International Affairs* (Royal Institute of International Affairs 1944-) 74, no. 1 (January 1998), <http://www.jstor.org/stable/2624672>.
- Henderson, Errol A., and Richard Tucker. "Clear and Present Strangers: The Clash of Civilizations and International Conflict." *International Studies Quarterly* 45, no. 2 (June 2001), <http://www.jstor.org/stable/3096113>.
- Herzog, Roman, Amitai Etzioni, and Henrik Schmiegelow. *Preventing the Clash of Civilization: A Peace Strategy for the Twenty-first Century*. New York, NY: St. Martin's Press, 1999.
- Houghton, David Patrick. "The Role of Self-Fulfilling and Self-Negating Prophecies in International Relations." *International Studies Review* 11, iss. 3 (September 2009).
- Hunter, Shireen. *The Future of Islam and the West: Clash of Civilizations or Peaceful Coexistence?* Westport, CT: Praeger, 1998.
- Huntington, Samuel P. "Response: If Not Civilizations, What? Paradigms of the Post-Cold War" *Foreign Affairs* 72, no. 5 (Nov/Dec 1993).
- Huntington, Samuel P. "The Clash of Civilizations?" *Foreign Affairs* 72, no. 3 (Summer 1993).

Assessment of the Clash of Civilizations Debate
Maj Amy Rammel

- Huntington, Samuel P. *The Clash of Civilizations and the Remaking of World Order*. New York, NY: Simon & Schuster, 1996.
- Ish-Shalom, Piki. "The Civilization of Clashes: Misapplying the Democratic Peace in the Middle East." *Political Science Quarterly* 122, No 4 (2007-2008).
- Kuhn, Thomas S. *The Structure of Scientific Revolutions*. Chicago, IL: University of Chicago Press, 1962.
- Lewis, Bernard. *Cultures in Conflict: Christians, Muslims, and Jews, in the Age of Discovery*. New York, NY: Oxford University Press, 1995.
- Neumayer, Eric and Thomas Plümper. "International Terrorism and the Clash of Civilizations." *British Journal of Political Science* 39, no. 4 (Oct 2009).
- Novak, Michael. *The Universal Hunger for Liberty: Why the Clash of Civilizations is not Inevitable*. New York, NY: Basic Books, 2006.
- Rogers, Everett. *The Diffusion of Innovations*. New York: Free Press, 2003.
- Russett, Bruce M., John R. Oneal, and Michaelene Cox. "Clash of Civilizations, or Realism and Liberalism Déjà Vu? Some Evidence" *Journal of Peace Research* 37, no. 5 (Sep 2000), <http://jpr.sagepub.com/cgi/content/abstract/37/5/583>.
- Sacks, Jonathan. *The Dignity of Difference*. New York, NY: Continuum Books, 2002.
- Sandole, Dennis J.D. "Turkey's Unique Role in Nipping in the Bud the 'Clash of Civilizations.'" *International Politics* 46 no. 5 (June 2009).
- Senghaas, Dieter. "A Clash of Civilizations. An Idee Fixe?" *Journal of Peace Research* 35, no. 1 (January 1998), <http://www.jstor.org/stable/425236>.
- Tusisicny, Andrej. "Civilizational Conflicts: More Frequent, Longer, and Bloodier?" *Journal of Peace Research* 41, no. 4 (July 2004), <http://www.jstor.org/stable/4149685>.