

Climate of Change: A Foreign Policy Analysis of China's Participation in International  
Environmental Agreements

BY

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Submitted to the graduate degree program in Political Science and the Graduate Faculty  
of the University of Kansas in partial fulfillment of the requirements for the degree of  
Master of Arts.

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Date Defended: Tuesday 12 April 2011

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Date approved: Tuesday 12 April 2011

## Abstract

In 2007 China became the world's largest emitter of carbon dioxide. China's increased emissions have more than offset all reductions made under the 1997 Kyoto Protocol. This makes China's participation in international environmental agreements, to address issues such as climate change, essential. What is puzzling about China's foreign policy on environmental issues and participation in international agreements are the inconsistencies over time. Previous research on Chinese foreign policy has not fully addressed or explained China's participation in international environmental agreements. . The broader literature on Chinese foreign policy indicates that leadership is the key factor determining policy decisions and implementation. Emerging research suggests that public opinion may also play a role, but the results are inconclusive. This study examines whether and how leadership and public opinion shape China's foreign policy on environmental issues. Three cases are examined: the 1987 Montreal Protocol, the 1997 Kyoto Protocol and the 2009 Copenhagen Accords. Using the congruence method I examine how China's participation in the three treaties corresponds to expectations based on existing literature. The results of this study are in line with previous research. Leadership appears to be the primary determinant of Chinese foreign policy on international environmental issues, while public opinion has no influence. Despite a continued emphasis by Chinese leaders on the importance of international environmental issues, Chinese participation and the nature of this participation has varied depending on the leader. Under each successive leader, China became progressively more active in the negotiations of environmental treaties and more assertive in promoting its position. This evidence suggests that China will continue to play a major role in international environmental agreements and international affairs in general as a new generation of leaders come to power.

## **Acknowledgements**

I first want to thank the members of my thesis committee, Dr. Julie Kaarbo, Dr. Brent Steele and Dr. Fiona Yap, for their feedback and contributions during the process. Dr. Kaarbo, who served as my committee chair, deserves special mention. Without her patience, advice, comments and support this endeavor would not have been possible. I also want to thank my friends and family for all their help during my time in college and graduate school. I especially want to thank my dad for his invaluable advice, support and encouragement. Finally, I want to thank the many faculty, staff and students who helped make my KU experience great. Four years as an undergraduate and two years as a graduate student at KU have culminated in this document.

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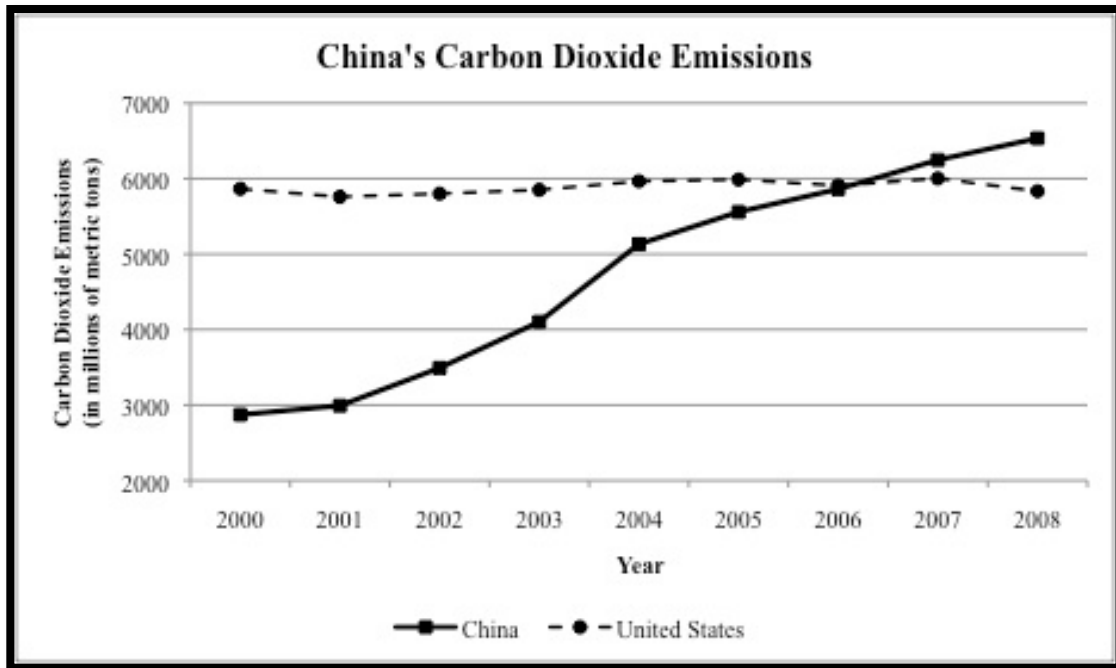
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## **Introduction**

Over the past decade, China's Greenhouse gas emissions have increased rapidly, more than doubling between 2000 and 2008. In 2007, China surpassed the United States to become the world's largest emitter of carbon dioxide (Energy Information Administration 2009). China's emissions are now four times what they were in 1980 and they do not show any sign of decreasing in the near future (see Figure 1). Although China's per capita emissions are relatively low, its carbon emissions are expected to increase at a rate of 2.5 to 5 percent annually (Alarming Growth In Expected Carbon Dioxide Emissions In China, Analysis Finds 2008). While the Chinese government has adopted policies to decrease energy intensity (the amount of energy used per unit of GDP), economic growth rates near ten percent mean continued growth in emissions. This growth will more than offset the 116 million metric tons of carbon emission reductions achieved under the Kyoto Protocol (Alarming Growth In Expected Carbon Dioxide Emissions In China, Analysis Finds 2008). These facts mean that understanding China's participation in international environmental agreements and the foreign policy that shapes its participation is increasingly important for policymakers and the study of Chinese foreign policy.

Beginning with the Deng Xiaoping administration, China has become increasingly active in international affairs. This activity has drawn attention from politicians, the news media, and scholars. News stories on the rise of China or politicians criticizing China and its policies are a common occurrence. However, much of the discussion, speculation and study has focused on economic and security issues. It is only rarely that China's environmental policy takes center stage. It is this topic that I will

focus on. More specifically, how China makes and implements foreign policy related to environmental issues.



**Figure 1: China's Carbon Dioxide Emission**

This figure shows China's carbon dioxide emissions in millions of metric tons, plotted against the United States emissions between 2000 and 2008. Source: U.S. Energy Information Administration 2009.

Environmental issues present a unique challenge to the international community and individual countries. They are one of the few issues in international relations that are directly transnational. While wars may be contained within borders and trade policies affect some countries, but not others, pollution does not recognize lines on a map. The actions of one country will inevitably affect others, even those on the opposite side of the planet. This is particularly true for atmospheric pollution, which cannot be contained in any manner, only reduced or eliminated. The result is that international agreements must be established in order to address these issues. However, constructing treaties that can gain support from all of the relevant countries, including China, has proven difficult. As the world's largest country and emitter of carbon dioxide China is now, and will continue to be, a vital part of any agreement seeking to address international environmental issues,

such as global climate change. Therefore, this study will examine whether theories used to understand, explain and predict China's foreign policy on other issues hold true for environmental policy as well. Specifically, I will examine the role leadership and public opinion play in shaping China's foreign policy on environmental issues.

What is puzzling about China's foreign policy on environmental issues and participation in international agreements are the inconsistencies over time. The extent and nature of China's participation has changed from one treaty to the next. While China's leaders have emphasized the importance of international environmental agreements they have not provided consistent levels of involvement and support (Oberheitmann and Sternfeld 2009). China signed and ratified the 1987 Montreal Protocol and the 1997 Kyoto Protocol, two of the most important environmental agreements in recent history. However, during the negotiations of the 2009 Copenhagen Accords, addressing the same issue as the Kyoto Protocol, China was accused of hindering the negotiations process and preventing the adoption of a substantive agreement. China's level of involvement in the negotiation process has also varied. China participated in the negotiations for the Montreal Protocol as an observer; it had an increased level of involvement in the Kyoto Protocol negotiations and was considered a major player at the Copenhagen Conference. What accounts for these discrepancies? A better understanding of how and why China participates in these negotiations and eventual agreements can improve our understanding of Chinese foreign policy, what factors affect foreign policy in authoritarian countries, and provide useful information to policymakers.

Various theories of and approaches to studying international relations have been used to examine international environmental agreements, including neorealism,



neoliberal institutionalism and foreign policy analysis. Each provides insights, but both neorealism and neoliberal institutionalism have significant shortcomings. Therefore foreign policy analysis is used in this study.

Neorealism emphasizes the importance of relative gains when analyzing global environmental issues. The relative gains argument contends that states are concerned not only with the absolute gains made by states but also their own gains relative to those of other states (Baldwin 1993). Grundig (2006) argues that relative gains make agreements on environmental issues, particularly greenhouse gas emissions, extremely difficult. Because the benefits of emissions treaties are nonexcludable goods, it is difficult to reach agreements because it is difficult to punish defectors (Grundig 2006). A state can easily reap the benefits of an emissions treaty without participating, therefore, it should be more difficult to establish agreements on issues like greenhouse gas emissions compared to an excludable good such as trade (Grundig 2006). While Grundig's argument that agreements on emissions and other environmental issues will be more difficult than trade agreements, it does not explain when and why they do occur. The Kyoto Protocol is a clear exception. Not only was the agreement established, but the "defection" of the United States under the Bush administration, did not result in other countries renegeing on their emissions reduction commitments. Further, the neorealist approach does not give detailed predictions about how individual states will behave. It also does not incorporate domestic factors. Since all emissions reductions necessitate major domestic legislation to make reductions, domestic considerations could be potentially important. Such information can be very useful when only a few states play a key role in the negotiations process.

Neoliberal institutionalism focuses on the role of international organizations and regimes for facilitating agreements on environmental issues. International organizations, it is argued, are initially important for framing issues such as global warming as important and in need of international attention (Paterson 2005). Paterson (2005) also contends that international institutions are important for agenda setting and deciding how an issue is framed. For example, framing global warming in terms of per capita emissions rather than total emissions and the idea of common but differentiated responsibilities. In this way institutions make cooperation easier, although not guaranteed (Paterson 2005). Like neorealism, neoliberal institutionalism can help predict and explain when cooperation will be more likely to occur and succeed. However, it also fails to provide insight into the behavior of individual states such as China. Further, as Paterson (2005) points out, neoliberal institutionalism does not help explain the relationship between the domestic and international factors. In order to better understand the actions of China and the factors that influence its actions and decision making, I turn to foreign policy analysis in this study. Specifically, this study examines the role of leadership and public opinion in China's foreign policy on environmental issues.

While neorealism and neoliberal institutionalism may not provide a complete picture of Chinese participation in international environmental policy on their own, they may compliment foreign policy analysis. Both describe the circumstances under which the agreements are made and make predictions as to the probability of an agreement being reached. These factors may also be important for leadership decisions. Different leaders may respond differently to the same set of conditions. That is, the international level factors of neorealism and neoliberal institutionalism may be fed through the leaders.

Depending on the characteristics of each leader they may respond differently to the same international conditions and factors.

Numerous studies in the area of foreign policy analysis have found a connection between foreign policy and leadership. That is, who leads matters for what decisions are made and policies are pursued with regards to international affairs. The literature on Chinese foreign policy comes to similar conclusions. Specifically, many argue that top Chinese leaders have been and remain the final decision makers on foreign policy issues and hold a great deal of influence over the decision-making process and implementation (Cabestan 2009, Harmin 1994, H. Lai 2010, Sutter 2008, Wen and Wen 2007). The current research on leadership in Chinese foreign policy argues that leaders have made China increasingly active in foreign affairs and have been more aggressive in asserting China's interests internationally. However, the literature on leadership and Chinese foreign policy focuses primarily on security and economic issues and rarely addresses international environmental issues. This study will help fill this gap in the current literature.

An alternative explanation and additional area of foreign policy research suggests that public opinion may have an important influence on foreign policy. Like leadership, public opinion has also received extensive study in the foreign policy literature, but with less conclusive results. Emerging evidence suggests that domestic factors, including public opinion, may be increasingly important for Chinese foreign policy (Glaser and Medeiros 2007, H. H. Lai 2005, Zhao 1992). It has been suggested that public opinion may be particularly important in authoritarian countries such as China because it is a source of legitimacy in the absence of free and fair elections. However, these studies are

fairly limited, and like the literature on leadership, have not addressed environmental issues. Further, most of the studies do not examine cases in which public opinion data can be directly compared to policy.

In this study I examine the influence of both leadership and public opinion on Chinese foreign policy, but unlike previous studies, focus on environmental issues. Specifically I examine three case studies: the 1987 Montreal Protocol, the 1997 Kyoto Protocol, and the 2009 Copenhagen Accord.

The evidence from the three cases in this study provides more detailed insight into how China makes foreign policy decisions on international environmental issues and what factors are important for making these decisions. In each of the three cases included in this study, China became progressively more active in the negotiations process and assertive in promoting its interests under three different leaders. Under Deng Xiaoping China was an observer during the Montreal protocol negotiations and had little influence on the outcome. During the 1997 Kyoto Protocol negotiations, under Jiang Zemin, China was an active participant and was more assertive in promoting its position of common but differentiated responsibilities for carbon emissions reduction. The final treaty reflected this position and was signed and ratified by China. Finally, at the 2009 Copenhagen Conference, under Hu Jintao, China was seen as a key player in the negotiations and was key for shaping the eventual Copenhagen Accord that resulted from the conference. On the other hand, public opinion does not appear to be an important factor.

This study makes several contributions to the existing literature. First, it expands the study of the influence of leadership and public opinion on Chinese foreign policy to a new policy area that has not been previously examined. This is important because it can

provide evidence of whether or not leadership and public opinion are important factors in a wide variety of policy areas or just some. Second, it examines three specific cases where public opinion data is available and provides more concrete evidence on the influence of public opinion on Chinese foreign policy. Third, this study expands the research on China's foreign policy as it relates to environmental issues. This is an area of continued importance for policy that has received relatively little attention in the literature. Finally, it adds an element of foreign policy analysis to the literature on China's participation in international environmental agreements that is not present in the current literature. This element provides more detailed understanding of how individual countries participate in environmental agreements than is possible with other international relations theories such as neorealism or neoliberal institutionalism. In doing so it helps begin to bridge the gap between two current areas of research on China and its participation in international affairs. While this study does not definitively answer the questions of how leadership and public opinion influence Chinese foreign policy on environmental issues, it does serve as an initial exploration into the utility of using foreign policy analysis to examine Chinese participation in international environmental agreements and provides some preliminary results that can serve as the basis for future research.

This paper will proceed as follows: First, a review of the relevant literature on Chinese foreign policy, China's participation in international environmental agreements, leadership and public opinion. Second, I will present expectations, for China's participation in international environmental agreements, derived from the literature on the influence of public opinion and leadership on Chinese foreign policy. Third, I outline the

methods used to examine these expectations. Fourth, I analyze the evidence from the three case studies for how well it corresponds to existing theory on the influence leadership and public opinion have on Chinese foreign policy. Finally, I will conclude with a summary of the findings, applications and limitations of my findings and an examination of potential areas of future research.

## **Literature Review**

This section will examine the relevant foreign policy and international relations literature. While Chinese foreign policy has received increased interest from scholars, very little research has been done on Chinese foreign policy as it relates to international environmental agreements. Scholars have studied Chinese foreign policy and international environmental policy separately, but rarely look at both topics in the same study. There are, however, several areas of relevant literature. Research that exists on China's international environmental policy is usually from a broader international relations perspective and does not include foreign policy analysis, theory, or methods. More often than not, it is descriptive in nature and does not have a strong theoretical basis. Therefore, this section will also examine relevant literature from foreign policy analysis on leadership and public opinion, from both the broader foreign policy and China specific areas of the literature.

I will proceed by examining four main areas of the literature and subsets within these areas: first a brief overview of the general research on Chinese foreign policy; second, research related to international environmental policy and China's participation; third, literature on the influence of leadership on foreign policy and the specific literature

on leadership in China; and, finally, research on public opinion and its effects on China's foreign policy.

### **Chinese Foreign Policy**

Much of the literature on Chinese foreign policy takes a national interest or rational choice approach. The topics most commonly studied relate to security and economic issues. While global climate change could eventually become a security or economic problem, it is not yet encompassed by such studies. The most common influences on China's foreign policy and decision-making cited in the literature are economic factors, prestige, nationalism, and regime stability and legitimacy. Wang (2005) refers to this emphasis as the three P's: preservation, prosperity and power. These factors are often interrelated and addressed within the same study. I will address each of these topics and some of the criticisms of the descriptive approach to studying Chinese foreign policy.

Economic prosperity is the most widely cited influence on Chinese foreign policy (F.-L. Wang 2005, Hempson-Jones 2005, Z. Chen 2005, B. Wang 2009, H. Lai 2010, Sutter 2008). Economic growth is important for its own merits and supporting China's other domestic and international priorities. First, economic prosperity is seen as essential for maintaining China's rise in the international community and domestic stability (F.-L. Wang 2005). China's rapidly growing economy is seen as being largely responsible for its current and rising position in international relations. Second, some contend that economic growth is the key factor supporting China's other goals of prestige, domestic stability and regime preservation. Scholars therefore predict that China will make its foreign policy decisions based primarily on the economic costs and benefits of a given

policy. China's ascension to the World Trade Organization (WTO) in 2001 was one of the most important factors in China's current economic growth (H. Lai 2010). This idea is reinforced by the findings of Hempson-Jones (2005) that China is most engaged on economic issues. Some argue China not only seeks policies that will bring economic growth, but also those that will create a conducive and stable environment for this growth (Sutter 2008). This may include ensuring access to energy resources or avoiding unfavorable economic policy (Ziegler 2006, Hallding, Han and Olsson 2009). While this area of research is useful, it does not provide insight into how the decisions are made, who makes them, or how they are implemented. Foreign policy decisions are made by individuals and groups, not an abstract, all encompassing state. Foreign policy analysis allows for the consideration of individual decision makers and domestic factors such as economic growth and stability in the making of foreign policy (Hudson 2005).

Prestige is the second factor that is commonly cited in the literature as an important consideration in the making of Chinese foreign policy. Many contend that China's policy is driven by a desire to be perceived as a "great power" in international relations (Wu 2001, F.-L. Wang 2005, Sutter 2008). It is argued that China's desire for such an image will result in increased and more active participation in international affairs. Wang (2005) contends that increased prestige is also seen as an additional source of political legitimacy for the Communist government.

The conventional wisdom in the literature also holds that domestic political legitimacy is a key factor in Chinese foreign policy (F.-L. Wang 2005, Z. Chen 2005, H. Lai 2010, Sutter 2008). The Chinese Communist Party wants to maintain its position as the legitimate government of China. Foreign policy relates to this in two ways. First, as



mentioned above, economic growth is seen as a major factor supporting the legitimacy of the Communist regime. As a result, Chinese foreign policy seeks to ensure economic growth. Second, foreign policy can also be a source of legitimacy by promoting China's position in the world as a great power (F.-L. Wang 2005). This in turn reinforces the idea that the Communist Party has created a strong and effective government. Some argue that in order to maintain domestic tranquility and support, China must have an effective foreign policy that emphasizes China's interest and prevents outside interference (Sutter 2008). The influence of domestic factors, particularly prestige is not captured by the neorealist or neoliberal approaches that focus on system level influences. By using foreign policy analysis, this study will help determine if and how domestic factors influence Chinese foreign policy and international relations. If the more specific domestic factors are not found to be important then the system level international relations theories may provide a sufficient explanation of international environmental agreements.

A related area of the Chinese foreign policy literature focuses on nationalism. In China, nationalism is based on strengthening China's position as a world power, both as it is perceived domestically and internationally. In order for a leader to be considered legitimate, they must show that they are able to maintain or increase China's position in global politics (Sutter 2008). Chen (2005) argues that nationalism is one of the most important and enduring influences on Chinese foreign policy. He contends that Chinese leaders and the public have a strong desire to increase China's international power and redeem itself from humiliations of the past (Z. Chen 2005). This area of study is important because it raises the possibility of a public influence on policy. If the legitimacy of a ruler or government is tied to nationalism and its ability to strengthen

China's role and position in international relations, then it would follow that domestic factors would be important for foreign policy decision-making. Therefore, nationalism also relates to studies emphasizing China's drive for prestige and economic growth.

The broad studies of Chinese foreign policy, outlined above, provide insight into some important elements, but provide very little detail on individual decisions or policies. Nationalism, economics, prestige and political legitimacy may all play a role, but they may also come into conflict (F.-L. Wang 2005). Participation in international agreements that could enhance China's prestige in international relations and promote nationalism, could also have economic costs. As mentioned previously, political legitimacy can be tied to both economic growth and nationalism, but these two goals are not necessarily achievable in all cases. Some have criticized the broad approach for just this reason. Yu (1994) argues that while studying larger, systemic topics in Chinese foreign policy is beneficial, it needs to be paired with more detailed study of specific factors like leadership and domestic influences. Broad factors like nationalism, prestige and economics may be important, however, knowing this does not indicate how they are integrated and considered in decision-making. Who decides what factors are most important in specific cases and how are they weighed against each other? It is these topics that are the focus of this paper and the remainder of the literature review.

### **International Environmental Policy**

Before proceeding to the specific topics of interest in this paper, leadership and public opinion, it is also useful to examine the literature on China's participation in international environmental agreements. Some of the themes from the general literature on Chinese foreign policy are mirrored in the literature on international environmental

agreements, including economic factors and China's rising position in the international community. Additional factors, including domestic issues are also introduced in this area of the literature.

Economic motivations remain a key element in the study of China's participation in international environmental agreements. Several authors argue that China's participation in agreements such as the Kyoto Protocol, Copenhagen Accord and Asia-Pacific Partnership have been largely motivated by economic interests (G. Chen 2008, G. Heggelund 2007, Oberheitmann and Sternfeld 2009, Kellow 2006, Heggelund and Baun 2009). These studies point out that in each instance, China signed an agreement when it reaped economic benefits. Oberheitmann and Sternfeld (2009) point to the clean development mechanisms in the Kyoto Protocol as a key economic benefit for China that contributed to its participation. Others emphasize the technology transfer of the Asia-Pacific Partnership as an important economic benefit that motivated China's participation (Heggelund and Baun 2009, Kellow 2006). Others still point to China's resistance to emissions reductions under the Copenhagen agreement as evidence of the importance of economics in China's decision-making (Christoff 2010).

Prestige is also cited as an important issue in the international environmental policy literature. It is argued that China's positioning of itself as the representative of the less developed countries helps enhance its standing internationally (J. I. Lewis 2007-08, Oberheitmann and Sternfeld 2009, G. Chen 2008). Many developing countries, including China, argue that more developed countries achieved their present stage of development with high levels of fossil fuel consumption and therefore bear the primary responsibility for the increased concentration of carbon dioxide in the atmosphere. They believe that

developing countries should not be forced to make emissions reductions that could slow their progress or hurt their economies. Despite its substantially higher levels of emissions than most developing countries, China has attempted to maintain solidarity with the “G-77” countries and preserve a position of leadership among them. (J. I. Lewis 2007-08). China has championed the cause of common but differentiated responsibilities that has put most of the burden for protecting the environment on more developed countries (G. Chen 2008).

The third factor commonly considered in research on China’s participation in international environmental agreements is the domestic costs of environmental problems. Some argue that the negative impacts of pollution and environmental degradation on the Chinese people are increasingly being considered when making decisions on international agreements (Christoff 2010, G. Heggelund 2007). Some even predict that the impact of environmental problems within China may eventually lead to major changes in its participation in international agreements (G. Heggelund 2007). Specifically, the costs of climate change may soon outweigh the benefits of improved living standards that have accompanied China’s rapid economic growth, which is dependent on increasing fossil fuel consumption (G. Heggelund 2007).

As with the general research on Chinese foreign policy, the literature on China’s participation in international environmental agreements focuses on general issues and does not examine specific factors related to decision-making or participation in negotiations. Harris (2008) argues that this approach is inadequate. He contends that a focus on environmental foreign policy that includes the analysis of domestic factors, institutions and actors will provide a clearer picture of how states participate in

international environmental agreements (P. G. Harris 2008). Specifically, understanding foreign policy actors and decision-making can play an important role in understanding international environmental agreements (P. G. Harris 2008). He cites China as an example of where foreign policy analysis incorporating domestic actors and interests could be particularly beneficial (P. G. Harris 2008). As mentioned previously, the general research on Chinese foreign policy often includes factors that have a domestic component. Many of the same domestic factors are also mentioned in the literature on China's participation in international environmental agreements. Prestige, economic considerations and domestic implementation costs are all cited. Foreign policy analysis allows for these factors to be incorporated under a theoretical framework and move beyond the more descriptive nature of most of the existing literature. It is this foreign policy analysis approach that will be the focus of this paper and the remainder of the literature review.

## **Leadership**

Many argue that who leads matters and that elite beliefs and characteristics are important for foreign policy decision-making and implementation. Numerous studies have confirmed that leaders matter for both the final policy and the decision-making process (Etheredge 1978, M. G. Hermann 1980, M. G. Hermann 1993, Hermann, et al. 2001, Holsti and Rosenau 1990, Kaarbo 1997). Focusing on and understanding the importance of individual leaders allows one to explore how human agency influences foreign policy decisions. This section will review the general foreign policy and China specific literature on the role of leadership in foreign policy decision-making.

General Foreign Policy Literature. Extensive research has confirmed the importance of individual leaders for foreign policy decision-making. While most of this research has focused on the United States, it does provide important insight for this study. First, the personality of leaders matters for how they make decisions; second, changes in leadership can lead to shifts in policy; third, individual leaders can be particularly important in dictatorships or authoritarian regimes where power is more concentrated in one or a few people.

The first major argument of relevance for this study is that individual leaders are important for making final decisions. Hermann (1993) suggests that a single powerful leader that has the authority to make decisions that cannot be overturned by others is key to understanding foreign policy decisions. Individual characteristics such as how a leader processes information and makes decisions impact policy outcomes (M. G. Hermann 1993, O. R. Holsti 1992, Mitchell 2005). Various personality traits such as interest in foreign policy issues, all affect how active leaders are in the decision-making process, how they come to decisions and what kind of decisions, they are likely to make (M. G. Hermann 1980).

Second, the conventional wisdom that leaders in authoritarian countries are likely to be more powerful and important is supported by the literature. In authoritarian countries it is more likely that a single individual will be responsible for making most if not all foreign policy decisions (M. G. Hermann 1993, Hermann, et al. 2001). This differs from more democratic systems where numerous individuals may play more predominant roles in various situations and there is the possibility that the decision could be overturned by another branch of the government (Hermann, et al. 2001). This is certainly

an important factor to consider with China, where the President has final say in foreign policy matters (Barnett 1985, H. H. Lai 2005, Sutter 2008).

Third, leadership change also matters. As one would expect, leaders with different personalities and leadership styles often make different policy decisions on the same or similar issues (Hermann, et al. 2001, O. R. Holsti 2002, Mitchell 2005). Therefore, examining similar cases or policies under different leaders can provide insight into how leaders matter and what kind of decisions a given leader is likely to make.

Leadership and Chinese Foreign Policy. The literature on leadership in Chinese foreign policy reflects the broader foreign policy literature and supports the idea that leadership, particularly that of the president, matters. The three leaders under consideration in this study are Deng Xiaoping, Jiang Zemin and Hu Jintao. While most of the research on leadership in Chinese foreign policy does not have the depth of that on other countries it does indicate that who leads and leadership change both matter for policy change. To a certain extent, the literature on Chinese leadership also reflects the more general literature on Chinese foreign policy. This section will examine the broad themes in the study of leadership and Chinese foreign policy and the literature on specific leaders.

Research on the influence of leadership on Chinese foreign policy emphasizes three factors: the importance of the top leader, continuity, and change. First, the general consensus is that the top leader is key to decision-making (Wen and Wen 2007, Harmin 1994, Barnett 1985, H. Lai 2010, Sutter 2008). The top leader is important first because external threats and policy challenges are perceived through them (Wen and Wen 2007). The leader provides a foreign policy vision and sets priorities for the country (H. Lai 2010). For example, leadership change and the combined emphasis on economic growth

and increased engagement in international relations was important for China's move to join the World Trade Organization (H. Lai 2010). The top leader also shapes the role of other actors before making the final decision on an issue (Harmin 1994). For instance the paramount leader has been very active in setting up guidelines for others to follow in reunification policy, even when certain tasks were delegated to others (Harmin 1994). While other factors may play a role in foreign policy decision-making the top leader remains the final decision-maker in all policy areas (Sutter 2008).

There is general agreement in the literature that leadership change has resulted in policy change (Dittmer 2003, H. Lai 2010, Liu 2003, Sutter 2008, Zhang 2010). Each generation of leadership has been increasingly active in international affairs (Dittmer 2003, Liu 2003). Along with this increase in activity, there has also been an increase in pragmatism and willingness to promote Chinese interests internationally with a less ideological focus (Liu 2003, Sutter 2008, Zhang 2010). Liu (2003) points out that Hu Jintao has been particularly pragmatic and realizes that adapting to new challenges necessitates new approaches to both domestic and international politics. Hu Jintao has not only taken a more active role in issues such as the North Korean and Iranian nuclear negotiations, but has also increased his engagement with foreign leaders and engagement in multilateral meetings (Zhang 2010). Different leaders have brought different policy priorities and approaches to policy and decision-making (H. Lai 2010).

While much of the research is focused on policy change between leaders, there is also continuity. Centralization of decision-making and the preeminent importance of the top leader have remained constant even with changes in top leadership (Cabestan 2009, Harmin 1994). All three leaders have also maintained an emphasis on sovereignty,



autonomy and regime survival (Kane 2001, Kirby 1994, H. Lai 2010). This is consistent with the broader research on Chinese foreign policy discussed previously.

Deng Xiaoping is noted for moving Chinese foreign policy away from the revolutionary ideals of Mao Zedong and making China more open to international affairs (H. Lai 2010, Sutter 2008). Deng was also more active in the foreign policy process and decision-making than his predecessors and remained the primary decision-maker on foreign policy issues (Barnett 1985). While Deng was more active in foreign policy he took a “lay low” approach and tended to be more focused on domestic affairs (Lam 2006, Zhang 2010). Deng was more concerned about domestic social and security issues than pursuing an aggressive foreign policy (Wen and Wen 2007).

Jiang Zemin, like Deng Xiaoping, remained the dominant voice in Chinese foreign policy (Lam 2006, Sutter 2008). Further, many argue that Jiang also created great change in that he was more active in foreign policy, which increased China’s participation in international organizations and put more emphasis on foreign policy (Cabestan 2009, Lam 2006, Sutter 2008). In the 1990s Jiang worked to build stronger bilateral relationships with Japan, Russia and Europe in hopes of building a more multi-polar world to offset the dominance of the United States (Wen and Wen 2007). At the same time, Jiang also sought to build ties with the United States as a means to build and sustain China’s emerging great power status (Lam 2006). Jiang also put an increased emphasis on modernization and development through the ascension of China in international relations and attaining “great power status” (Dittmer 2003, Zhang 2010).

China’s participation in international affairs has only increased under the current president Hu Jintao. Liu (2003) contends that Hu has been the most active of all Chinese

leaders, both in his role in the decision-making process and in increasing China's role in the international community. Hu has put an increased emphasis on international law, norms and institutions (Liu 2003, Kent 2008). While he has many similarities to Jiang Zemin, Hu is more adaptive and pragmatic than his predecessors, choosing to utilize international institutions to serve China's interests, rather than resisting them or shunning participation in them (Lam 2006, Liu 2003, Sutter 2008). Further, many argue that while there has been increased participation in decision-making from other elements within the Chinese government, Hu remains the final decision maker and has a great deal of control over the foreign policy process (H. Lai 2010).

The literature on the importance of leadership and individual leaders in Chinese foreign policy supports the general argument in the foreign policy literature that who leads matters for foreign policy. Chinese leaders have become increasingly active in international affairs and foreign policy decision-making. This appears to represent a change in the beliefs of leaders and what they believe to be the role and importance of China in international relations. There appears to be more continuity in leadership style between the three top leaders. Deng Xiaoping, Jiang Zemin and Hu Jintao were all in the position of making the final decision on foreign policy issues and exercised a great deal of control over the decision making process. While continuities exist between leaders, each has taken a unique approach that has increased China's involvement in international affairs. However, the literature does not address the role leadership plays in decision-making on environmental issues that are of ever increasing importance. This study will help begin to fill this gap.

## **Public Opinion**

Public opinion polls are very common, especially in western politics, and many people believe public opinion matters for policy. Public opinion has been the subject of a great deal of study in the foreign policy literature, however, uncertainty remains as to how important public opinion is for foreign policy decision-making, if it matters at all. In China, the people do not elect their leaders. Does this make leaders less sensitive to public opinion because they are not concerned about elections or more sensitive because they are concerned about maintaining legitimacy? This section will review some of the general foreign policy literature on public opinion and the emerging literature on public opinion in Chinese foreign policy.

General Foreign Policy Literature. Many studies on foreign policy have found a high correlation between public opinion on a foreign policy issue and the policy outcome (Foyle 1997, O. R. Holsti 1992, Shapiro and Jacobs 2000). However, debate remains as to how important public opinion is and how it matters for foreign policy (Foyle 1997). Some argue that public opinion is important because it constrains policy options that leaders have to choose between (Foyle 2003, O. R. Holsti 2002). Others contend that whether or not public opinion matters depends on the structure of the government and that it will be more important in some countries than others (Risse-Kappen 1991). While it might seem logical that public opinion would matter less in authoritarian countries, like China, some have found it to be more important as a source of legitimacy in non-democratic countries (Telhami 1993).

The literature on public opinion remains mixed and inconclusive about the actual effect of public opinion. Much of the foreign policy research on public opinion is focused

on the United States. One solution that has been proposed is to increase the amount of cross-national research on the effect of public opinion on foreign policy (O. R. Holsti 1992). Research, such as that done by Isernia, Juhasz and Rattinger (2002) has found that even on the same topic, public opinion can vary and fluctuate more or less across countries. Expanding the research to cover more countries could be useful in understanding how, when and why public opinion matters, if it matters at all. China is a particularly useful case because most people assume that public opinion would not be a factor in China or other authoritarian states.

Public Opinion and Chinese Foreign Policy. Public opinion is an emerging area of research in the study of Chinese foreign policy. Like the broader foreign policy literature, debate remains as to whether or not it matters. Some contend that foreign policy decision-making in China is increasingly open to influences outside of the central leadership, including public opinion (Glaser and Medeiros 2007, H. Lai 2010, Hao 2005). Zhao (1992) points to the increased use of open demonstrations and passive resistance as evidence of the growing role of public opinion. More specifically Hao (Influence of Societal Factors: A Case of China's American Policy Making 2005) notes that public outcry over the 1999 bombing of a Chinese embassy influenced the response of Chinese leaders. Others argue that public opinion is irrelevant to foreign policy decision-making (Hao and Ho 2009). Those that contend that public opinion matters argue that meeting the public's demands for growth and prosperity are key for maintaining the legitimacy of the Communist Government and therefore play an important role in shaping foreign policy (Guo 2006, Roy 2009). This further supports Telhami's (1993) contention that public opinion may matter even more in authoritarian countries. However, most of the

research on the influence of public opinion in Chinese foreign policy is speculative and does not present specific cases comparing public opinion to policy decisions and implementation.

The public opinion literature on China is relatively sparse and does not consider environmental policy. This study will expand the number of case studies on the issue and open up a new policy area that has not been previously considered in research on Chinese foreign policy or foreign policy in general.

While Chinese foreign policy has drawn the attention of scholars, very little foreign policy research examines international environmental issues. The research that does relate to environmental issues generally takes a broader international relations perspective and does not consider how leadership or public opinion affects Chinese foreign policy in this area. There appears to be fairly wide consensus that leadership and who leads matters for China's foreign policy. The research on public opinion is less clear. This study will help begin to fill the gaps in the literature by incorporating three environmental policy case studies and two specific influences studied in the broader foreign policy literature.

## **Methods**

This study utilizes the congruence method, and to a more limited extent, process tracing, as described by George and Bennett (2005), to analyze three cases: the 1987 Montreal Protocol, the 1997 Kyoto Protocol, and the 2009 Copenhagen Accord. The congruence method examines whether and how expectations align with the outcome of a particular case. That is, given public opinion and leadership, what outcome would one expect and is that prediction in line with events (George and Bennett 2005). The

congruence method is useful in this case because it requires relatively little data. Chinese foreign policy decision-making is historically, and remains a fairly closed process. Therefore it is difficult to gather detailed information about the process upon which to test a theory.

For this study, I examined what kind of policy and level of participation would be expected given public opinion and what leader is in power. Public opinion data is available for the time periods around each case and is discussed in more detail below. I chose to focus on three individuals as the independent variable for leadership. As discussed previously, Deng Xiaoping, Jiang Zemin, and Hu Jintao were the most prominent and important decision makers during each of the three periods under consideration. In each instance, they exercised final authority in making foreign policy decisions and had a strong influence on the decision-making process. These three leaders have also been the subjects of large amounts of previous research, which provides a strong basis for developing expectations for analysis.

To supplement the congruence method, I also utilized, to a more limited extent, process tracing. Process tracing can serve to clarify any casual relationship between the leaders, public opinion and policy, and provide more insight into the actual decision-making process (George and Bennett 2005). First, I examined the proceedings of the three conferences focusing on statements given during and at the end of the conference. I looked for statements regarding China's position on or in support of an agreement at various stages and how those statements relate to China's pre-conference papers. These documents provide insight into the position that China took in each of the three negotiations. This allows me to not only better understand China's position, but also how

active they were in the conference and how assertive China was in promoting its position. I am looking to see if China is outspoken about particular issues or policies and what is emphasized in its policy statements. Second, I also examined Western and Chinese news articles from a month prior to a month after each conference for statements by top Chinese leaders. This provides a more nuanced picture of China's position on and reaction to each agreement.

While this method of analysis does not directly measure the actions of individual leaders or the decision-making process, the actions of China leading up to, during and after negotiations can be seen as reflecting the differences in policy under individual leaders. Existing literature has shown that Deng, Jiang and Hu all held the position of final decision maker and exercised a great deal of influence over the processes of decision-making and implementation in Chinese foreign policy, therefore, policy outcomes should reflect the differences between leaders. Because China's foreign policy decision-making remains a fairly closed process, it is difficult to study decision-making directly. Rather, in this study I am seeking to determine whether the evidence for the three cases in question supports the existing theories on leadership and public opinion.

### **Case Selection**

The 1987 Montreal Protocol, the 1997 Kyoto Protocol, and the 2009 Copenhagen Accord were selected as cases for this study for several reasons. First, each of the three treaties was signed and ratified under a different leader. This was, of course, necessary for making comparisons between them. Second, the treaties are focused exclusively on addressing environmental issues. Many treaties, such as the United Nations Convention on the Law of the Seas include environmental components, but are not focused only on

environmental issues. Selecting these three cases isolates the topic of the environment. Third, all three treaties address atmospheric pollution. This allowed me to examine how the same or at least similar decisions were made under three different leaders. Finally, all three treaties address issues of major environmental concern, ozone depletion and climate change.

### **Public Opinion Data**

Public opinion data for the study came from two sources the 1990, 1995 and 2001 World Values Survey, and the 2007, 2008 and 2009 Global Attitudes Project. Together these two sets of data cover the general time period of the three treaties. Both of the surveys asked respondents if action should be taken to protect the environment, even if it came at an economic cost. These questions measure not only whether the Chinese people support the government taking action on environmental issues such as ozone depletion or climate change, but also if they are willing to pay an economic cost to do so. This is significant because, as noted above, much of the research indicates that maintaining economic growth is a high priority in Chinese foreign policy decision-making. The two studies used slightly different phrasing but incorporated very similar questions. The full questions and responses for each year are included in Appendix I and are summarized in the analysis section. Other questions from these surveys will be incorporated into the analysis but to a more limited extent.

The World Values Survey and Pew Global Attitudes Project (GAP) data are some of the most extensive surveys of Chinese public opinion and incorporate more questions on environmental issues than other available data. However, they are not without shortcomings. Both surveys utilized phone interviews and in the case of the Pew GAP in



person interviews. Both used a probability sample ranging in size from 2,000 to 3,500 respondents. By this measure, both surveys should provide accurate results. However, there are a couple of problems. First, both the World Values Survey and Pew GAP either oversampled or exclusively sampled urban populations. The results may, therefore, not be representative of the entire population. Second, both the World Values Survey and Pew GAP under sampled the less educated portions of the population. This is connected to the sampling of more urban populations. These two issues present a problem insofar as they data may not be representative of the entire Chinese population. However, urban and the more highly educated segments of the population may be more likely to be politically active and their opinions more important. China's population is also predominantly urban and the rural population is shrinking. While there are shortcomings for both data sets they do represent the best available data for Chinese public opinion on environmental issues and are a good starting point for this study.

### **News Analysis**

As a supplement to the official conference proceedings, several news sources were also consulted. Using LexisNexis Academic, news articles from the duration of the conference were reviewed for statements by Chinese participants and officials. Specifically, *Xinhua*, China's official state news agency, *China Daily*, a prominent English Language Chinese newspaper, *The New York Times*, and reports published by BBC News. These are useful sources because they provide a perspective from both within and outside China. *Xinhua* is the official Chinese state news agency and therefore provides useful insights into the government's positions. *China Daily* is the most widely circulated English language newspaper in China. *The New York Times* and BBC provide

an international perspective. The BBC is the largest news organization in the world and The New York Times is widely circulated domestically and internationally.

## **Analysis**

### **Expectations**

The congruence method of case studies is based on comparing individual cases to expectations based on previous studies and evidence. Therefore, I will first establish what one would expect in each of the three cases based on existing theory on the role of leadership and public opinion in Chinese foreign policy.

Leadership. The literature on leadership in Chinese foreign policy predicts continuity and change. When considering leadership, the focus lies more on China's participation in the negotiations than on the decision whether or not to sign and ratify an agreement. Signing and ratifying an agreement is only one small part. Just as important if not more important, is how China participates in negotiating and shaping the three agreements. If leadership matters, different policies and approaches should be apparent under different leaders, while maintaining some similar characteristics. First, I would expect there to be some continuity, with all three leaders to emphasizing sovereignty and regime preservations. Second, previous research indicates that each leader became progressively more active in international affairs. Based on this research, I expect that China would be more active in the negotiation process and assertive in promoting its interests under Jiang Zemin and Hu Jintao than under Deng Xiaoping. Existing research predicts that China would be especially active and assertive in the Copenhagen Accord, compared to previous administrations and agreements.

Public Opinion. Since the research on the influence of public opinion on Chinese foreign policy is relatively new and limited in scope there is less to base predictions on.

However, it is still possible to make predictions based on the existing theory. First, I expect that if public opinion matters for foreign policy decision-making, it will be more important in the case of the Copenhagen Accord than the Montreal or Kyoto Protocols.

Public opinion is cited in the literature as an emerging influence and one would therefore expect it to matter more in recent cases. If public opinion is an important factor, I would expect Chinese foreign policy to reflect public opinion, especially if there is a major change in the level of support for environmental protection. Second, if public opinion matters, I would expect not just approval or rejection of an agreement, but active participation by China in the negotiation process that reflects public opinion.

### **Leadership**

The evidence from the analysis of the treaty and negotiation documents and the news analysis supports existing theory on leadership in Chinese foreign policy decision-making. While leadership style seems more constant over time, with each leader serving as the final decision-maker and having a great deal of control over the process, beliefs about China's role in international affairs appear to change. In each successive case, under different leaders, China became more active in shaping the treaties and assertive in promoting its position during the negotiations. Each of the three case studies will be addressed separately with summary analysis at the end.

Montreal Protocol. China's participation in the Montreal Protocol negotiations was minimal. China was present only as an observer during the negotiations process and did not play a major role in shaping the treaty (UNEP Ozone Secretariat 1989). Also, China

was not an initial signatory, but rather, it ratified the agreement two years later (UNEP Ozone Secretariat 2010). News analysis provides more support for this interpretation of limited participation on the part of China. China received no mention for its participation in any of the news reports. The only mention of China's participation in any of the news sources used for this study was a brief announcement when China ratified the agreement (China Ratifies Vienna Convention on Environment 1989).

This level and type of participation is in line with existing research that characterizes Deng Xiaoping's foreign policy as a "lay low" approach. While Deng may have been more active in international affairs than previous Chinese leaders, he was not particularly focused on foreign policy or international issues. The Montreal Protocol and Deng Xiaoping serve as a good baseline against which the remaining two cases and leaders can be measured. It shows a minimal level of participation that, based on theory, I would expect to see increase for the Kyoto Protocol and Copenhagen Accord.

Kyoto Protocol. The Kyoto Protocol saw a major increase in the level of Chinese participation and assertiveness. During the negotiations, China was an active participant and strongly asserted its interests. During the high level segment for ministers and leaders of delegations, China served as a leader among the Group of 77. China's position emphasized that major reductions should come from the Annex I (more developed countries) and that there should also be provisions for technology transfer and financial support to China and other developing countries to support emissions reductions and adaptation to climate change (UN Framework Convention on Climate Change 1997). This activity represents a clear increase over China's passive observer status during the Montreal Protocol negotiations where it was largely inactive.

Further evidence of China's increased involvement in international environmental policy negotiations comes from a Chinese government white paper published prior to the Kyoto Conference. In the document, China emphasized both its increased role in international environmental policy and its position on key issues (Information Office of the State Council Of the People's Republic of China 1996). Specifically, the white paper emphasized the need for international action on environmental issues, but also that taking action was primarily the responsibility of developed countries and that countries such as China should not have to compromise economic development or national sovereignty for environmental protection (Information Office of the State Council Of the People's Republic of China 1996). This document not only reflects China's increased participation, but also its increased assertiveness in promoting Chinese perspectives and interests.

News analysis provides further support for an increase in Chinese participation in international environmental policy between the Montreal and Kyoto Protocols. Initial reports on the adoption of the Kyoto Protocol noted China's strong opposition to mandatory emissions reductions by developing countries (BBC News 1997). In 2002 when China officially ratified the Kyoto Protocol, Premier Zhu Rongji touted China's participation in the negotiations and active role in international environmental policy (China takes active part in multilateral environment cooperation: premier 2002). Others, including Amara Essy, the Secretary General of the African Union, noted China's role as spokesman for developing countries during and after the negotiations (M. Chen 2002). These articles indicate that China and the rest of the world considered China's participation in the negotiations to be important and influence. This is a significant

increase over the Montreal Protocol when China received no mention other than the fact that it had ratified the treaty.

Copenhagen Accord. If China was an observer at the Montreal Protocol negotiations and a participant in the Kyoto Protocol negotiations then it was a major player in the Copenhagen Accord. As was the case during the Kyoto Protocol negotiations, China was assertive about its position. Prior to the negotiations, China once again emphasized its desire for international action on climate change and the steps it had taken in the past (Information Office of the State Council of the People's Republic of China 2008).

However, the main focus of this document was on topics such as technology transfer and financial support for developing countries to voluntarily reduce emissions (Information Office of the State Council of the People's Republic of China 2008). The road map China presented to the UNFCCC emphasized emissions reductions by developed countries and assistance to developing countries. (China's Views on Enabling the Full, Effective and Sustained Implementation of the Convention Through Long-Term Cooperative Action Now, Up To and Beyond 2010 2008). China was particularly assertive in promoting its pre-conference positions during the negotiations for the Copenhagen Accord.

The news analysis for the Copenhagen Accord is particularly telling. It shows that both China and other countries viewed China as a key player in the negotiations process. First, China is noted as being one of the key players in the “behind closed doors” sessions that resulted in the final agreement (Harrabin 2009). Specifically Harrabin (2009) labeled China as being one of the “two key players” along with the United States in the negotiations. President Obama and Chinese Premier Wen Jiabao met together several times in an attempt to break the deadlock at the conference and were called the two most

important players in the negotiations (Copenhagen climate summit enters crucial stage 2009). Second, several international leaders, including then British Prime Minister Gordon Brown, accused China of obstructing the negotiations process (Climate summit 'held to ransom' 2009). This serves as an important indicator of China's key role by demonstrating its ability to influence the outcome of the negotiations. Third, developing countries showed support for China's leadership position, and emphasis on economic development and differentiated responsibilities for emissions reductions (China's commitment to climate change strong, fair: delegates from developing world 2009). During the negotiations China continued to emphasize its position as a leader among developing nations and representative of their common interests during the negotiations.

One of the unique elements that appears in the conference and news analysis for the Copenhagen Accord is that not only did China emphasize its own importance in the negotiations, other countries and leaders did so as well. China's importance and strong influence over the negotiation process was widely recognized and reported on. In the past, Chinese news media was the strongest in its reporting of China's role in the negotiations. During the Copenhagen Conference, China received much wider attention in the media for its participation and pivotal role in the negotiations.

Summary Analysis. The evidence on the role of leadership in Chinese foreign policy decision-making and implementation largely supports existing research and corresponds to expectations. During each of the three cases, under a new leader, China was more active in the negotiations and more assertive in promoting its position. China went from being an observer during the Montreal Protocol negotiations to a key player in the Copenhagen Accord negotiations. Evidence from analysis of both the conference

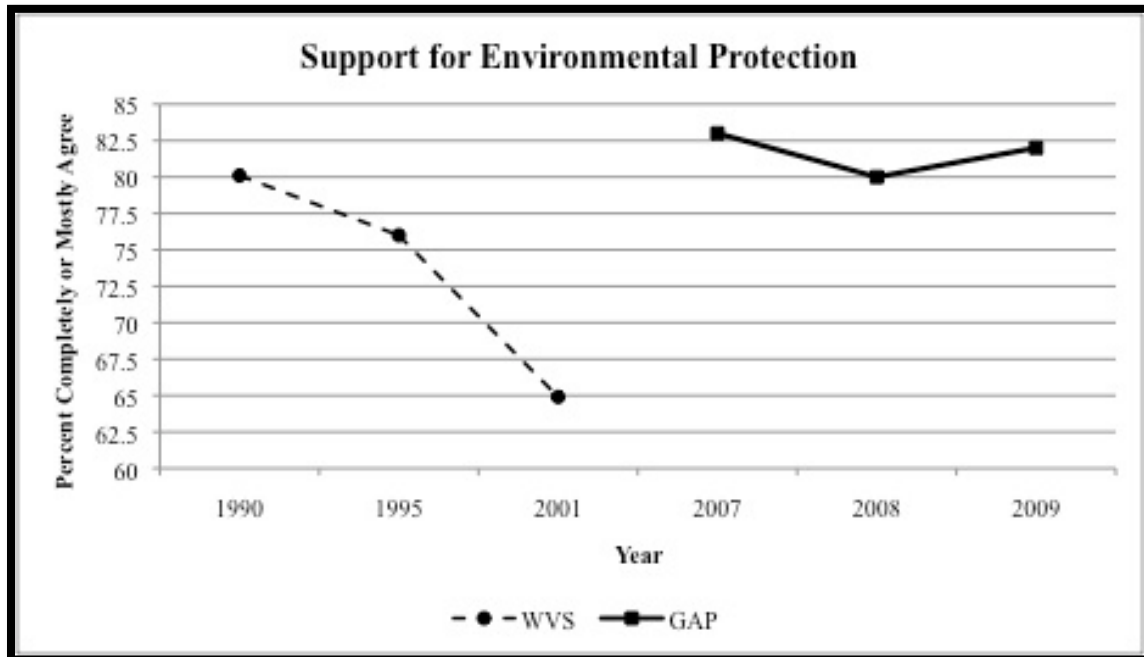
documents and news reports indicate a more active role. Because each of the three leaders in question exercised final decision-making power and exerted a great deal of influence over the decision-making and implementation process, the differences in the policies and how they were implemented in the three cases provides evidence that different leadership and leadership change was important for Chinese foreign policy on the three agreements.

### **Public Opinion**

The analysis of public opinion data does not support the hypothesis that public opinion is important for foreign policy decision-making and implementation on international environmental policy. While public opinion surveys have shown consistently high levels of support for action by the Chinese government to protect the environment, this is not reflected in China's participation in international environmental agreements.

Public opinion surveys conducted by the Pew Research Center and World Values Survey indicate that the Chinese people support protecting the environment, even if it comes at an economic cost to them (Figure 2). While the numbers fluctuate over time both surveys found that more than 60 percent of the Chinese surveyed supported action to protect the environment. The numbers were even higher, above 80 percent, between 2007 and 2009. When specific questions regarding global climate change were asked, 88 percent of people agreed that people should be willing to pay higher prices to address global climate change (Pew Global Attitudes Project 2009).





**Figure 2: Chinese Support for Environmental Protection**

Percentage of respondents that agreed or completely agreed that action should be taken to protect the environment even if it came at a cost to individuals. Source: 2009 Global Attitudes Project; 1991,1995 and 2001 World Values Survey.

The conference and news analysis from the leadership section indicates that while China’s decision to sign each of the three agreements may be in line with public opinion, its participation in the negotiations was not. Specifically, during the negotiations for the Kyoto Protocol and Copenhagen Accord, China avoided making any commitments to reduce carbon emissions, often citing the potential economic costs. In contrast, public opinion data indicates that the Chinese public supports such action and is even willing to bear some economic costs for doing so (see Tables 1 and 2).

	Completely Agree	Mostly Agree	Mostly Disagree	Completely Disagree	DK/Refuse
<b>2009</b>	33	50	14	2	2
<b>2008</b>	31	49	14	3	3
<b>2007</b>	36	46	13	2	2

**Table 1: Support for Environmental Protection (2007-2009 Global Attitudes Project Responses)**

Table 1 displays responses in percentages to the question: “Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs.” In all three years

more than 80 percent of respondents mostly or completely agreed with the statement. Source: Pew Global Attitudes Project 2009.

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>DK/Refuse</b>
<b>1990</b>	22.4	57.7	15.4	1.7	2.8
<b>1995</b>	18.9	57.1	13.1	2.5	2.3
<b>2001</b>	8.9	56	21.4	1.0	12.6

**Table 2: Support for Environmental Protection (1991, 1995 and 2001 World Values Survey Responses)**

Table 2 displays the responses in percentages to the question: “I would agree to an increase in taxes if the extra money were used to prevent environmental pollution.” In all three years more than 60 percent of the respondents agreed or strongly agreed with the statement.

Theory predicts that public opinion has become increasingly important for foreign policy decision-making in China. While the data shows consistently high levels of support to address environmental issues China’s policy has been increasingly assertive in avoiding emissions reductions. The evidence points in the opposite direction of what theory would predict in terms of public opinion influencing Chinese foreign policy on environmental issues. While public opinion may matter in other policy areas, it does not appear to be an important consideration for international environmental policy.

### **Alternative Explanations**

While there is strong evidence that leadership matters for determining China’s foreign policy decision-making and implementation on international environmental issues it is not the only possible explanation. The primary alternative explanation is that China’s increased power in international affairs could be responsible for China’s more active participation. However, this explanation cannot fully account for China’s increased participation. While an increase in power may be a contributing factor, it is not sufficient to explain China’s increased participation. It is, however, possible that these international level factors are filtered through the individual Chinese leaders.

First, increased power has not always resulted in increased participation. Despite increased international power and recognition under the Deng Xiaoping administration, Deng maintained a policy of “never taking the lead” (Lam 2006). Even if power is a factor, the leader must decide how and when it is used. If power was the key determinant of China’s increased participation there should not be a discrepancy across leaders in whether or not the power is utilized.

Second, even when leaders do utilize China’s increased power, there is variation in how they approach and engage in international relations. Jiang Zemin focused on maintaining China’s power and role in the international community through attempting to increase multilateral and bilateral relationships (Lam 2006). In contrast, Hu Jintao has been more focused on using China’s increase power to pursue goals internationally. China’s power has certainly increased over the period examined in this study, but the way in which each leader utilizes or does not utilize this power is important for how and what policies China pursues.

The variation in how and when Chinese leaders utilize China’s increased power in international relations may be evidence that international level factors are fed through leaders. That is, how much international level factors matter depends on how they are perceived and responded to by different individuals. This is particularly evident in the differences between Jiang Zemin and Hu Jintao who were presented with similar international conditions, but responded differently.

## **Conclusion**

This study serves as an initial exploration into the utility and feasibility of using foreign policy analysis to study Chinese participation in international environmental

agreements. While the results are not definitive, the idea that leadership and not public opinion is important for Chinese foreign policy decision-making and implementation found increased support. This study also opens the door to extensive areas of future research, which are discussed below.

While previous studies have examined Chinese foreign policy, the research done on Chinese foreign policy as it relates to environmental issues has tended to be more descriptive in nature and does not provide a theoretical explanation. This left the question of why China has become more active in the negotiations process. Despite a continued emphasis by Chinese leaders on the importance of international environmental issues, Chinese participation and the nature of this participation has varied. Under each successive leader, China appears to have become progressively more active in the negotiations of environmental treaties and more assertive in promoting its position. Over the period of time spanning the three cases, China went from being an observer with very little influence, to a major player essential for the outcome of the negotiations. In particular, during the 2009 Copenhagen Conference, China was recognized as one of the two primary players, along with the United States, in the negotiations. This supports the existing literature that suggests China has become more active in international affairs under Hu Jintao than during previous administrations.

This evidence suggests that China will continue to play a major role in international environmental agreements and international affairs in general. If trends continue, China's next leader should continue to emphasize foreign policy, possibly even more so than his predecessor. While China's role may change, one would also expect continuity with a continued emphasis on economic development and sovereignty at the

costs of environmental protection. This study not only supported previous literature in demonstrating change in how China participates in international affairs, but it also showed that these factors remained important across all three leaders.

On the other hand, public opinion did not appear to be an important factor. Despite high levels of public support in China for action to protect the environment, China consistently avoided any kind of binding obligations to take action, especially under the Kyoto Protocol and Copenhagen Accord. Existing literature and public opinion data suggest that the opposite should have been the case and that due to an increased influence of public opinion and rising support China should have supported and agreed to more specific action on its part. While public opinion may become a more important factor in the future, based on the evidence in this study it does not appear to be important for foreign policy on environmental issues.

This initial study leaves open the possibility of more extensive future research. It serves primarily as an initial examination of how foreign policy analysis can be used to understand and explain Chinese foreign policy on international environmental issues. Future research on leadership could incorporate trait analysis, operational code and examine how receptive Chinese leaders are to constraints, both domestic and international. It would also be possible, if not advantageous to incorporate additional leaders, such as the Chinese premier into future research. Expanded and more detailed analysis would provide better insight into Chinese foreign policy decision-makers. There are also several other domestic influences that could also be studied. Chinese businesses, scientific and academic communities, and provincial level groups could all have a role or state in China's international environmental policy and each warrants future

consideration. Other international level factors, such as international norms, could also be considered. Each of these areas has potential but also requires more time and information for analysis. More extensive government documents on the decision-making process, analysis of the committees involved in the decisions, expanded news analysis, speeches by top leaders, and more representative public opinion surveys would all aid future research.

International environmental issues and Chinese participation in the agreements proposed to address them are likely to remain relevant for the foreseeable future. Expanding on this study with future research can provide increased insight into how Chinese foreign policy is made and by whom. This study indicates that domestic influences and leadership in particular both warrant further consideration for their role in Chinese participation in international environmental agreements and foreign policy in general.

## Appendix I

Appendix I lists the full questions and responses from the 2007-2009 Pew Global Attitudes Project and the 1991, 1995 and 2001 World Values Survey.

### 2007-2009 Pew Global Attitudes Project

Q12 Please tell me whether you completely agree, mostly agree, mostly disagree or completely disagree with the following statements.

ROTATE IN TELEPHONE SURVEYS

c Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs

- 1 Completely agree
- 2 Mostly agree
- 3 Mostly disagree
- 4 Completely disagree
- 8 Don't know (DO NOT READ)
- 9 Refused (DO NOT READ)

	Completely agree	Mostly agree	Mostly disagree	Completely disagree	DK/Refuse	Total
2009	36	46	13	2	2	100
2008	31	49	14	3	3	100
2007	33	50	14	2	2	100

### 1991, 1995 and 2001 World Values Survey

2. I would agree to an increase in taxes if the extra money were used to prevent environmental pollution

	Frequency	Percent
Strongly agree	224	22.4
Agree	577	57.7
Disagree	154	15.4
Strongly disagree	17	1.7
Don't know	28	2.8
Total	1000	100

## Bibliography

- “Alarming Growth In Expected Carbon Dioxide Emissions In China, Analysis Finds.” *ScienceDaily*. University of California - Berkeley. 2008 йил 11-March.  
<http://www.sciencedaily.com/releases/2008/03/080310155857.htm> (accessed 2009 26-April).
- Baldwin, D.A. “Neoliberalism, Neorealism, and World Politics.” In *Neorealism and Neoliberalism: The Contemporary Debate*, edited by D.A. Baldwin, 3-29. New York: Columbia University Press, 1993.
- Barnett, A Doak. *The Making of Foreign Policy in China: Structure and Process*. Boulder, CO: Westview Press, 1985.
- BBC News. “Conference ends with adoption of "historic" pact, participants comment.” *BBC Summary of World Broadcasts*, 1997 12-December.
- BBC News*. “Climate summit 'held to ransom'.” 2009 22-December.
- BBC News*. “Copenhagen climate summit enters crucial stage.” 2009 18-December.
- Bhalla, Madhu. “Domestic Roots of China's Foreign and Security Policy.” *International Studies* 42, no. 3&4 (2005).
- Cabestan, Jean-Pierre. “China's Foreign and Security policy Decision-making Processes under Hu Jintao.” *Journal of Current Chinese Affairs* 38, no. 3 (2009): 63-97.
- Caspary, William R. “The Mood Theory: A Study of Public Opinion and Foreign Policy.” *American Political Science Review* 64, no. 2 (1970).
- Chen, Gang. “China's Diplomacy on Climate Change.” *The Journal of East Asian Affairs*, 2008: 145-174.
- Chen, Ming. “World hails China's approval of Kyoto Protocol at Earth Summit.” *Xinhua News Agency*, 2002 3-September.
- Chen, Zhimin. “Nationalism, Internationalism and Chinese Foreign Policy.” *Journal of Contemporary China* 14, no. 42 (February 2005): 35-53.
- “China's Views on Enabling the Full, Effective and Sustained Implementation of the Convention Through Long-Term Cooperative Action Now, Up To and Beyond 2010.” *United Nations Framework Convention on Climate Change*. 2008 йил 28-September.  
[http://unfccc.int/files/kyoto\\_protocol/application/pdf/china\\_bap\\_280908.pdf](http://unfccc.int/files/kyoto_protocol/application/pdf/china_bap_280908.pdf) (accessed 2010 October).
- Christoff, Peter. “Cold climate in Copenhagen: China and the United States at COP15.” *Environmental Politics* 19, no. 4 (July 2010): 637-656.



- Dittmer, Lowell. "Leadership Change and Chinese Political Development." *The China Quarterly*, no. 176 (December 2003): 903-925.
- Energy Information Administration. "China Energy Profile." *Energy Information Administration - Official Energy Statistics from the US Government*. 2009 йил 13-October.  
[http://tonto.eia.doe.gov/country/country\\_time\\_series.cfm?fips=CH#co2](http://tonto.eia.doe.gov/country/country_time_series.cfm?fips=CH#co2) (accessed 2009 10-November).
- Etheredge, L S. "Personality Effects on American Foreign Policy." *American Political Science Review* 72 (1978): 1978.
- Foyle, Douglas C. "Leading the Public to War? The Influence of American Public Opinion on the Bush Administration's Decision to go to War in Iraq." *International Journal of Public Opinion Research* 16, no. 3 (2003).
- Foyle, Douglas C. "Public Opinion and Foreign Policy: Elite Beliefs as a Mediating Variable." *International Studies Quarterly* 41 (1997): 141-169.
- Gallup. "Poll: Developed and Emerging Nations Should Cut Emissions." 2009 йил 17-December. <http://www.gallup.com/poll/124733/poll-developed-emerging-nations-cut-emissions.aspx> (accessed 2010 15-October).
- . "Top-Emitting Countries Differ on Climate Change Threat." 2009 йил 7-December. <http://www.gallup.com/poll/124595/top-emitting-countries-differ-climate-change-threat.aspx> (accessed 2010 15-October).
- George, Alexander L, and Andrew Bennett. *Case Studies and Theory Development in the Social Sciences*. Cambridge, MA: MIT Press, 2005.
- Gernstein, Steven. "International institutions and the framing of domestic policies: The Kyoto Protocol and Canada's response to climate change." *Policy Sciences* 35 (2002): 203-236.
- Glaser, Bonnie S, and Evan S Medeiros. "The Changing Ecology of Foreign Policy-Making in China: The Ascension and Demise of the Theory of "Peaceful Rise"." *The China Quarterly*, no. 190 (June 2007): 291-310.
- Grundig, Frank. "Patterns of International Cooperation and the Explanatory Power of Relative Gains: An Analysis of Cooperation on Global Climate Change, Ozone Depletion, and International Trade." *International Studies Quarterly* 50 (2006): 781-801.
- Guo, Baogang. "China's Peaceful Development, Regime Stability and Political Legitimacy." In *China's "Peaceful Rise" in the 21st Century: Domestic and International Conditions*, edited by Suijian Guo, 39-60. Burlington, VT: Ashgate, 2006.

- Hallding, Karl, Guoyi Han, and Marie Olsson. "China's Climate- and Energy-security Dilemma: Shaping a New Path of Economic Growth." *Journal of Current Chinese Affairs* 38, no. 3 (2009): 119-134.
- Hanson, Fergus, and Andrew Shearer. *China and The World: Public Opinion and Foreign Policy*. Lowy Institute for International Policy, MacArthur Foundation, 2009.
- Hao, Yufan. "Influence of Societal Factors: A Case of China's American Policy Making." In *China's Foreign Policy Making: Societal Force and Chinese American Policy*, edited by Yufan Hao and Lin Su, 1-18. Burlington, VT: Ashgate, 2005.
- Hao, Yufan, and Lin Su. "Contending Views: Emerging Chinese Elite's Perception of America." In *China's Foreign Policy Making: Societal Force and Chinese American Policy*, edited by Yufan Hao and Lin Su, 19-40. Burlington, VT: Ashgate, 2005.
- Hao, Yufan, and Ying Ho. "Chinese Foreign Policy Making: A Comparative Perspective." *Public Administration Review*, December 2009.
- Harmin, Carol Lee. "Elite Politics and the Development of China's Foreign Relations." In *Chinese Foreign Policy: Theory and Practice*, edited by Thomas W Robinson and David Shambaugh, 70-114. New York, NY: Oxford University Press, 1994.
- Harrabin, Roger. "After Copenhagen." *BBC News*, 2009 21-December.
- Harris, Paul G. "Bringing the In-Between Back in: Foreign Policy in Global Environmental Politics." *Politics and Policy* 36, no. 6 (2008): 914-943.
- Harris, Stuart. "China's Strategic Environment: Implications for Diplomacy." In *China's "New" Diplomacy: Tactical or Fundamental Change?*, edited by Pauline Kerr, Stuart Harris and Yaqing Qin, 13-32. New York, NY: Palgrave MacMillian, 2008.
- Heggelund, Gorild. "China's Climate Change Policy: Domestic and International Developments." *Asian Perspective* 31, no. 2 (2007): 155-191.
- Heggelund, Gorild M, and Inga Fritzen Baun. "China in the Asia-Pacific Partnership: consequences for UN climate change mitigation efforts?" *International Environmental Agreements*, no. 9 (2009): 301-317.
- Hempson-Jones, Justin S. "The Evolution of China's Engagement with International Governmental Organizations: Toward a Liberal Foreign Policy?" *Asian Survey* 45, no. 5 (September-October 2005): 702-721.
- Hermann, Margaret G. "Explaining Foreign Policy Behavior Using the Personal Characteristics of Political Leaders." *International Studies Quarterly* 24, no. 1 (March 1980).

- Hermann, Margaret G. "Leaders and foreign policy decision making." In *Diplomacy, force, and leadership: essays in honor of Alexander George*, edited by D Caldwell and T McKeown, 77-94. Boulder, CO: Westview Press, 1993.
- Hermann, Margeret, Thomas Preston, Baghat Korany, and Timothy M Shaw. "Who Leads Matters: The Effects of Powerful Individuals." *International Studies Review*, 2001: 83-131.
- Holsti, Ole R. "Public Opinion and Foreign Policy Analysis: Where We Were, Are and Should Strive to Be." In *Millenial Reflections on International Studies*, 514-528. Michigan University Press, 2002.
- Holsti, Ole R. "Public Opinion and Foreign Policy: Challenges to the Almond Lippmann Concensus." *International Studies Quarterly* 36, no. 4 (1992).
- Holsti, Ole, and James Rosenau. "The Structure of Foreign Policy Attitudes Among American Leaders." *Journal of Politics* 52, no. 1 (1990).
- Hong, Zhidong. "The Internet and China's Foreign Policy Making: The Impact of Online Public Opinions as a New Societal Force." In *China's Foreign Policy Making: Societal Force and Chinese American Policy*, edited by Yufan Hao and Lin Su, 93-110. Burlington, VT: Ashgate, 2005.
- Hudson, Valerie M. "Foreign Policy Analysis: Actor-Specific Theory and the Ground of International Relations." *Foreign Policy Analysis* 1 (2005): 1-30.
- Information Office of the State Council of the People's Republic of China. "China's Policies and Actions for Addressing Climate Change." *Chinese Government White Papers*. 2008 йил 29-October. [http://www.china.org.cn/government/whitepaper/node\\_7055612.htm](http://www.china.org.cn/government/whitepaper/node_7055612.htm) (accessed 2010 October).
- Information Office of the State Council Of the People's Republic of China. "Environmental Protection in China." *Chinese Government White Papers*. 1996 йил June. <http://www.china.org.cn/e-white/environment/index.htm> (accessed 2010 October).
- Isernia, Pierangelo, Zoltán Juhász, and Hans Rattinger. "Foreign Policy and the Rational Public in Comparative Perspective." *The Journal of Conflict Resolution* 46, no. 2 (2002): 201-224.
- Jeon, Hyung-Kwon, and Seong-Suk Yoon. "From International Linkages to Internal Divisions in China: The Political Response to Climate Change Negotiations." *Asian Survey* 46, no. 6 (Nov.-Dec. 2006): 846-866.
- Kaarbo, Juliet. "Prime Minister Leadership Styles in Foreign Policy Decision-Making: A Framework for Research." *Political Psychology* 18, no. 3 (1997): 553-581.

- Kane, Thomas. "China's Foundations: Guiding Principles of Chinese Foreign Policy." *Comparative Strategy* 40 (2001): 45-55.
- Kellow, Aynsley. "A new process for negotiating multilateral environmental agreements? The Asia-Pacific climate partnership beyond Kyoto." *Australian Journal of International Affairs* 60, no. 2 (June 2006): 287-303.
- Kent, Ann. "China's Changing Attitude to the Norms of International Law and its Global Impact." In *China's "New" Diplomacy: Tactical or Fundamental Change?*, edited by Pauline Kerr, Stuart Harris and Yaqing Qin, 55-76. New York, NY: Palgrave MacMillian, 2008.
- Kirby, William C. "Traditions of Centrality, Authority, and Management in Modern China's Foreign Relations." In *Chinese Foreign Policy: Theory and Practice*, edited by Thomas W Robinson and David Shambaugh, 13-29. New York, NY: Oxford University Press, 1994.
- Lai, Hongyi Harry. "External Policymaking under Hu Jintao - Multiple Players and Emerging Leadership." *Issues & Studies* 41, no. 3 (September 2005): 209-244.
- Lai, Hongyi. *The Domestic Sources of China's Foreign Policy: Regimes, leadership, priorities and process*. New York, NY: Routledge, 2010.
- Lam, Willy Wo-Lap. *Chinese Politics in the Hu Jintao Era: New Leaders, New Challenges*. Armonk, New York: East Gate, 2006.
- Lewis, Joanna I. "China's Strategic Priorities in International Climate Change Negotiations." *The Washington Quarterly* 31, no. 1 (2007-08): 155-174.
- Lewis, Joanna I. "Climate change and security: examining China's challenges in a warming world." *International Affairs* 85, no. 6 (2009): 1195-1213.
- Liu, Guoli. "Leadership Transition and Chinese Foreign Policy." *Journal of Chinese Political Science* 8, no. 1&2 (Fall 2003): 101-117.
- Mitchell, David. "Centralizing Advisory Systems: Presidential Influence and the U.S. Foreign Policy Decision-Making Process." *Foreign Policy Analysis* 1 (2005): 181-206.
- Moore, Gregory J. "China's Strategic Posture in the Asian-Pacific Region under the Leadership of Hu Jintao." In *Multidimensional Diplomacy of Contemporary China*, edited by Simon Shen and Jean-Marc F Blanchard, 101-128. New York, NY: Lexington Books, 2010.
- Ning, Lu. *The Dynamics of Foreign-Policy Decisionmaking in China*. Edited by Second. Boulder, CO: Westview Press, 2000.

- Oberheitmann, Andreas, and Eva Sternfeld. "Climate Change in China - The Development of China's Climate Policy and Its Integration into a New International Post-Kyoto Climate Regime." *Journal of Current Chinese Affairs* 38, no. 3 (2009): 135-164.
- Paterson, Matthew. "IR Theory: Neorealism, neoinstitutionalism and the climate convention." In *The Environment and International Relations*, edited by John Vogler and Mark F Imber, 64-83. New York: Routledge, 2005.
- Pearson, Margaret M. "Domestic Institutional Constraints on China's Leadership in East Asian Economic Cooperation Mechanisms." *Journal of Contemporary China* 19, no. 66 (September 2010): 621-633.
- Pew Global Attitudes Project. "Spring 2009 Survey Data." *Pew Global Attitudes Project*. Pew Research Center. 2009. <http://pewglobal.org/category/data-sets/> (accessed 2010 August).
- Pu, Xiaoyu, and Guang Zhang. "China Rising and Its Foreign Policy Orientations: Perspectives from China's Emerging Elite." In *New Dimensions of Chinese Foreign Policy*, edited by Suijian Guo and Shiping Hua, 63-82. New York, NY: Lexington Books, 2007.
- Risse-Kappen, Thomas. "Public Opinion, Domestic Structure, and Foreign Policy in Liberal Democracies." *World Politics* 43 (1991): 479-512.
- Ross, Lester. "China: Environmental Protection, Domestic Policy Trends, Patterns of Participation in Regimes and Compliance with International Norms." *The China Quarterly*, 1998.
- Roy, Denny. "China's Democratised Foreign Policy." *Survival* 51, no. 2 (April-May 2009): 25-40.
- Schroeder, Miriam. "The construction of China's climate politics: transnational NGOs and the spiral model of international relations." *Cambridge Review of International Affairs* 21, no. 4 (December 2008): 505-525.
- Shapiro, Robert, and Lawrence Jacobs. "Who Leads and Who Follows? U.S. Presidents, Public Opinion and Foreign Policy." In *Decisionmaking in a Glass House: Mass Media, Public Opinion, and American Foreign Policy in the 21st Century*, edited by B Macos, R Shapiro and P Isernia. Rowman and Littlefield, 2000.
- Shen, Simon. "Multidimensional Diplomacy as a Global Phenomenon." In *Multidimensional Diplomacy of Contemporary China*, edited by Simon Shen and Jean-Marc F Blanchard, 3-20. New York, NY: Lexington Books, 2010.
- Sutter, Robert G. *Chinese Foreign Relations: Power and Policy Since the Cold War*. New York, NY: Rowman & Littlefield, 2008.

- Telhami, Shibley. "Arab Public Opinion and the Gulf War." *Political Science Quarterly* 108, no. 3 (1993).
- Tung, Chen-yuan. "An Assessment of China's Taiwan Policy under the Third Generation Leadership." *Asian Survey* 45, no. 3 (May-June 2005): 343-361.
- UN Framework Convention on Climate Change. "Draft list of items proposed by the Group of 77 and China." *United Nations Framework Convention on Climate Change*. 1997 14-November. <http://unfccc.int/cop3/resource/docs/cop3/l01.pdf> (accessed 2010 йил October).
- UNEP Ozone Secretariat. "Evolution of the Montreal Protocol - Status of Ratification." *United Nations Environment Program: Ozone Secretariat*. 2010 11-November. [http://ozone.unep.org/Ratification\\_status/](http://ozone.unep.org/Ratification_status/) (accessed 2010 December).
- . "Report Of The Parties To The Montreal Protocol On The Work Of Their First Meeting." *United Nations Environment Program: Ozone Secretariat*. 1989 йил May. [http://ozone.unep.org/Meeting\\_Documents/mop/01mop/MOP\\_1.shtml](http://ozone.unep.org/Meeting_Documents/mop/01mop/MOP_1.shtml) (accessed 2010 October).
- Volgy, Thomas J, and John E Schwarz. "Does Politis Stop at the Water's Edge? Domestic Political Factors and Foreign Policy." *Journal of Politics* 53, no. 3 (1991).
- Wang, Bo. "Exploring China's Climate Change Policy from both International and Domestic Perspectives." *Journal of Chinese Studies* 16, no. 2 (October 2009): 87-104.
- Wang, Fei-Ling. "Preservation, Prosperity and Power: what motivates China's foreign policy?" *Journal of Contemporary China* 14, no. 45 (November 2005): 669-694.
- Wang, Jianwei. "Hu Jintao's "New Thinking" on Cross-Strait Relations." *American Foreign Policy Interests* 29 (2007): 23-34.
- Wen, Jiang, and Hu Wen. "Pos-Cold War China Under New Leaders." In *Chinese Strategic Culture and Foreign Policy Decision-Making*, by Huiyun Feng, 81-98. New York, NY: Routledge, 2007.
- Winter, David, Margaret Hermann, Walter Weintraub, and Stephen Walker. "The Personalities of Bush and Gorbachev Measured at a Distance: Procedures, Portraits, and Policy." *Political Psychology* 12 (1991).
- "World Values Survey." *World Values Survey Online Data Analysis*. 1990. <http://www.wvsevsdb.com/wvs/WVSanalyze.jsp?Idioma=I> (accessed 2010 September).
- "World Values Survey." *World Values Survey Online Data Analysis*. 1995. <http://www.wvsevsdb.com/wvs/WVSanalyze.jsp?Idioma=I> (accessed 2010 September).

- “World Values Survey.” *World Values Survey Online Data Analysis*. 2001.  
<http://www.wvsevsdb.com/wvs/WVSanalyze.jsp?Idioma=I> (accessed 2010 September).
- Wu, Xinbo. “Four Contradictions Constraining China's Foreign Policy Behavior.” *Journal of Contemporary China* 10, no. 27 (2001): 293-301.
- Xinhua News Agency*. “China Ratifies Vienna Convention on Environment.” 1989 27-July.
- Xinhua News Agency*. “China takes active part in multilateral environment cooperation: premier.” 2002 йил 3-September.
- Xinhua News Agency*. “China's commitment to climate change strong, fair: delegates from developing world.” 2009 19-December.
- Yu, Bin. “The Study of Chinese Foreign Policy: Problems and Prospect.” *World Politics* 46, no. 2 (January 1994): 235-261.
- Yu, Hongyuan. “Knowledge and Climate Change Policy Coordination in China.” *East Asia* 21, no. 3 (Fall 2004): 58-77.
- Zhang, Baohui. “Chinese Foreign Policy in Transition: Trends and Implications.” *Journal of Current Chinese Affairs* 39, no. 2 (2010): 39-68.
- Zhao, Quansheng. “Domestic Factors of Chinese Foreign Policy: From Vertical to Horizontal Authoritarianism.” *Annals of the American Academy of Political and Social Science* 519 (January 1992): 158-175.
- Ziegler, Charles E. “The Energy Factor in China's Foreign Policy.” *Journal of Chinese Political Science* 11, no. 1 (2006).