Contextual Effects and Support for Liberalism:

A Comparative Analysis

by

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Abstract

This dissertation examines how variation in political freedom shapes individuals' liberal attitudes and challenges existing explanations on value change. I begin by demonstrating that mainland China does not follow the path anticipated by Inglehart's popular theory of value change, which expects protracted economic development to result in growing liberalism (Chapter 2). Many societies sharing similar economic and cultural backgrounds (such as Japan, South Korea, Hong Kong, Taiwan) have successfully embraced liberal values. I argue that it is necessary to consider a neglected contextual factor—level of political freedom—to explain the variation. I validate this argument by comparing a wide range of societies with different economic, cultural and political contexts in Chapter 3. My analysis shows that countries with different levels of political freedom exhibit markedly different patterns of value change. Specifically, while members of politically free societies largely follow the pattern sketched by Inglehart, relatively well-educated and well-to-do people in politically unfree societies experience little value change or even express growing conservativism (compared to other demographic groups) as their societies develop economically. To explain this finding, I suggest that political regimes, especially non-free regimes manipulate cultural institutions, including the educational system, to impede value liberalization. To investigate this process, Chapter 4 compares educational reform and value

change in Taiwan and mainland China since the late 1940s. These two societies share economic and cultural backgrounds but have radically different political systems. My analysis finds that the value change mechanisms in the two societies differ greatly from each other. In sum, this dissertation demonstrates that political context is critically important in shaping individual value orientations. This argument adds to existing literature on how democratic values provoke democratization by emphasizing the other side of the story: how regimes, especially non-democratic ones, actively prevent value liberalization. The educational system is an important medium through which a political system promotes its preferred ideology. The main policy implication of this dissertation is that economic growth is insufficient to generate liberal values. Political freedom is a critical prerequisite for successful democratization and a healthy civil society.

This dissertation is dedicated to the 1989 student protesters in Tiananmen Square.

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Chapter 1 Introduction

1 Overview

Ronald Inglehart argues that to varying degrees in different parts of the world, economic development causes the spread of a cultural syndrome that includes liberal values. This dissertation establishes the existence of important exceptions to Inglehart's generalization. Moreover, it explains these exceptions by examining interactions between contextual and individual-level variables and introducing some previously ignored contextual variables that have previously been ignored. The result is a theory that significantly improves upon Inglehart's explanation of global value change since the 1950s.

Inglehart's analysis of liberalism derived from his work on "postmaterialism." In the 1980s, Inglehart observed that people in the advanced industrialized world were shifting their attention from material concerns to such issues as environmental protection, LGBTQ rights, civic participation, animal rights, anti-nuclear movements, and so on. He held that the new wave of politics and related political values, which he labelled postmaterialism,[1] was the result of economic development (Inglehart 1990; Inglehart and Baker 2000; Inglehart and Rabier 1986). From his point of view, people coming of age in relatively affluent societies no longer have to struggle with survival-level needs, so they turn their attention to higher-level demands. Thus,

[1] Similarly, other social scientists refer to the emergence of "new politics" (Flanagan and Lee 2003) and "new social movements" (Habermas 1981).

economic security and cohort replacement presumably drive the advanced industrial world toward postmaterialism (Inglehart 1990).

Later critics sought to demonstrate that Inglehart had neglected the role of culture in the adoption of postmaterialist values (Dalton and Ong 2005; Flanagan 1980; Flanagan and Lee 2000; 2003), and Inglehart responded positively. First, he recognized that different cultures have different effects on the pace of value change associated with economic development (Inglehart and Welzel 2010). He argued that some cultures facilitate, while other cultures retard, the transition to a syndrome of "trust, tolerance, political activism, support for gender equality, and emphasis on freedom of expression, all of which are conducive to democracy" (Inglehart and Welzel 2010, 557). Second, Inglehart refined his analysis by claiming that the modern syndrome consists of two value dimensions. First, a "survival vs self-expression" dimension includes such issues as quality of life, tolerance of other lifestyles, trust, life satisfaction, and happiness; second, a "traditional vs secular-rational" value dimension or "authoritarianism vs liberalism" includes the degree to which people are committed to religion, respect authority and traditional culture, and support nationalism (Flanagan and Lee 2000; 2003). For brevity and clarity concerns, Inglehart himself (Welzel and Inglehart 2005) and other scholars often use the label "liberalism" to refer to the more progressive side of the "traditional vs secular-rational" spectrum (Zhang et al. 2017). Therefore, I adopt the term *liberalism* or *liberal values* to refer to the focus of this dissertation.

It is my contention that contextual factors other than culture influence not just the pace but also the *direction* of value change. In particular, a country's political regime significantly influences people's value-response to economic development. Consequently, some countries experience rapid and substantial economic development with little or no value change in the

direction of liberalism. China and Russia are important examples. I am not the first social scientist to note exceptions to Inglehart's generalizations (Bomhoff and Gu 2012; Chang and Chu 2002; Dalton and Ong 2005; Flanagan and Lee 2003; Lee 2007; Shaykhutdinov et al. 2010). However, my dissertation uniquely establishes the existence of a mechanism that accounts for such exceptionalism: type of political regime.

Exactly how do macro-level factors such as political freedom and regime type shape individual-level value preferences? The dissertation finds regimes influence individuals' values via education systems. Experts in the area of education and society have pointed out that education systems function as a key medium for value transmission and consensus construction (Barber 2012; Dewey 1916; Gellner 1994; 2008) As John Dewey wrote a century ago:

> The moral and the social quality of conduct are, in the last analysis, identical with each other…. The measure of the worth of the administration, curriculum, and methods of instruction of the school is the extent to which they are animated by a social spirit. And the great danger which threatens school work is the absence of conditions which make possible a permeating social spirit; this is the great enemy of effective moral training. For this spirit can be actively present only when certain conditions are met. (Dewey 1916, 415-416)

Because education plays a central role in shaping a "social spirit," modern regimes often pay close attention to the content of education systems (Geddes and Zaller 1989; Jowett and O'Donnell 2014; Saha 2000), making education and its effects susceptible to the political manipulation. I seek to demonstrate that in liberal political regimes, education encourages acceptance of the modern value syndrome described by Inglehart, including its liberal component. In non-liberal political regimes, however, education has no effect in this regard, and in some situations, it has a negative effect on the acceptance of liberalism.

I also contend that the detection of exceptions has been hampered by the tendency of Inglehart and his associates to confine their analyses to the country level. Other researchers examine not only individual-level variables' independent effects but also their interactions with contextual-level variables. Their analyses show some countries that initially seem to conform to Inglehart's thesis actually depart from his generalizations in significant ways (cf. Andersen and Fetner 2008; Dunlap and York 2008; Haller 2002; Seligson 2002). To cite one example from my own work, Inglehart argues that low economic inequality (a by-product of economic development) is associated with liberalism, but I find that across China's provinces, economic inequality is associated with liberalism – a finding that would be obscured if I were to focus only on the national level (Zhang et al. 2017).

In short, the empirical objective of my dissertation is to investigate how individual-level variables, previously unexamined contextual variables, and their interactions affect the acceptance of liberal values. After reviewing the relevant literature (Chapter 1), I employ multi-level modelling to investigate the important Chinese case (Chapter 2). Given my research interest in value change, the case of China is highly relevant and interesting because it significantly differs from the economic and cultural explanations' predictions. Studying China is likely to reveal the limits of existing approaches and may even suggest alternative explanations. And in fact, based on the Chinese General Social Survey 2006, I find richer provinces and richer individuals do not become more liberal, which refutes the Inglehart thesis at both societal and individual levels. While interesting, this analysis does not consider the cultural variations. To control both economic and cultural variations, I need to move on to comparative analysis.

Accordingly, my next move is to analyze value change cross-nationally (Chapter 3). Since previous literature has suggested the importance of economy and culture (Inglehart and

Baker 2000; Welzel and Inglehart 2005), I investigated 88 societies from seven major cultural zones (Huntington 1993b) and with various economic development levels, controlled for their influences and thus singled out the role played by political freedom. As I suspected, political freedom is a more relevant societal factor than has hitherto been acknowledged. The multi-level analysis shows political freedom significantly moderates educational effects on individual value changes. However, as the World Values Survey is not panel data, in-depth analysis of certain societies is necessary before making meaningful conclusions about the causal link between political freedom and value changes.

I strengthen my argument by moving to a comparative analysis of Taiwan and mainland China (Chapter 4). Chapter 4 describes the different paths that Taiwan and mainland China took after the 1980s, a comparable historical period for both societies. As the economy soared, the two Confucian societies chose two diverging political directions: democratization and the reinforcement of authoritarianism for Taiwan and China respectively. The consequent education reforms in the two societies moved accordingly, leading to different value change patterns. In Chapter 4, once I set the stage for the historical background and political environment of each country, my comparison of the two cases shows how education reforms work differently in different political contexts.

In sum, my dissertation proposes significant revisions to Inglehart's explanation of contemporary value change worldwide. In addition to the economic and cultural arguments, political freedom is another important explanation for value change. I also chart a path for additional empirical analyses and theoretical refinements (Chapter 5).

2 Economic Explanations of Support for Liberalism

It is widely recognized that liberal values have political and cultural aspects—including attitudes toward tradition, authority, family, gender, national identity, religion, and so on—and that societal-level factors influence the adoption of liberal values (Flanagan and Lee 2003; Inglehart 1997; Inglehart and Baker 2000; Inglehart and Rabier 1986; Inglehart and Welzel 2010). Accordingly, the following literature review focuses on extant societal-level explanations, more specifically, economic and cultural factors. I discuss the origin, development, and flaws of those explanations. Doing so allows me to formulate the research questions pursued in the dissertation.

Economic development was a key component in the initial explanation of the rise of liberal values (Inglehart and Rabier 1986), and it remains a focus of current research (Brym 2016; Dobewall and Rudnev 2014; Inglehart and Welzel 2009; Milligan, Andersen, and Brym 2014). According to Inglehart and his associates, the positive effect of economic well-being on the adoption of liberal values works through three mechanisms. First, affluence frees people from survival-level demands. Second, socialization in a social context of relative wealth makes younger generations more liberal. Third, cohort replacement increases support for liberalism in the long term, as younger and more tolerant generations of citizens are replacing elder cohorts. Numerous empirical studies support these arguments (e.g., Milligan, Andersen, and Brym, 2014; Zhang, Brym, and Andersen, 2017). At the country level, GDP per capita, HDI (the human development index), and the like are found to be associated with support for liberal values. At the individual level, high income, social class, and education are also associated with liberal attitudes. Some scholars have suggested other economic predictors of liberalism, notably economic inequality. Inequality has been found to be positively correlated with intolerance of homosexuality (Andersen and Fetner 2008), hostility to immigrants/minorities (Milligan,

Andersen, and Brym 2014), and anti-secularization attitudes (Karakoç and Başkan 2012). In contrast, my analysis of China in Chapter 2 finds that inequality tends to generate disobedience of the government and erode loyalty to traditional culture.

3 Cultural Explanations of Liberalism Support

Economic explanations have been criticized for their inability to account for value change in countries like Japan and Korea, where affluence has been achieved, but people show a persistent preference for authoritarian traditions (Chang and Chu 2002; Lee 2007; Schwartz 2006). To explain this pattern, East Asian experts have introduced a cultural alternative, arguing that in that area of the world, culture sets the basic orientation for public opinion and has an enduring effect on values (Huntington 1993a; Flanagan and Lee 2000; 2003). This challenges Inglehart's early argument that only one value dimension exists and only economic development matters. Proponents of the cultural theory call this the "traditionalism vs liberalism" value dimension or "rational-secular" or simply "liberalism," the term I prefer for brevity and clarity (Chang and Chu 2002; Dalton and Ong 2005). Simply stated, proponents of the cultural theory hold that East Asian and other non-Western societies do not become postmaterialist and liberal even when they are affluent. Empirical studies of China, Singapore, Taiwan, and South Korea substantiate the existence of an enduring value divide between East Asian and Western industrialized societies (Chang and Chu 2002; Dalton and Ong 2005; Lee 2007; Roy 1994).

Research shows that the cultural argument explains why some societies are less liberal (and less postmaterialist) than one would expect after controlling for economic effects; why people living in the same culture zone tend to display similar attitudes; and why different culture

zones tend to be located in distinct geographical regions (Inglehart and Baker 2000; Inglehart and Welzel 2010). Given the weight of evidence supporting the cultural theory, Inglehart and Welzel (2010: 552) have accepted its validity, commenting: “Socio-cultural change is path dependent. Although economic development tends to bring predictable changes in people’s worldviews, society’s religious and historical heritage leaves a lasting imprint.”

4 The Challenge of China and Russia

Although the growth of affluence is a useful explanation for the spread of liberal values, most of the evidence supporting the theory comes from advanced industrial societies in the West (Dunlap and York 2008). Given the homogeneity of the selected cases, early research failed to identify cross-cultural variation in support for liberalism. The cultural explanation has filled that gap, making sense of Japan, South Korea, Singapore, and other non-Western cases.

Nonetheless, the cultural thesis assumes all culture zones follow the same dynamics. It problematically assumes that development plays a positive role in value change, with culture acting only as a retardant. That is, some cultures presumably slow down value shifts, so they are left behind in the value-liberalization process. However, to the extent that economic development continues, exceptional cultures are expected to follow the “mainstream” pattern, albeit more slowly. Yet the fact is that some cases, such as Russia and China, cannot be set in this frame. Both countries have experienced decades of continuous high-speed economic development, but this has not made either society more liberal, tolerant, or open-minded. New elites and the middle class tend to support a nationalist and authoritarian regime. Instead of becoming more

liberal, they remain conservative and, as we shall see as the dissertation develops, they are, in some respects, becoming more conservative over time.

The cultural explanation fails to meet the challenge of these deviant cases. For example, the Chinese share a Confucian tradition with the citizens of Singapore, Taiwan, Hong Kong, South Korea, and Japan, all of which experienced roughly the same rate of economic growth as China between 1960 and 1990 (Nathan 2003). In the latter societies, individual well-being generally correlates positively with tolerant, democratic, and liberal orientations. However, China has taken a different direction: upper-class people in China have become more authoritarian over time (Zhang, Brym and Andersen 2017). We find a similar pattern in Russia. In the 1990s, most of its neighbours in Eastern Europe became more like other developed European societies in terms of support for liberalism, but Russia's economic success fostered an increasingly radical nationalism. Here we see similar growth and similar cultural backgrounds, but different paths of value change—a clear inability of the cultural explanation to work across societies. Public opinion scholars need to find an alternative theory.

Some might argue that although cultural theories do not adequately account for the Chinese and Russian cases, the economic explanation might still fit. Economic theorists might claim that China and Russia simply do not qualify because they are not "rich enough." From this point of view, economic development must pass a certain threshold for a social transformation such as value liberalization and democratization to take place.

Although such a qualification is plausible it runs the risk of making modernization theories unfalsifiable. We should not claim that any county embracing democratization and post-materialism is rich enough, while others are not. One way to ensure falsifiability is to define the threshold. How rich is rich enough? Unfortunately, scholars have not found a threshold

(Przeworski and Limongi 1997). Moreover, many empirical studies find that value change take place continuously instead of stalling until a tipping point is reached. For example, Inglehart's cohort analysis (1995) shows that European citizens born between 1880 and 1960 are increasingly supportive of environmentalism, and each generation has moderately stronger concerns than the previous one; there is no identifiable tipping point. In other words, value change is a gradual process with no certain threshold. Inglehart and Welzel (2010, 562) conclude that "self-expression values exert pressure for changes in levels of democracy. These values emerge through slow but continuous processes."

The idea of a threshold faces another challenge. Countries like China and Russia, along with other non-democratic regimes such as Turkey and Singapore, are economically better off than many established democracies, such as Ghana and India. The explanation of their uniqueness is not their lack of economic development. It is also relevant that some rich countries, such as the Persian Gulf states, are not democracies. In fact, several studies find no relationship between per capita income and democracy, and at least one study finds a negative relationship (Acemoglu et al. 2008; Fayad, Bates and Hoeffler 2011; Przeworski et al. 2000).

Critics of my argument that China and Russia are exceptional may argue that inequality is so high in those societies that affluence only benefits a small proportion of the population. How then can we reasonably expect to see value change among the masses? If the inequality critique were valid, we would at least expect to see that richer and better educated citizens become more liberal. Is this the case in China? According to the most recent data from the United Nations Development Programme (Jahan 2016), China's coastal provinces and metropolitan areas, such as Beijing, Shanghai, Tianjin, Zhejiang, Jiangsu, Fujian and Guangdong, have a Human Development Index above 0.8, which is equivalent to advanced industrial societies, such as

Finland, Poland and the Czech Republic. These provinces are heavily populated, with nearly 400 million residents. A 2013 report from McKinsey estimates that China's middle-class population numbers approximately 200 million (Barton et al. 2013). Are these rich Chinese following modernization theorists' predictions? In a word – no. In Chapter 2, I show that urban and upper-class Chinese are more authoritarian than other categories of the Chinese population. In Chapter 3, I find the educated population is the most intolerant of homosexuality and gender equality in non-democratic regimes. This is precisely why the deviant cases are so interesting.

If we can agree that Russia and China qualify as exceptional cases, the question that we need to answer becomes "what Russia and China have in common?" Both societies have authoritarian regimes and a low level of political freedom. Unlike Japan, South Korea, and Taiwan, where democratization followed economic development, China remains strictly controlled by the Communist Party of China. In fact, the current leader, Xi Jinping (2012-present), is strengthening his control over China. Signs include jailed human rights lawyers and activists, illegal arrests, abductions of dissidents (even overseas in Thailand and Hong Kong SAR) and attempts to build a cult of personality (Ortmann and Thompson 2016). Meanwhile, in Russia, Putin's 17-year term in power is notoriously authoritarian. By suppressing opponents and dissidents, maintaining a stubbornly anti-gay stance, provoking nationalism in every aspect of politics from fueling anti-international adoption sentiments to invading Ukraine, Putin's government shows a preference for authoritarian and nationalistic values (Makarychev and Medvedev 2015; Shaykhutdinov et al. 2010). As I argue here, the political statuses of both countries are associated with their citizens' value orientations. Bringing political freedom back into the discussion is indebted to the state-centered perspective in social science (Hall 1993; Skocpol 1979; Skocpol et al. 1999). Taking exception to modernization and cultural theories, my

dissertation reminds us that political regimes play an important, independent role in shaping citizens' attitudes.

5 How Political Freedom Affects Mass Beliefs

Previous studies have discussed how political context can influence public opinion. For example, current and former communist societies show some similarities in their political orientation towards gender, family, civic participation, homosexuality, and so on (Andersen and Fetner 2008; Gibson et al. 1992; Inglehart and Baker 2000; Zhao 1998). Moreover, the type of party system and the responsiveness of government have important implications for value cleavage and policy preferences (Andersen and Heath 2003; Brym et al. 2004). For example, Tranter and Western (2009) discover that given the same economic development, the different dominant party structures across democracies will lead to varying degrees of postmaterialism and liberalism support. In sum, political context seems to be an important factor influencing support for liberalism. How, then, does the specific context of political freedom relate to mass beliefs? Scholars have suggested several possible mechanisms of influence.

First, autocratic regimes use economic rewards and punishments to encourage loyalty. Unlike societies where free markets dominate, in non-free societies, the economy is often controlled by the government, as in planned economies, and political power holders, as in dictatorships, oligarchies, or monarchies. Since power holders control economic resources and opportunities, they tend to reward private sector owners and intellectuals selectively in exchange for political loyalty and obedience (Acemoglu, Verdier and Robinson 2004; Gu 2011). Therefore, like the "resource curse" identified by economists (Mehlum et al. 2006), affluence or

higher socio-economic status in non-democracies can discourage liberalism. In such societies, elites are more likely to be satisfied with, and defensive of, the status quo, as well as to be more conservative and anti-reform – clearly challenging Inglehart's prediction of economic well-being as a generator of liberalism. Recently, Rosenfeld (2017) found that Russia's middle and upper-class are often employed in the public sectors. Influenced by their dependency on the state, they tend to be supportive of authoritarianism. For the reasons stated above, we can predict that illiberal attitudes will become dominant in non-free societies in the long term. Modernization theorists' optimism may not be supported in those societies. Chapter 2 confirms China's status as an exemplar of this process.

Second, compared to free societies, non-free societies usually enjoy less freedom of speech and less diversity of opinion. In non-free societies, governments often control the dissemination of information and engage in mass persuasion through propaganda and censorship in education, publishing, the mass media, and the Internet (Brady 2009; Jiang 2012; Meyer 1977; Saha 2000; Wang 2008; Zhao 1998). They censor unwanted information and promote values favouring power stability and other interests. Authoritarian rather than liberal values are more likely to be promoted by such regimes to ensure support and avoid the spread of democratic tendencies (Solt 2011; Weiss 2014). As a result, mass beliefs in non-democratic societies usually favour government-endorsed opinions.

Third, in non-free societies, education is potentially a political tool for illiberal values. According to Gellner (2008), under the pressure of ruling a complex industrialized society, modern states, democratic or not, feel the need to maintain social solidarity through education systems. Gellner argues:

> [In industrial society] …there is very little in the way of any effective, binding organization at any level between the individual and the total community. This total and ultimate political community thereby acquires a wholly new and very considerable importance, being linked both to the state and to the cultural boundary. … The state, inevitably, is charged with the maintenance and supervision of an enormous social infrastructure. The educational system becomes a very crucial part of it, and the maintenance of the cultural/linguistic medium now becomes the central role of education. (Gellner 2008, p.63-64)

In addition to the necessity of influencing education systems, most modern governments have the capacity to influence the curriculum, education policies, and investment in education and research (Geddes and Zaller 1989; Jowett and O'Donnell 2014; Saha 2000). Non-democratic regimes have more incentives to do so (Brady 2009; Jiang 2012) because mass education is a key institution for legitimation and mass persuasion (Meyer 1977; Saha 2000). As such, it is crucial for the survival of such regimes (Weiss 2014).

Although I have suggested that political freedom is a contextual factor shaping political values, scholars may rightfully be concerned about endogeneity because of the potential for reciprocal causality. As noted, many studies show that democratic values are conducive to democratic institutions. Therefore, readers have good reasons to challenge my findings, especially in Chapter 3. Are non-democratic governments the reason for illiberal people? Or do illiberal people enable the survival of non-democratic regimes? In Chapter 4, I use the case of mainland China and Taiwan to respond to these criticisms. The rapid military victory of the Chinese Communist Party in 1949 in the Chinese civil war can be seen as a "natural experiment" (Dunning 2008; Vincente 2010). By considering the historical sequence of the two societies and their transformations in political institutions, educational reforms and value consequences, I show that at least in these two societies, institutional changes took place *prior* to value change. In

short, the empirical investigations in Chapter 4 should at least partially relieve concern with endogeneity.

6 Research Questions and Thesis Outline

In this thesis, I pose and answer the following questions in my three empirical chapters:

(1) Are there important exceptions to economic and cultural explanations of liberal value change? In my first empirical chapter (Chapter 2), I demonstrate that at least one such exception exists: China. My analysis of data from the Chinese General Social Survey shows that, by virtue of its status as an authoritarian regime, China defies economic and cultural explanations of liberal value change.

(2) How generalizable is Chinese exceptionalism across countries? Chapter 3 employs World Values Survey data from 88 countries to test the proposition that a country's level of political freedom affects people's liberal attitudes net of other contextual and individual factors. In particular, Chapter 3 shows that political freedom conditions educational effects. It suggests the possibility that freedom affects liberalism through school systems.

(3) My analysis of the Chinese case in Chapter 2 demonstrates flaws in economic and cultural explanations of value change. My cross-sectional analysis of 88 countries in Chapter 3 allows me to claim that politics and value change are correlated beyond the Chinese case. My comparison of China and Taiwan in Chapter 4 demonstrates that political causes (state-directed educational reforms in particular) precede value effects.

> I use Taiwan and China because both societies belong to the Confucian cultural zone and have recently experienced decades of rapid economic growth. Such similarities in economic and cultural contexts help to isolate the effects of political factors on public opinion.

Through its analysis of China, its cross-sectional analysis of countries across the world, and its cross-time analysis of China and Taiwan, the dissertation shows that political freedom is an important contextual factor shaping individual values. The political context argument adds to economic and cultural theories in public opinion research and sheds light on value changes in non-democratic settings.

7 Main Findings

The findings in Chapter 2 support my claim that Inglehart's original thesis does not fit the Chinese case well. Inglehart's modernization theory predicts that societies with higher affluence levels will turn to liberalism. In China, this prediction fails. Although China shares similar Confucian cultural origins and rapid economic growth with several other East Asian societies (albeit in different decades of the late twentieth century), it has not become more liberal. In fact, upper classes in China are nor more liberal than their fellow citizens with lower social status. Simply put, China differs considerably from its culturally and economically neighbours in terms of value change. Chapter 2 challenges existing value change theories and asks for a better theoretical framework to interpret value changes.

Chapter 3 analyzes 88 countries using data from the World Values Survey. By examining people's attitudes towards liberalism, it finds a significant interaction between an individual's educational attainment and contextual political freedom. In politically free societies, education plays a positive and liberalizing role in value formation; in non-free societies, education's influence is dampened, muted, or even a negative and de-liberalizing force. This finding challenges the argument that education is necessarily a liberalizing instrument. It alerts us to attempts by nondemocratic regimes to influence attitudes and reminds us that social processes are embedded in specific contexts. Without knowing the contexts, we cannot understand how mechanisms differ across countries.

Chapter 4 compares Taiwan and mainland China, jurisdictions that have been (1) similar for millennia in terms of culture; (2) similar for roughly the last half-century in terms of economic growth; but (3) radically different for nearly seven decades in terms of their political regimes. Following Dewey (1916), Gellner (2008) and Barber (2012), the chapter links value change to the literature of education and mass persuasion in modern societies. It focuses on education reforms in the two settings and asks how political context affects reforms and, as a consequence, value change. Analysis of the Taiwan Social Change Survey data and the Chinese General Social Survey data finds that education works differently in the two societies. In Taiwan, people's political beliefs change in line with education reforms encouraging support of values favoured by government and opposition to values opposed by the government. Public opinion follows in lockstep with the reforms. Chinese education reforms also encourage support of values favoured by government and opposition to values opposed by the government. However, in China, public opinion does not change in line with education reforms. This finding supports the view that type of political regime is significantly associated with public opinion, and

education is a key mechanism through which this influence is exercised. Insofar as my analysis in Chapter 4 is historical, it adds substance to my claim that the connection between political regime and public opinion is causal, not merely correlative. And finally, Chapter 4 explains how educational systems in authoritarian regimes provide opportunities for citizens to demonstrate their fealty without recognizing regime legitimacy, a process with important implications for research on democratization and public opinion.

8 Implications of the Dissertation

My dissertation qualifies conventional wisdom in the study of public opinion, authoritarianism, and democratization. By pointing out that economic growth and affluence do not necessarily entail value liberalization, my work questions the widespread economic theory of value change. By focusing on Taiwan and mainland China (and touching on Russia and other countries), it challenges traditional cultural explanations. I do not dismiss the validity of economic and cultural explanations. Far from it. However, I show that adding political context to the picture contributes substantially to the accuracy and comprehensiveness of models of value change. That is the chief contribution of this dissertation.

Finally, I note the existence of a widespread belief that economic globalization will inexorably cause Western values to be exported to non-democracies (Menon 2015; Roy 1996). From this point of view, in non-democracies, it is the younger generation that is most likely to liberalize under the force of economic globalization, and it is they who are most likely to form and lead social movements calling for democracy. Proponents of this view recommend that Western governments not push authoritarian regimes to democratize for fear of impeding

international trade and inciting repression; they regard a gradual, internal, and spontaneous evolution of democracy as a safer (and more lucrative) bet. Some observers refer to this approach as appeasement.

By implication, this dissertation urges Western politicians and political observers to abandon such a naïvely optimistic approach to democratization. In recent decades in China and elsewhere, economic development has increased support for authoritarianism. Growing affluence has done more to encourage national pride and loyalty than demands for democracy and freedom. State control prevents Western values from taking hold by providing citizens with increased material benefits and abundant opportunities to express support for the regime, albeit insincerely in many cases. All things considered, it seems to me that a more effective approach than appeasement would involve applying more economic and political pressure on authoritarian regimes to democratize, not simply waiting for it to happen.

Chapter 2 Liberalism and Postmaterialism in China: The Role of Social Class and Inequality

According to Ronald Inglehart's postmaterialism thesis, a value shift occurs as societies industrialize and modernize. The shift is caused by growth in the number and proportion of higher-status positions and the replacement of older generations raised in periods of economic deprivation by younger cohorts brought up in the context of relative prosperity (Taniguchi 2006; Inglehart and Rabier 1986). Most research on this topic pertains to Western countries (Ike 1973; Calista 1984). However, the theory implies that all countries that industrialize and modernize will embrace two orthogonal sets of values in due course, albeit to varying degrees: postmaterialism (values pertaining to quality of life and individual autonomy and creativity) and liberalism (anti-authoritarian, non-nationalistic, non-traditional, pro-democratic values) (Inglehart and Baker, 2000; Inglehart and Welzel, 2009; Welzel 2011).

Other research shows that in certain Asian countries—mainland China, Taiwan, Japan, and South Korea—the persistence of Confucian culture results in comparatively high levels of support for patriarchy, authoritarianism, conformity, social stability, and collectivism (Nisbett et al., 2001). Therefore, the association of national wealth with postmaterialism and liberalism is weaker than in the West (Flanagan and Lee, 2000; Park and Shin, 2006). Nonetheless, Inglehart and scholars influenced by his ideas still hold that economic growth causes a value shift in the direction of postmaterialism and liberalism (Steel et al., 1992; Morris and Peng, 1994; Jackman and Miller, 1996; Inglehart and Carballo, 1997; Flanagan, 1980; Flanagan and Lee, 2000;

Inglehart and Baker, 2000; Chang and Chu, 2002; Park and Shin, 2006; see also Majima and Savage, 2007; Nathan, 2003; Bomhoff and Gu, 2012).

Two main ideas emerge from this literature. First, we can discern materialist-postmaterialist and traditional-liberal value dimensions in all societies, with the proviso that different scholars use different terms for these value dimensions. Second, the cultural traditions of some Asian societies impede but do not eliminate the effect of economic growth and the resulting proliferation of higher status positions on the drift toward postmaterialism and liberalism. I accept the validity of the first proposition but contend that the second oversimplifies matters. Specifically, while economic growth multiplies the number and proportion of higher status positions in all societies, a value shift toward liberalism is not always associated with this process.

In what follows, I explore this issue using data from the 2006 Chinese General Social Survey. I find that higher-status positions are not always associated with liberalism. However, contextual-level inequality, which is generally associated with a low level of economic development, is correlated with liberalism. I also find that liberalism is unaffected by the GDP per capita of Chinese provinces. I attribute these findings to certain aspects of Chinese culture and social structure while making the theoretical point that postmaterialists underplay the effect of important contextual factors, thus requiring modification of their central argument. My analysis supports Max Haller's contention that Inglehart's theory "does not take into consideration the relation of values to … the context within which they become relevant" (Haller, 2002: 142).

1 Critique

According to the postmaterialist thesis, value change tends to move from materialism to postmaterialism and from traditionalism to liberalism under the impact of economic growth, rising affluence, and the proliferation of higher-status positions (Abramson and Inglehart, 1995; Inglehart and Baker, 2000: 38). Consider support for environmentalism, supposedly an important quality of life issue and a constituent element of postmaterialism. Inglehart (2000: 19) argues that "societies at the early stages of the [economic growth] curve tend to emphasize economic growth at any price. But as they move beyond a given threshold, they begin to emphasize quality of life concerns such as environmental protection and lifestyle issues." From this point of view, support for environmentalism is a postmaterialist value, more widespread in affluent societies and among better-off people.

Inglehart's assertion ignores that issues defined as matters of lifestyle in some contexts might be defined as life-or-death issues in others. For instance, where the economic policies of authoritarian regimes inflict especially severe air and water pollution on low-status groups, many of the disadvantaged may become sympathetic to environmentalism. Meanwhile, many of those who benefit most in a material sense from rapid industrialization—people in higher-status positions—may be in a position to escape its most dangerous excesses and thus are less enthusiastic about the virtues of environmentalism. They may also come to oppose liberalism insofar as a liberal-democratic political system can allow the citizenry to promote curbing air and water pollution, perhaps suppressing economic growth in the process. Some surveys suggest that just such an inversion of Inglehart's prediction has occurred in China (Brechin and Kempton, 1994; Fairbrother, 2013). In some countries other than China, the existence of special circumstances might explain why researchers have found either no relationship or a negative one

between indicators of economic well-being and support for both liberalism and postmaterialism (Davis and Davenport, 1999; Brym et al. 2004; Dalton and Ong, 2005; Pavlović, 2009; Shaykhutdinov et al., 2010; Stefanovic, Brym, and Evans, 2014).

One such special circumstance occurs when economic growth nourishes a revival of national pride and traditional culture, both of which might limit the spread of liberal values. Again, China comes to mind. Between 1999 and 2012, China's rate of economic growth averaged a phenomenal 9.9 percent annually (World Bank 2014). Yet survey results and other indicators register a revival of traditionalist values over this period, provoked in part by worsening relations between China and its immediate neighbours over maritime petroleum rights, but fundamentally invigorated by China's growing economic pride and military might. These circumstances seem to have prompted a growing number of Chinese to want to take what they regard as their rightful place in the world order (Guo, 2003; Lin and Wang, 2012; Reilly, 2013; Brym, 2016). Accordingly, Gu (2011) finds that wealthy people tend to hold the most traditional values in China.

China is an excellent laboratory in which to test my claims because it has (1) witnessed rapid economic growth for an extended period (Inglehart's precondition for the spread of postmaterialist and liberal values) but (2) remains deeply influenced by Confucian culture (which, according to Inglehart and others, ought to slow down but not eliminate the drift toward postmaterialism and liberalism). Moreover, industrialization and the opening of the country to the wider world since the late 1970s have variously affected different segments of Chinese society, presumably causing substantial variations in status across provinces, classes, and ethnic groups and between urban and rural areas, thus allowing us to see whether such differences are associated with variations in values, as the postmaterialism thesis contends.

This chapter has a deficiency common to all extant work on the postmaterialism thesis: it is cross-sectional, not longitudinal. That is, it does not measure value change over time among a panel of respondents. Therefore, it cannot speak authoritatively about event sequences, including cause-and-effect relationships. Strictly speaking, the analysis focuses on the relationship between values, on the one hand, and status and inequality, on the other, under the institutional conditions of China in 2006. Nonetheless, it suggests a plausible hypothesis for value change over time that future longitudinal analysis should assess more rigorously.

2 Data and Methods

I used data from the 2006 Chinese General Social Survey (CGSS) to test my claims. The CGSS is a nationwide survey conducted in mainland China by the Renmin University of China and the Hong Kong University of Science and Technology. The 2006 wave included a probability sample of 10,151 adult respondents in 28 provinces, autonomous regions, and direct-controlled municipalities. (For simplicity's sake, I refer to these administrative units simply as "provinces.") Taiwan, Hong Kong, Macau, Tibet, and Qinghai and Ningxia provinces were excluded from the survey, apparently for political reasons, including disputed sovereignty and ethnic conflict. The 2006 wave of the CGSS is particularly useful for present purposes because it is the only wave to include questions on a range of values relevant to traditionalism-liberalism and materialism-postmaterialism.

2.1 Dependent Variables

I chose six questions from the 2006 CGSS as indicators of the two value dimensions, making selections based on the fact that other researchers, including Inglehart and his associates, have

commonly used these or similar items as measures of liberalism and postmaterialism. Although the wording of relevant questions in the 2006 CGSS does not always exactly mirror the wording used by Inglehart and his associates, they are sufficiently alike to allow me to test ideas central to Inglehart's work (see relevant citations in the next two paragraphs). Moreover, while some readers may have qualms about the face validity of some of the measures employed by Inglehart because the present aim is to test Inglehart's thesis, I am obliged to use items that are identical, or very similar to, those he uses.

Variables for the materialism-postmaterialism dimension include attitudes toward environmentalism (Brechin and Kempton, 1994; Inglehart, 1995; Inglehart and Baker, 2000; Fairbrother, 2013), policy preferences for government investment (Abramson and Inglehart, 1995; Inglehart and Rabier, 1986; Pavlović, 2009; Inglehart, 2015), and self-evaluation of happiness (Inglehart and Baker, 2000; Welzel, Inglehart, and Klingemann, 2001). These items reflect how people prioritize different lifestyles, their subjective well-being, and how much they care about a sustainable environment—in other words, how much they prioritize quality-of-life issues over survival concerns.

Items used to measure the traditionalism-liberalism dimension include support for democracy (Inglehart and Welzel, 2009; Welzel and Inglehart, 2009), tolerance of foreign cultures (Inglehart and Welzel, 2009), and lack of obedience to authoritarian government (Inglehart and Baker, 2000; Flanagan and Lee, 2003; Dalton and Ong, 2005; Inglehart and Welzel, 2009; Welzel and Inglehart, 2009; Inglehart and Welzel, 2010; Gu, 2011).

Table 2-1 Operationalization of Value Dimensions

Dimension	Concepts	Questions	Response options	Recodes
Materialism-postmaterialism	Unhappiness vs happiness	Do you describe yourself as happy? To what extent?	1=very unhappy 2=unhappy 3=neutral 4=happy 5=very happy	1=very unhappy 3.25=unhappy 5.5=neutral 7.75=happy 10=very happy
	Lack of environmental consciousness vs environmental consciousness	Have you participated, or would you like to participate, in an environmental group?	0=yes, I already have/am willing to 1= no, I am not interested	1=no, I am not interested 10=yes, I already have/am willing to
	Support for materialist govt. programs vs support for postmaterialist govt. programs	Assume the local government. is going to provide funding for some programs. Please tell us the top three you would support (in descending order).	Materialist items = policing; retirement insurance; fighting poverty; reducing unemployment; unemployment insurance Postmaterialist items = environmental protection; education; gyms and stadiums; museums and the arts	-3, -2, -1 if the 1st, 2nd, 3rd item belongs to the materialist item category; 3, 2, 1, if the 1st, 2nd, 3rd item belongs to the postmaterialist item category. Standardized to a 1-10 scale.
Traditionalism-liberalism	Xenophobia vs tolerance	Do you agree that foreign movies, music, and books are having a bad influence on Chinese culture?	1=strongly agree 2=agree 3=disagree 4=strongly disagree	1=strongly agree 4=agree 7=disagree 10=strongly disagree
	Anti- vs pro-democracy	Do you agree that, as long as the economy keeps growing, democratization is unnecessary?	1=strongly agree 2=agree 3=disagree 4=strongly disagree	1=strongly agree 4=agree 7=disagree 10=strongly disagree
	Strict obedience to govt. vs lack of such obedience	Do you agree that obeying the government is always the right thing to do?	1=strongly agree 2=agree 3=disagree 4=strongly disagree	1=strongly agree 4=agree 7=disagree 10=strongly disagree

Table 2.1 displays the wording of the six questions, their associated response options, and the coding decisions. For all questions, I assigned low scores to materialist and traditionalist responses and high scores to postmaterialist and liberal responses. Within each index, I weighted questions equally. The means of each set of three questions became the dependent variables: the scales of postmaterialism and liberalism. To assess the reliability of the indexes, I calculated Cronbach's alpha, finding a score of 0.799 for the postmaterialism index and a value of 0.727 for the liberalism index. Both scores exceed the 0.700 benchmark conventionally used to assess index reliability. Confirmatory factor analysis supported my decision to group happiness, environmental consciousness, and preferences regarding government investment in a materialism-postmaterialism index and attitudes toward democracy, obedience to authority, and foreign cultures in a traditionalism-liberalism index.

2.2 Individual-Level Predictors

Examining the effects of income and class is an important part of my analysis. I chose household income as a measure of economic well-being because it avoids possible bias caused by single-income families (one spouse may report no personal income while enjoying a high standard of living because the other spouse earns high income). Social class in the 2006 CGSS is a self-reported categorical variable with four response categories: peasantry (the reference category in my statistical models), working class, middle class, and the capitalist class. Given the small number of respondents in the capitalist class (n = 85), I collapsed the middle class and capitalist class categories, labelling the union of these two sets "middle/ upper class."

According to postmaterialist theory, the father's social status is important insofar as the early experience of economic security encourages people to favour liberalism and postmaterialism. Respondents to the 2006 CGSS were asked to report their father's social class when the respondent was 18 years old. In the survey, father's class includes three categories: peasants; workers; and managers, professionals, and political/military leaders.

I controlled for other variables found by previous studies to be relevant to people's traditional-liberal and materialist-postmaterialist values: gender (female = 0, male = 1), age, formal education in years, ethnicity (Han and Manchu = 0, other = 1)[2], type of residence (rural = 0, urban = 1), and Communist Party membership (non-member = 0, member = 1). The literature suggests that young, highly educated people will be more sympathetic to liberalism and postmaterialism than elderly people who have completed fewer years of formal education. In less developed countries, women are expected to be less supportive of liberalism and postmaterialism than men (Inglehart and Rabier, 1986; Inglehart and Norris, 2000). To the degree that majority status is associated with social and economic advantage, it is consistent with the postmaterialist thesis to expect majority ethnic group members will support liberal and postmaterialist values more than minority ethnic group members.

In North America, variations in the standard of living are greater between rich and poor neighbourhoods within cities than between urban and rural settings. In China, the opposite is true (Logan and Bian, 1993; Bian, 2002). Accordingly, I included rural vs urban residence as a dummy variable tapping economic advantage and disadvantage. It is consistent with

[2] Han form the overwhelming majority at nearly 92 percent of the population; Manchu constitute less than one percent of the population, but their socioeconomic position is higher than that of the Han.

postmaterialist theory to expect urban residence to be associated with greater liberalism and postmaterialism.

In China, Communist Party membership has important consequences for a person's life chances, such as promotion opportunities in the public and private sectors and access to power, information, resources, and social welfare. Some might assume that Communist Party members would tend to be anti-liberal, to support authoritarianism and social stability, and to express hostility to democracy. However, the fact that such people are usually well-educated, wealthy, and in an otherwise advantaged position would lead Inglehart and associates to expect the opposite.[3] Table 2.2 shows descriptive statistics for individual-level predictors and dependent variables.

[3] For all covariates, I used multiple imputations (n ¼ 5) to handle missing data (Allison 2002). To report hierarchical linear model results, I used the MI package in R to pool the results and produce estimates from imputed data sets.

Table 2-2 Descriptive Statistics, Chinese General Social Survey, 2006

Variables	n	Percentage or Mean (s.d. in parentheses)
Independent variables and controls		
Gender		
Female (=0)	5,466	53.85 percent
Male	4,685	46.15 percent
Total	10,151	
Age (18-70)	10,151	42.39 (13.45)
Years of education (0-23)	10,151	8.18 (4.28)
Ethnicity		
Majority (Han and Manchu) (=0)	9,526	93.84 percent
Minority	625	6.16 percent
Total	10,151	
Rural/Urban		
Rural (=0)	4138	40.76 percent
Urban	6013	59.24 percent
Total	10151	
Party membership		
Non-member (=0)	8,622	84.94 percent
CCP or CYLC member	1,529	15.06 percent
Total	10,151	
Annual Household income 2005 (in 1,000s of CNY)	9,234	25.17 (16.22)
Social Class		
Peasants (=0)	4647	48.14 percent
Working Class	4217	43.68 percent
Middle/Upper Class	790	8.18 percent
Total	10151	
Father's Social Class when respondent was 18 yrs old		
Peasants (=0)	5800	60.45 percent
Working Class	2839	29.59 percent
Middle/Upper Class	956	9.96 percent
Total	10151	
Dependent variables (1 - 10 Scale)		
Materialism vs. Postmaterialism	10151	5.914 (1.891)
Traditionalism vs. Liberalism	9933	5.149 (1.660)

Table 2-3 Provincial-Level Variable Summary, 2005

Province	GDP per capita (in 10,000 CNY)	Gini Index	Average M-PM Score	Average T-L Score
Shanghai	5.71	0.51	6.36	4.79
Beijing	4.98	0.51	6.14	5.73
Tianjin	4.06	0.40	5.81	5.05
Zhejiang	3.16	0.63	5.71	5.13
Jiangsu	2.87	0.70	6.10	5.54
Guangdong	2.82	0.70	5.66	5.53
Shandong	2.37	0.40	6.56	5.20
Liaoning	2.17	0.42	6.03	5.11
Fujian	2.14	0.60	5.74	5.35
Inner Mongolia	2.00	0.44	5.86	5.37
Hebei	1.69	0.77	6.40	5.69
Heilongjiang	1.62	0.38	5.34	4.35
Jilin	1.57	0.41	6.20	4.85
Xinjiang	1.49	0.47	5.59	5.06
Shanxi	1.41	0.41	7.13	4.56
Hubei	1.33	0.46	5.05	4.98
Henan	1.33	0.48	5.97	4.72
Hainan	1.26	0.57	6.03	5.64
Chongqing	1.24	0.43	6.62	5.10
Shaanxi	1.21	0.46	6.07	4.32
Hunan	1.19	0.53	5.32	5.06
Jiangxi	1.08	0.66	6.03	6.21
Guangxi	1.02	0.57	5.54	5.66
Anhui	1.01	0.57	6.40	5.62
Sichuan	0.90	0.76	5.65	4.20
Yunnan	0.89	0.45	6.43	5.52
Gansu	0.87	0.73	6.80	5.71
Guizhou	0.61	0.62	4.88	4.96

Note:

1. Provinces are sorted by descending order of GDP per capita. GDP per capita is retrieved from Chinese Yearbook of Statistics (2006).
2. Gini coefficients are calculated from the CGSS 2006 data based on household income.

2.3 Provincial-Level Predictors

The province is treated as the level-2 unit of analysis. According to postmaterialist theory, affluence is one of the most important predictors of values, exerting a positive influence on both liberalism and postmaterialism. To measure provincial-level affluence, I used GDP per capita in 2005 (National Bureau of Statistics of China, 2006).

Following previous research (Andersen, 2012), I surmised that contextual inequality might influence respondents' values insofar as less egalitarian contexts may spur greater sympathy for democracy, social change, and other attributes of a liberal society. Accordingly, I included a provincial Gini index in the models, calculated from the 2006 CGSS data on household income. The Gini index has a theoretical range of 0 to 1, with high values indicating more inequality. In China's provinces, the Gini index ranges widely from 0.379 to 0.772.

I found a weak but statistically significant negative correlation between provincial inequality and provincial affluence. Other pairs of provincial-level measures were not significantly correlated. See Table 2.3 for province-level descriptive statistics.

Table 2-4 Hierarchical Linear Models 1A and 1B for Materialism vs. Postmaterialism Index and Models 2A and 2B for Traditionalism vs. Liberalism Index (standard errors in parentheses)

	Model 1A	Model 1B	Model 2A	Model 2B
Intercept	6.024*** (0.493)	5.984** (0.564)	4.250*** (0.447)	4.144*** (0.437)
Provincial Level Variables				
GDP per capita	0.046 (0.807)	-0.039 (0.143)	0.035 (0.072)	0.004 (0.069)
Gini coefficient	-0.292 (0.839)	-0.703(0.927)	1.598* (0.745)	1.685* (0.715)
Individual-Level Variables				
Male (high)		-0.033 (0.039)		0.146*** (0.035)
Age		-0.009*** (0.002)		-0.007*** (0.001)
Years of education		0.067*** (0.007)		0.010 (0.006)
Ethnic minority (high)		0.266** (0.083)		0.309*** (0.075)
Urban (high)		-0.510*** (0.062)		0.149** (0.056)
Party membership (high)		0.531*** (0.059)		0.128* (0.052)
Household income (log)		0.425***(0.043)		0.029 (0.039)
Social Class				
Working Class		0.163** (0.065)		0.160** (0.059)
Middle/upper class		0.530*** (0.092)		-0.037 (0.083)
Father's social class at 18				
Working class		-0.034 (0.054)		0.026 (0.049)
Middle/upper class		0.133 (0.072)		0.092 (0.065)
Random Effects				
Intercept	0.264 (0.513)	0.322 (0.568)	0.208 (0.456)	0.189 (0.435)
AIC Value	41195	33280	37500	30788
BIC Value	41231	33393	37536	30901

** = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$.*

Note: The sample includes 10,151 adult respondents in 28 provinces, autonomous regions, and directly controlled municipalities.

2.4 Statistical Methods

I employed hierarchical linear models to assess the correlates of traditional-liberal and materialist-postmaterialist values at the individual and provincial levels. The models specify individual respondents (level 1, n = 10,151) as nested within provinces (level 2, n = 28). All include random components for the intercept; that is, they allow mean scores on the dependent variables to differ by province. Models 1A and 2A are contextual-level models, including provincial affluence and income inequality as predictors. Models 1B and 2B build on models 1A and 2A by including individual-level factors. The final models accomplished two goals. First, they provided a more rigorous test of postmaterialists' claims about the role of economic conditions, namely that although they imply economic growth at the societal level, they work at the individual level. Second, they allowed me to test for contextual influences on values net of individual-level characteristics.

Besides these three fixed effects models, I tested for cross-level interactions between individual-level economic status indicators (income, class, and father's social status) and contextual-level measures of GDP per capita and the Gini coefficient. None of these interactions was statistically significant, so they do not appear in the final models reported in Table 2.4.[4]

[4] I also used robust regression diagnostics (Andersen 2008) within and between provinces to search for influential cases, multicollinearity, and heteroscedasticity, but detected no significant problems.

3 Findings

3.1 Materialism-Postmaterialism

This section turns to the findings of the statistical models shown in Table 2.4. Model 1A, tests the postmaterialist thesis by examining the association between contextual effects and postmaterialism. Contrary to what Inglehart would lead us to expect, neither affluence nor inequality is statistically significant. In China, provincial-level wealth, a proxy for economic development, is not significantly associated with postmaterialism. Although this finding is inconsistent with some previous findings on the contextual effect of economic conditions, it does not necessarily pose problems for Inglehart's theory, which reportedly operates at the individual level. The issue is discussed in more detail below.

When individual-level predictors are included in Model 1B, we find support for the postmaterialism thesis mixed with a couple of surprises. Younger Party members who have spent more years in school and have higher household income are significantly more likely to adhere to postmaterialist values than older Party members who have spent fewer years in school and have lower household income. Compared to peasants, members of the working class are significantly more likely to support postmaterialist values. Members of the middle and capitalist classes support such values even more strongly. These findings are in line with the expectations of postmaterialist theory.

Adherents to postmaterialist theory might expect minority ethnic status to be negatively correlated with postmaterialism to the degree it is associated with disadvantages not captured by class, household income, and years of education. For instance, discrimination against minority ethnic group members might mean they work more hours in more difficult conditions to achieve

the same income as majority ethnic group members do, and, as a result, face more physical and mental health issues. However, Model 1B shows that being an ethnic minority member encourages support for postmaterialism, thus challenging the notion that such support is more common among those in higher status positions.

Model 1B also allows me to assess Inglehart's early socialization argument, which holds that economic security during childhood weakens people's materialist concerns and consolidates their postmaterialist beliefs (Inglehart and Rabier 1986). Contrary to such expectations, respondents with a father in the working class or middle/upper class are no more postmaterialistic than respondents with a peasant father.

Intriguingly, Model 1B suggests rural residents are significantly more postmaterialistic than urban residents. Following postmaterialist theory, we would expect the opposite; rural residence should be negatively correlated with postmaterialism to the degree that class, household income, and years of education fail to capture material disadvantages associated with rural residence. Such disadvantages might include having to work longer hours in worse conditions to achieve the same income as urban residents or receiving an inferior education despite attending school for the same number of years. The data did not allow me to test whether such factors are associated with Chinese rural residence, but it is generally understood that rural residents are more disadvantaged economically than urban residents, net of the effects of class, household income, and years of education. It is worth lingering on this point for a moment. Chinese environmental problems are more severe in rural than urban areas (Liu and Diamond, 2005; Economy, 2007; Chin and Spegele, 2013). Because rural residents pay a disproportionate share of the costs of industrialization while gaining relatively little, they often feel a more urgent need to fight the environmental crisis. Contrary to what postmaterialists would expect, rural

residence, in other words, a low status, is associated with favourable attitudes to postmaterialism in China. Context matters.

In addition, while Inglehart assumes homologous affluence effects at the individual and contextual levels, my findings suggest the effect of economic well-being on postmaterialism occurs only at the individual level. This result underscores the importance of clearly identifying the level at which effects are evident, an issue Inglehart tends to ignore.

3.2 Traditionalism-Liberalism

Models 2A and 2B in Table 2.4 display the results for the traditionalism-liberalism index. Here we find a different pattern of association, with many of the results inconsistent with postmaterialist theory.

Consider Model 2A, for example. Provincial GDP per capita is not statistically significantly associated with liberalism, but the provincial Gini coefficient is. This finding stands after introducing individual level variables in Model 2B. That is, high levels of income inequality tend to make people more pro-democratic, less obedient of government, and more tolerant of cultural diversity—in short, more liberal. I interpret the positive effect of inequality on liberalism as reflecting the well-established fact that, since ancient times, Chinese culture has been more collectivist and less individualistic than Western culture (Nisbett et al., 2001).

It is well known that a high level of inequality tends to make people dissatisfied, albeit to varying degrees and with different consequences across population categories and countries. In the West, inequality tends to increase workers' resentment of immigrants because they see them as competitors for scarce jobs. In the United States, inequality is also frequently linked to belief in the possibility of upward mobility, while in Western Europe, it is more commonly associated

with a greater desire for equality (Alesina, Di Tella, and MacCulloch, 2004; Andersen and Fetner, 2008; Andersen, 2012; Milligan, Andersen, and Brym, 2014). In China, however, high inequality may threaten to subvert the traditional values of mutual obligation and consensus. Said differently, my finding that inequality has a positive effect on liberalism is consistent with the view that, given the strong collectivist tradition, the dissatisfaction generated by inequality in China encourages a strong desire for equality. Opposition to an economic status quo associated with inequality apparently translates into anti-authoritarianism, support for democracy, and tolerance of foreign values.

The individual-level predictors in Model 2B indicate the kinds of people who are most and least likely to hold such values. Young, male, urban Party members are more liberal than are older, female, rural, non-Party members. These predictors are in line with what Inglehart and his associates would expect. In contrast, when it comes to class differences, middle/upper class people are no more likely than peasants to support liberalism. Working class people support liberalism most strongly—even more than middle/upper class people. This finding throws down another challenge to Inglehart's affluence argument.

Model 2B also fails to substantiate Inglehart's early socialization argument. Father's social class has no influence on liberalism; nor are household income and years of schooling significantly associated with support for liberalism. Finally, ethnic minority status is significantly and positively associated with liberalism, a finding inconsistent with Inglehart's argument that less advantaged people tend to be less liberal and more traditional. In short, the preponderance of evidence in Models 2A and 2B fails to support Inglehart's argument about the conditions that promote liberalism.

Table 2.5 displays fitted values for my three focal variables—respondent's class, father's class, and the provincial Gini coefficient. To derive this table, using Models 1B and 2B, I calculated fitted values for each focal variable (Fox 2003). I let the variable of interest vary through its range while holding all other variables in the models to their means.

The table demonstrates that support for postmaterialism differs significantly by social class, net of other factors. Specifically, postmaterialism scores are about three percent higher in the working class than in the peasantry. Middle/upper class respondents score about six percent higher on the postmaterialism scale than do respondents in the working class. However, for liberalism, the story is different. Although liberalism is about three percent higher among the working class than the peasantry, it is about four percent lower among the middle class than the working class, net of other factors. Finally, while a person living in a high-inequality province (Gini $\geq$0.66) tends to be about two percent less supportive of postmaterialism than one living in a low-inequality province (Gini $\leq$0.45), a person living in a high-inequality context is, on average, seven percent more supportive of liberalism than one living in a low-inequality context. These findings support the idea that in China, contextual inequality discourages support for postmaterialism and encourages support for liberalism.

Table 2-5 Fitted Values of Final Models on Postmaterialism and Liberalism Indices

	Model 1B	**Model 2B**
Dependent Variable	Postmaterialism Index	Liberalism Index
Min	1	1
1st Quartile	4.25	4
Median	6.25	5
3rd Quartile	7.5	6
Max	10	10
Fitted Values		
Class		
Peasantry	5.87	5.06
Working Class	6.04	5.22
Middle/Upper Class	6.40	5.03
Provincial Gini		
1st Quartile (0.45)	6.03	4.97
Median (0.51)	6.00	5.08
3rd Quartile (0.66)	5.91	5.33

4 Discussion and Conclusions

The findings suggest that in China some measures of higher status are associated with postmaterialism and liberalism, while others are associated with materialism and traditionalism. The lack of longitudinal or cross-time data prevents conclusive arguments on how economic growth affects values, but the cross-sectional results suggest the associations between status and the two value dimensions examined are more complex than postmaterialist theorists would have us believe.

Specifically, although on the whole, I found support for Inglehart's theory as it pertains to postmaterialism, I discovered that urban-rural status operates in the opposite direction of what the theory leads us to expect. Also, contrary to expectations, provincial affluence and father's social class have no effect on postmaterialism.

As for liberalism, middle- and upper-class Chinese are not significantly more liberal than Chinese peasants. Yes, they enjoy better economic conditions, but they are not less xenophobic, less authoritarian, or more desirous of democracy, although postmaterialist theory suggests they should be. Similarly, members of the ethnic majority group enjoy better economic conditions than members of the ethnic minority group, but they are less supportive of liberal ideas. Individual-level income has no bearing on support for liberalism, although postmaterialist theory leads us to expect a positive relationship. Nor does father's class behave as expected. I also found evidence contradicting postmaterialists' claim that contextual-level wealth strengthens liberal attitudes. Finally, income inequality at the provincial level influences liberalism. The more unequal a province, the more people support liberal values. This finding is consistent with other research showing inequality plays a more important role than affluence in shaping attitudes

(Alesina, Di Tella, and MacCulloch 2004; Andersen and Fetner 2008; Milligan 2012). Given the measurement of traditionalism-liberalism, the finding means that a higher level of provincial-level inequality in China makes people more supportive of democracy, less inclined to obey political authority unconditionally, and more accepting of foreign cultures.

To appreciate why some key measures of social status fail to predict support for postmaterialism and liberalism, especially the latter, we must return to the work of psychologist Abraham Maslow, on which Inglehart bases his theory. Maslow (1943) posited the existence of a hierarchy of human needs, ranging from basic physiological ones to the need for safety, love and belonging, esteem, to, at the top of the hierarchy, the need for self-actualization (creativity, tolerance, etc.). According to Maslow, higher-level needs become more pronounced as lower-level ones are met, but lower-level needs do not have to be satisfied entirely before higher-level needs emerge (Maslow 1943: 388–89). Under this logic, needs for material well-being and security may coexist with needs for artistic expression and tolerance.

It was Inglehart's intuition that the capacity of different economic conditions to meet various levels of need causes lower- or higher-level needs to predominate in different social locations and to shape values accordingly. However, in Maslow's view—and this is a point Inglehart, and his associates do not really consider—motivations generated by need-fulfilment are not the only determinants of behaviour. As Maslow (1943: 371) emphasizes, "The situation or the field in which the organism reacts must be taken into account." Said differently, the characteristics of people's social settings, apart from the capacity of those settings to meet various levels of need, influence the balance of motivations and values that prompt human action. One such characteristic, particularly important in the context of the present discussion, is the way culture influences values. Traditional culture does not just temper the effect of economic

development and the associated proliferation of higher-status positions on postmaterialism in China. As we have seen, it influences value change in ways that are unexpected from the point of view of postmaterialist theory.

I should emphasize that my interpretation reaches beyond the evidence amassed. Longitudinal data are required to test the hypotheses rigorously. At a minimum, however, I hope to have cast doubt on the judgment that higher individual social status necessarily has a positive effect on postmaterialism, especially liberalism, in all social contexts.

Chapter 3 Education and Societal Effects on Support for Liberalism: Evidence from the World Values Survey, 1981-2014

1 Introduction

Students of public opinion have noted the recent emergence of a "broad syndrome of interrelated values" (Welzel and Inglehart 2009: 216) that render people more participatory, tolerant, trusting, secular, and self-expressionist—in a word, more liberal (Andersen and Fetner 2008; Flanagan and Lee 2003; Inglehart and Baker 2000; Inglehart and Welzel 2010; Lee 2007; Solt 2011; Treas 2002). This development has been explained in two ways. Economic development theory argues that economic security frees individuals from worrying about basic needs and stimulates higher-level needs (Inglehart and Baker 2000; Inglehart and Welzel 2010). In contrast, the cultural theory argues that cultural backgrounds set the basis for society's preferences and shape subsequent value and behavioural shifts through path-dependent effects (Adamczyk and Pitt 2009; Flanagan and Lee 2003; Huntington 1993a; Inglehart and Baker 2000; Jung 2015; Lee 2007; Schwartz 2006; Shin and Sin 2012).

However, recent empirical analyses challenge the validity of both explanations. For example, contrary to economic development theory, researchers have found that Chinese and Russians are not becoming more liberal despite rapid economic growth (Brym 2016; Zhao 1998). Furthermore, China's upper class is less liberal than is its working class (Zhang, Brym and Andersen 2017). Cultural theory has been equally problematized. Unlike its Confucian neighbours (Japan, South Korea, Taiwan, and Hong Kong), mainland China has not softened its

attitudes towards liberalism (Zhao 1998). We see a similar gap between Russia and its Orthodox neighbours: while many Eastern European societies have successfully democratized, and embraced a more liberal-democratic system, Russia's economic growth under Putin is fostering a resurgence of nationalism and authoritarianism (Brym, 2016; Makarychev and Medvedev 2015; Shaykhutdinov et al., 2010).

How can we explain the exceptional cases? What are the qualities that China and Russia have in common and how do they differ from their neighbours? To respond to the theoretical challenges posed here, I suggest focusing on political freedom. The lack of political freedom in China and Russia may explain why economic success has not encouraged support for liberalism. In previous public opinion studies, political freedom has received little attention as a determinant of liberalism. Public opinion and democratization studies focus on how political liberalism at the individual level is conducive to democratization and freedom (Fukuyama 2006; Gibson et al. 1992; Lipset 1959; Saha 2000; Welzel and Inglehart 2005), not the other way around. In this chapter, I take a fresh approach to the topic by examining how liberal attitudes and behaviour are affected by the level of political freedom.

For the most part, public opinion studies of contextual variables address their main effects. What remains understudied is the fact that societal factors often condition the effects of individual qualities. For example, Milligan et al. (2014) find living in a Muslim-majority state, rather than being Muslim *per se*, tends to make people intolerant. They conclude that regime type affects individual political orientations. Similarly, Andersen and Fetner (2008) find class effects on attitudes towards homosexuality depend on societal-level inequality. Members of lower classes are more intolerant in unequal societies than in equal societies. Such findings

challenge previous attempts to provide universal explanations by suggesting that the effects of individual predictors are often conditioned by social contexts.

Moreover, the chapter asks us to pay attention to the education system's role linking macro-level and micro-level variables. In the literature of education and society, it is widely accepted that education systems foster "social spirits" (Dewey 1916). Similarly, Gellner (1994) argues that in modern societies, the polity and the system of formal education are key to forging cultural infrastructure and social solidarity, both of which are necessary for a modern society to properly function. Education's centrality in consolidating social solidarity is reinforced where mandatory education prevails. Given the importance of education, governments are incentivized to care about what is being taught in schools. Most importantly, in most modern societies, governments are capable of influencing educational systems via policy making and resource allocation. Therefore, it is reasonable to think that political regimes, education systems and individual-level value formation are closely linked. In short, I assume that education systems serve as the medium through which a polity influences its citizens' political orientations.

This chapter contributes to the literature in two ways. First, it studies political freedom as a contextual-level explanation of individual-level liberalization, thus providing an alternative to existing explanations. Second, it considers the conditioning effects of freedom on the role of education in the liberalization process. Research shows the level of education at the individual level is positively associated with liberal attitudes (Campbell and Horowitz 2016; Easterbrook, Kuppens and Manstead 2015; Ohlander et al. 2005; Treas 2002; Weil 1985; Zhang, Brym and Andersen 2017). However, the content of educational curricula varies widely by political context (Meyer 1977; Jowett and O'Donnell 2014; Wang 2008). Thus, education is potentially an important link between political contexts and the liberalization process at the individual level. To

probe this issue, in what follows, I analyze data from all six waves of the World Values Survey (WVS), 1981-2014. I find political freedom encourages liberalism, while political freedom conditions the liberalizing effects of education. I conclude the chapter by discussing the broader implications of this finding.

2 Why Political Freedom Matters

Previous studies identify mainly economic and cultural factors underlying the rise of liberalism at the level of the individual (Flanagan and Lee 2003; Huntington 1993a; Inglehart and Baker 2000; Inglehart and Welzel 2010). They ignore the possibility that political freedom may be independently associated with the spread of liberalism insofar as political freedom has wide-ranging consequences for social mobility, the distribution of power and wealth (Rosenfeld 2017), and the content of educational curricula and media messages (Acemoglu et al. 2004; Gellner 2008; Jowett and O'Donnell 2014; Sen 2001).

Public opinion studies touch on political freedom but typically treat it as a consequence of liberalism (Fukuyama 2006; Gibson et al. 1992; Lipset 1959; Saha 2000; Welzel and Inglehart 2005). For example, some researchers have analyzed the way political contexts affect public opinion on certain policies or issues, such as how political cleavages and voting systems affect policy preferences (Andersen and Heath 2003; Brym et al. 2004; Nir and McClurg 2015). They have paid little attention to political freedom as a potential determinant of liberalism.

Yet, arguably, free and non-free societies are fundamentally different when it comes to value formation. To be sure, freedom of speech is not absolute in relatively free societies; some

minorities are comparatively voiceless, and some media messages dominate. Nonetheless, various ideologies and opinions are allowed to compete for support in the public sphere, fostering a relatively diverse and tolerant political culture. In contrast, non-free societies rely for survival on a more centralized, homogeneous, censored, and obedient sphere of public opinion. To remain in power, authoritarian governments or dictators must maintain effective control over information and the mass media (Jiang 2012). Voices advocating more citizen participation, individual and collective autonomy, and political reform are muted; voices advocating respect for established authority and traditional values are encouraged. Instead of promoting tolerance, authoritarian regimes tend to incite nationalism and xenophobia, in part to divert domestic discontent (Solt 2011; Weiss 2014). They reward citizens handsomely for political loyalty and punish them harshly for disobedience (Acemoglu et al. 2004). Liberal attitudes are therefore discouraged, and illiberal ideas are relatively popular in non-free societies. These considerations motivate my first hypothesis:

H1: Society's level of political freedom is positively correlated with the strength of liberal attitudes among individuals, controlling for other relevant societal and individual factors.

3 Freedom, Education, and Support for Liberalism

A society's level of political freedom has broad implications for public opinion and behaviour. In countries that are relatively free, people tend to be exposed to diverse opinions and lifestyles and to be able to speak, assemble, and engage openly in religious and ethnic practices of their choosing. Political freedom seems to influence value formation via education, and researchers consistently find education is positively associated with liberal attitudes (Campbell and Horowitz

2016; Easterbrook et al. 2015; Nir and McClurg 2015; Ohlander et al. 2005; Treas 2002; Weil 1985). It seems worthwhile, therefore, to explore the possibility of an interaction between the level of contextual freedom and individual education attainment. What is more, Ernest Gellner argues that since the Industrial Revolution, the rising complexity of societies has required states to maintain a "cultural infrastructure" shared by its citizens (Gellner 1994). Gellner suggests that education systems, especially state-endorsed formal education, are the key to forging this cultural infrastructure or identity. Empirical studies support this argument. Most modern governments have the capacity and the motivation to influence education policies, school curricula, and investments in education and research (Geddes and Zaller 1989; Gellner 1994; 2008; Jowett and O'Donnell 2014; Saha 2000).

Based on these theoretical claims and empirical findings, I suggest the "regime-education-individuals" link is important in studies of public opinions in non-democracies. All else being the same, non-democratic regimes have relatively more capacity to exercise influence than democratic ones because they monopolize state power. And, arguably, they are more motivated to exercise their influence because they must deal with an inherently higher level of underlying discontent than is typical of democratic regimes. In non-free societies, then, education is an especially important institution for legitimation, mass persuasion, and regime stability (Brady 2009; Jiang 2012; Meyer 1977; Saha 2000; Weiss 2014). Moreover, non-free regimes tend to pay disproportionately more attention to highly educated citizens because they are typically more inclined than others to challenge authority.

We observe considerable regime interference with curricula in comparatively unfree societies. In the former Yugoslavia, for example, the personality cult surrounding Josip Broz Tito was evident not only in the mass media but also in history textbooks glorifying his

accomplishments and denigrating his opponents. Glaring biases were removed only after democratization (Pavasović Trošt, 2014). Similarly, in reaction to the 1989 Tiananmen Student Protests, post-1989 China initiated a "patriotic education campaign" to regain legitimacy (Brady, 2009; Zhao, 1998). A key component of the ongoing campaign is the manipulation of higher education curricula. Today, Chinese university students are required to take courses in political propaganda, including Marxism-Leninism, Maoism, Deng Xiaoping Theory, and so on (Wang, 2008). Liñán (2010: 270) observes similar attempts by the current Russian regime: "There is a close relationship between the implementation of centralized (state) education systems and the construction of identities in those states. Textbooks have been, and still are, a very valuable vehicle for political propaganda." These examples suggest that societal-level political freedom not only influences individual-level liberalism directly; it also interacts with the effect of education. Education has a positive effect on liberalism (Weil, 1985), but in non-free societies this effect might be less influential, suggesting my second hypothesis:

H2: The liberalizing effect of education is greater in free societies than in non-free societies.

4 Data and Methods

Testing the above hypotheses requires cross-national data. Therefore, the chapter draws on all six waves of the WVS, spanning the period 1981 to 2014. The WVS provides individual-level data on demographic variables and political attitudes and behaviour. The six waves of WVS data cover 99 societies, with 240 country-year observations. The societies vary widely in their stage of economic development, level of equality, cultural traditions, and type of political system, thus offering an excellent opportunity to isolate the role of political freedom by controlling for other

contextual factors identified by researchers as sources of liberalism. There were 341,271 respondents in the original data set (all six waves), 71 percent of whom completed the questionnaire. I added contextual-level data from authoritative secondary sources to the data set, including an index of political freedom, the Gini coefficient, and GDP per capita. To deal with missing data, I excluded countries missing one or more aggregate variables, which cannot be imputed. This procedure left 99 countries with 239 valid country-year observations. I then conducted multiple imputations with the R statistical package "Amelia II" (Honaker et al. 2011), generating five imputations based on the chained equations method.[5] After data cleaning, multiple imputations, and deletion of two country-years based on reliability checks (discussed later), 293,364 complete observations in 211 country-years (85.96 percent of the original sample size) remained. Statistical estimates were based on pooled data from the imputed data sets.

4.1 Dependent Variable

To measure liberalism at the individual level, I selected five items that appear consistently in all country surveys from wave 1 (1981-1984) to wave 6 (2010-2014) of the WVS. The questions ask whether respondents have "actually done," "might do" or "would never, under any circumstances, do" any of the following: (1) sign a petition; (2) join in a boycott; (3) attend a lawful demonstration; (4) join an unofficial strike; and (5) occupy a building or factory. From the responses, we can assess the degree to which respondents support freedom of expression and assembly by inclination and action. Such support has been recognized as a key aspect of

[5] Graham et al. (2007) and Hershberger and Fisher (2003) argue for many more than five imputations but Von Hippel (2005) holds that five to 10 are more efficient and do not lead to a significant loss in the number of cases.

liberalism (Andersen et al. 2011; Flanagan and Lee 2003; Inglehart and Baker 2000; Inglehart and Welzel 2010; Lee 2007). Across the five variables, between 75 percent and 95 percent of responses are valid.

Table 3.1 provides details for each item and shows how they were combined to form a scale. As the table shows, each "will never do" response is given a score of 0, and each succeeding item ranks higher in terms of risk or radicalism. Boycotting is the least risky or radical political action;e occupying a building or factory is the riskiest or most radical political action. Accordingly, later items have heavier weights.

I constructed the total liberalism score scale from the average value of all five items for each respondent and standardized the values into a 1-to-10 scale, with 1 being the least liberal and 10 the most liberal. Principal components analysis identifies only one eigenvalue greater than 1, suggesting the scale is unidimensional. Cronbach's alpha for the five items is 0.73, suggesting the five items are internally consistent. I regard the five items as having high face validity. They also have good predictive validity: they correlate highly and in the expected direction with measures of other dimensions of liberalism, including questions that tap respondents' tolerance of minority groups, attitudes toward freedom of speech, and so on.

To ensure comparability across countries, I calculated Cronbach's alpha for the liberalism scale of each country-year (Alemán and Woods 2016) and found 213 country-years with valid data for variables central to my analysis. Of those, 79.3 percent have alpha values at or above the conventional 0.7 cut-off point (Nunnally 1978). Another 19.7 percent have alpha values between 0.6 and 0.69. Only 0.9 percent of country-years—Venezuela in 2001 and Tanzania in 2000—have alphas below 0.6. I elected to remove those two country-years from the final data set. I retained country-years with alphas between 0.6 and 0.69 because my liberalism scale has five

questions with three response options each, and psychometricians consider 0.6 a permissible cut-off for scales with fewer than ten items and items with fewer than seven response options if the scales are valid and theoretically justified, as mine are (Loewenthal 2001).

4.2 Individual-Level Variables

Studies show age, gender, marital status, class, and social status are significant predictors of liberalism (Andersen and Fetner 2008; Treas 2002; Zhang, Brym and Andersen 2017). These variables serve as my control variables. Gender is a dummy variable (female=0, male=1); age ranges from 18 to 99 years; marital status is collapsed into three categories: single/never married (the reference group), married/cohabiting, and widowed/separated/divorced. The variable of occupation has eight categories: (1) unemployed (the reference group), (2) student, (3) retired, (4) unskilled manual labourer, (5) skilled manual labourer, (6) non-manual office worker, (7) professional, and (8) manager/owner.

The focal predictor at the individual level is educational attainment. Education levels are recoded into five categories: (1) none or little formal education (the reference group), (2) elementary school completed, (3) middle school completed, (4) high school completed, and (5) college degree and above. In several countries, education is coded as years of formal education. For those countries, I recoded years of education as follows: 0-5 (none or little education), 6-8 (elementary school completed), 9-11 years (middle school completed), 12-14 years (high school completed), 15 years+ (college/university/higher levels).

4.3 Contextual-Level Variables

Previous studies argue that level of economic development (Inglehart and Baker 2000), inequality (Andersen and Fetner 2008; Milligan et al. 2014), and culture zone (Flanagan and Lee 2003; Huntington 1993a; Jung 2015) are significantly associated with liberalism, so I controlled for these contextual variables. GDP per capita serves as the measure of economic development, with purchasing power parity figures converted into 2005 US dollars (World Bank 2015). The Gini coefficient of inequality comes from the Standardized World Income Inequality Database (Solt 2009), which is based on household disposable income (post-tax, post-transfer), using data from the Luxembourg Income Study. Culture zone is a set of dummy variables that take into account the constructed cultural traditions and dominant religions suggested by Huntington (1993a) and Schwartz (2006): (1) Western/West Europe and North America (the reference group), (2) Catholic/Latin America, (3) Orthodox/East Europe and Russia, (4) Islamic/Middle East and North Africa, (5) Sub-Saharan Africa, (6) Indian/South Asia, and (7) Confucian/East and South-East Asia.

The focal predictor at the contextual level is political freedom, as defined by Freedom House (2014). The freedom index ranges from 1 to 7, with intervals at a distance of 0.5 points; 1 represents the freest societies and 7 the least free. Table 3.2 summarizes the independent and dependent variables.

Table 3-1 Items in the Political Liberalism Scale

Question Wording	Item	Response options and recodes	Mean (SD)
Now I'd like you to look at this card. I'm going to read out some different forms of political action that people can take, and I'd like you to tell me, for each one, whether you have actually done any of these things, whether you might do it or would never, under any circumstances, do it.	E026: Boycott	Have done - 6 Might do - 1 Would never do - 0	0.78 (1.62)
	E025: Petition	Have done - 7 Might do - 2 Would never do - 0	2.44 (2.80)
	E027: Demonstration	Have done - 8 Might do - 3 Would never do - 0	2.23 (2.77)
	E028: Strike	Have done - 9 Might do - 4 Would never do - 0	1.37 (2.51)
	E029: Occupy Buildings/Factories	Have done - 10 Might do - 5 Would never do - 0	0.77 (2.06)
	Liberalism Scale	Average of Five Standardized to a 1 – 10 scale 1 (least liberal) 10 (most liberal)	2.53 (1.68)

Table 3-2 Summary of Individual and Contextual Variables (Imputed Cases Only)

Variables	N	Percentage or Mean (S.D. in parentheses)
Individual		
Gender		
Female (=0)	151, 263	51.56 percent
Male	142, 101	48.44 percent
Age	293, 364	40.93 (16.19)
Level of Education		
None/Little	36, 662	12.50 percent
Elementary	61, 066	20.82 percent
Middle School	76, 894	26.21 percent
High School	71, 989	24.54 percent
College or Above	46, 753	15.94 percent
Marital Status		
Never Married	73, 345	25.00 percent
Married or Cohabiting	186, 560	63.59 percent
Divorced, Separated or Widowed	33, 459	11.41 percent
Job		
Not Employed	63, 368	21.60 percent
Student	25, 840	8.81 percent
Retired	20, 666	7.04 percent
Unskilled Manual Worker	33, 427	11.39 percent
Skilled Manual Worker	49, 784	16.97 percent
Non-Manual Office Worker	30, 944	10.55 percent
Professional	27, 742	9.46 percent
Managerial/Owner	41, 593	14.18 percent
Contextual (country-year)		
GDP per capita (in constant 2005 USD)	211	11119.51 (14095.62)
Gini Coefficient (0-100)	211	38.55 (9.69)
Culture Zone		
Western/West Europe North America	39	17.37 percent
Catholic/Latin American	53	23.11 percent
Orthodox/East Europe and Russia	33	15.24 percent
Islamic/Middle East North Africa	32	16.20 percent
African	20	12.46 percent
Indian/South Asia	7	3.93 percent
Confucian/East Asia	27	11.70 percent
Freedom House Index	211	2.97 (1.69)
Liberalism Scale (1-10, 10=most liberal)	293364	(1.68)

5 Statistical Models

To analyze individual- and contextual-level effects, I used hierarchical linear modelling to predict respondents' support for liberalism. In all models, individuals are nested in country-year, and country-year is nested in countries.

All models include the fixed effects of individual-level predictors and the intercepts of the waves.[6] I included random terms for country intercepts and country-year intercepts to allow across-context variation. More importantly, all models include a random term for education across contexts, allowing the effect of education to vary across country-year. The statistical models are motivated by the hypotheses stated earlier:

Model 1: All individual-level predictors + Freedom;

*Model 2: Model 1 + Education * Freedom;*

Model 3: Model 2 + all other contextual level predictors.

Model 1 tests whether political freedom is a positive predictor of liberal attitudes, as Hypothesis 1 predicts. Model 2 tests Hypothesis 2 by including the interaction of freedom and education. Model 3 includes all contextual effects. By adding GDP per capita, the Gini coefficient, and culture zone, Model 3 tests whether previous models hold up when political freedom is

[6] Wave could be a random component because over-time differences might differ by country. However, much of the over-time variation across countries is captured by changes in other variables, including population demographic characteristics, GDP per capita, the Gini coefficient, and so on. Moreover, a comparison of models with and without wave as a random component indicates trivial differences. Therefore, I included wave as a fixed rather than a random term.

controlled. I conducted robustness checks with the R package, “influence.ME” (Nieuwenhuis and Pelzer 2012). Excluding influential cases at contextual and individual levels did not change the findings. Therefore, the reported models contain all cases.

6 Results

Table 3.3 displays the estimates from all three models. Model 1 includes all fixed effects at the individual level and the focal predictor: contextual political freedom. It shows that political freedom contributes positively and significantly to liberalism. Since the Freedom House index assigns 1 to the freest societies and 7 to the most unfree societies, the negative coefficient (-0.14, $p < 0.001$ level) indicates that the gap between the freest and the most unfree societies can be as high as 0.84 on a 1-10 scale. Model 1 also substantiates the liberalizing effect of education: the more education an individual attains, the more liberal he or she will be. Compared to people with no or little education, a college graduate is 0.86 points higher on the liberalism scale ($p < 0.001$ level). Findings on other control variables are not surprising. Younger, single, male respondents who are students or professionals are more liberal than those in other social groups.

Model 2 highlights the hypothesized interaction between contextual freedom and educational attainment. All categories of education have significant interactions with the freedom index. The interaction is weak at elementary and middle school levels, strengthens at the high school level, and peaks at the level of college and above. For those with little or no education, the free/non-free context makes almost no difference; the liberalism gap between elementary school level respondents in the freest societies and those in least free societies is 0.30 (0.05 * 6). For college level respondents, the comparable gap is 0.90 (0.15 * 6).

Model 3 examines whether the results of Model 2 remain stable after including other contextual controls: GDP per capita (logged), the Gini coefficient, and the cultural zone dummies. In fact, the results remain stable; findings on demographics, education, political freedom, and their interactions change little. To decide on the final model for interpretation, I tested all other contextual qualities' interactions with the focal individual-level predictor, educational attainment. The rationale for fitting the models is provided in the Appendix for Chapter 3 (page 128). The details of model selection and information criteria statistics can be found in Appendix Table A1 (page 129). As displayed in the Appendices, when more complex models with additional interaction terms are tested, Model 3 is still the best fit by far. Moreover, all other models find that the interaction terms of education and other contextual variables are insignificant. For these reasons, Model 3 is the final model to be interpreted.

Model 3 presents some interesting findings on other contextual variables, however. First, GDP per capita is positively associated with liberalism. For example, logged GDP per capita ranges from 5.25 to 11.14, representing an original value ranging from 190 to 69,095 USD. A 1-unit increase in the logged term is associated with an increase in liberalism of 0.11 points on a 1-10 scale. That is, controlling for other variables, the richest society is approximately 0.65 points higher on the liberalism scale than the poorest society. This effect size is not as large as expected. Even though it confirms Inglehart's thesis that affluence encourages liberalism, significance at the .05 level is unimpressive given the large sample size.

Equally unimpressive but still statistically significant is the finding that inequality correlates negatively with liberalism. Model 3 indicates that a 1-unit increase in Gini (coded in percent) yields a 0.01-point decline in the dependent variable ($p < .05$). In other words, less equal societies are less liberal. The gap between the most equal societies and the most unequal

societies on the liberalism scale is about 0.4 on a 1-10 scale, making it a significant predictor net of other factors, but barely so. A somewhat stronger effect is evident for culture zone. Among all seven zones, Western, African, and South Asian societies are the most liberal, and they do not significantly differ from each other.[7] Societies in the remaining culture zones show decreasing support for liberalism in the following order: Catholic/Latin America, Orthodox/Eastern Europe and Russia, Islamic/Middle East and North Africa, and Confucian/East Asian.

Figure 3.1 illustrates the interaction effect between contextual freedom and educational attainment found by this model. It plots the fitted values of the liberalism scale as predicted by freedom and education levels. All other variables are set to typical values (the mean for numeric variables and the proportion for categorical variables). We see that in unfree countries, an increase in education occasions little increase in liberal attitudes. In such societies, the fitted value for respondents with no formal education is about 2.5, while the fitted value for respondents with college and above is about 2.7. That difference is not statistically significant at the conventional .05 level. However, education has a strong influence in the freest societies, where holding a college or higher-level degree can increase liberal attitudes from 3.5 to 2.3, a highly statistically significant difference. The visual results confirm Hypothesis 2: political freedom conditions the effect of education on liberalism. Only in free societies does education have a strong liberalizing impact on individuals.

[7] Findings for South Asian societies should be interpreted with caution as only seven country-year observations fall into this category.

Table 3-3 Estimates for Hierarchical Linear Models Predicting Liberalism Scale in 99 Societies (Standard Errors in Parentheses)

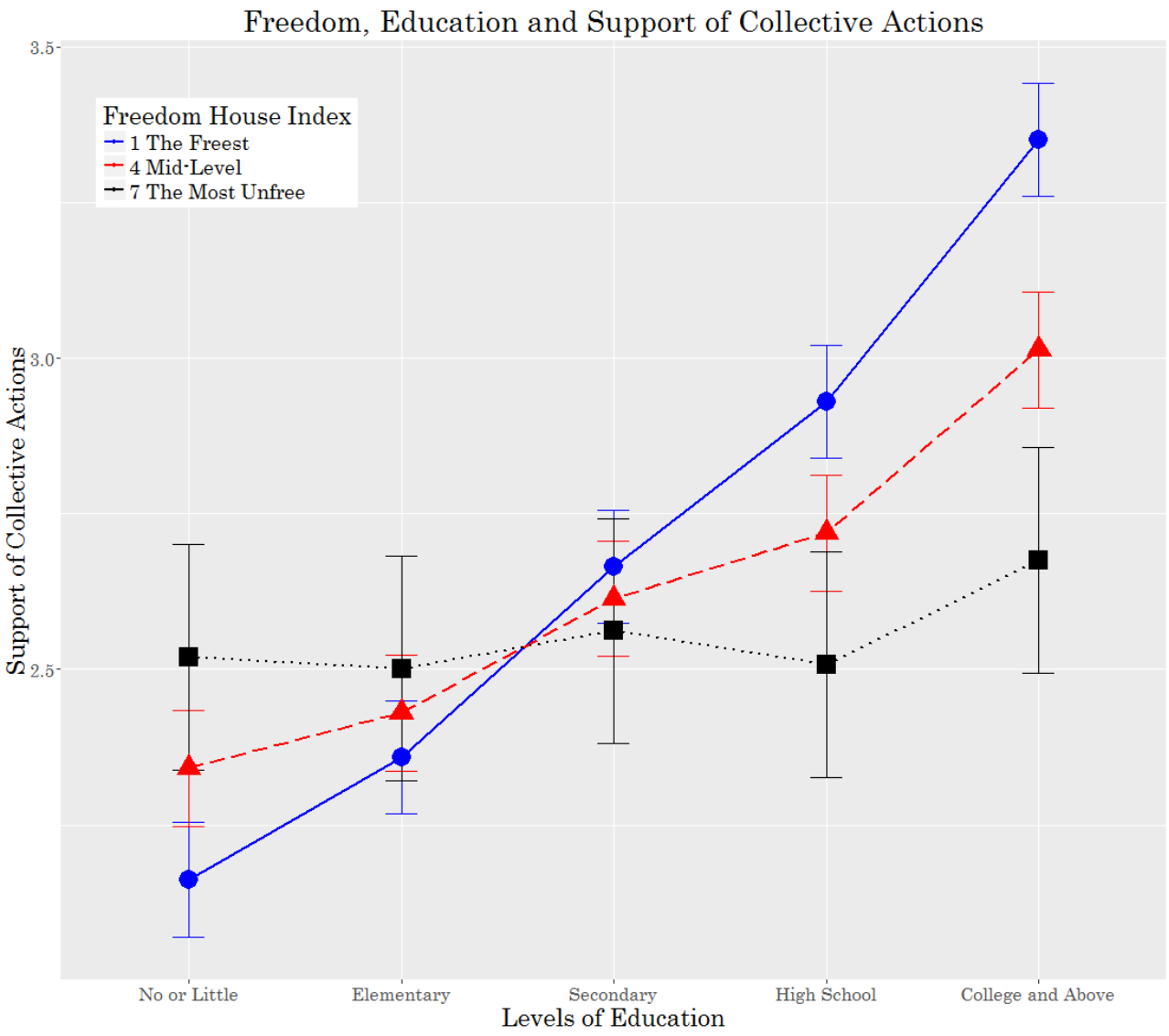
	Model 1	Model 2	Model 3
Intercept	1.98***	1.54*	1.41*
	(0.20)	(0.63)	(0.63)
Survey wave			
1	0	0	0
2	0.51**	0.63***	0.62***
	(0.19)	(0.18)	(0.18)
3	0.35*	0.50**	0.49**
	(0.17)	(0.16)	(0.16)
4	0.35	0.55**	0.54**
	(0.18)	(0.17)	(0.17)
5	0.51**	0.69***	0.68***
	(0.17)	(0.17)	(0.17)
6	0.43*	0.61***	0.61***
	(0.17)	(0.17)	(0.17)
Individual-level predictors			
Gender (Men = 1)	0.23***	0.23***	0.23***
	(0.01)	(0.01)	(0.01)
Marital Status			
Single	0	0	0
Married/cohabiting	-0.10***	-0.10***	-0.10***
	(0.01)	(0.01)	(0.01)
Divorced/separated/widowed	-0.08***	-0.08***	-0.08***
	(0.01)	(0.01)	(0.01)
Age	-26.64***	-26.64***	-26.58***
	(2.03)	(2.03)	(2.03)
Age^2 (orthogonal)	-57.53***	-57.57***	-57.41***
	(1.72)	(1.72)	(1.72)
Occupation			
Unemployed	0	0	0
Student	0.23***	0.23***	0.23***
	(0.01)	(0.01)	(0.01)
Retired	0.13***	0.13***	0.13***
	(0.01)	(0.01)	(0.01)
Unskilled manual	0.08***	0.08***	0.09***

	(0.01)	(0.01)	(0.01)
Skilled manual	0.18***	0.18***	0.18***
	(0.01)	(0.01)	(0.01)
Non-manual office	0.24***	0.24***	0.24***
	(0.01)	(0.01)	(0.01)
Professional	0.34***	0.34***	0.34***
	(0.01)	(0.01)	(0.01)
Manager/owner	0.18***	0.18***	0.18***
	(0.01)	(0.01)	(0.01)
Levels of education			
None/little formal education	0	0	0
Elementary school completed	0.14***	0.27***	0.27***
	(0.02)	(0.04)	(0.04)
Secondary school completed	0.33***	0.56***	0.55***
	(0.02)	(0.05)	(0.05)
High school completed	0.52***	0.87***	0.86***
	(0.03)	(0.06)	(0.06)
College or above	0.86***	1.31***	1.31***
	(0.04)	(0.07)	(0.07)
Contextual-level predictors			
Freedom House index	-0.14***	-0.10***	0.04
	(0.03)	(0.03)	(0.03)
GDP per capita (logged)			0.11
			(0.05)
Gini coefficient			-0.01*
			(0.01)
Culture Zones			
Protestant/West Europe and North America			
Catholic/Latin America			-0.49**
			(0.17)
Orthodox/Eastern Europe and Russia			-0.74***
			(0.19)
Islamic/Middle East and North Africa			-0.95***
			(0.21)
African			-0.19
			(0.27)
India and South Asia			-0.09
			(0.36)
Confucian/East Asia			-0.97***
			(0.19)

Freedom * education interactions			
Elementary school completed		-0.05***	-0.04***
		(0.01)	(0.01)
Secondary school completed		-0.08***	-0.08***
		(0.01)	(0.01)
High school completed		-0.12***	-0.12***
		(0.02)	(0.02)
College and above		-0.15***	-0.15***
		(0.02)	(0.02)
Random effects			
Country intercept	0.19	0.11	0.11
Country-year intercept	0.13	0.13	0.12
Educational level			
Elementary school completed	0.03	0.03	0.03
Middle school completed	0.08	0.08	0.07
High school completed	0.20	0.20	0.17
College and above	0.31	0.30	0.24
Num. groups: CY	211	211	211
Num. groups: country	86	86	86
Num. obs.	293364	293364	293364
AIC	1149116	1149098	1149083

*p < 0.05, **p < 0.01, ***p < 0.001

Figure 3-1 Support for Liberalism by Freedom Score and Educational Level



7 Discussion and Conclusions

Many studies have examined how economic and cultural contexts affect liberalism, but until now, little research has focused on the impact of political freedom. In this chapter, I introduce freedom as a predictor of liberalism. By analyzing cross-national WVS data, I find political freedom is an important contextual variable shaping political orientations to liberalism. I also discover political freedom exerts an impact partly by channelling educational effects. As expected, the level of education matters more in free societies than in non-free societies, and freedom matters more for a better-educated populace. The finding remains valid after considering the contextual impact of economic development, inequality, and culture. The research weakly supports the view that GDP per capita and inequality influence liberalism net of other factors and offers somewhat stronger support for the effect of culture.

The major contribution of the chapter is its systematic investigation of how political context conditions the liberalizing effect of education, supporting Gellner (1994; 2008) and Barber's (2012) idea of how polity, education and political ideologies are intertwined. We already knew that societal contexts have main effects on political attitudes and behaviour. We now know they interact with individual-level variables and change the way they work.

The finding in this paper has three important implications for the sociology of education, public opinion studies, and research on democratization. First, no single theory can fully explain cross-national variations in liberalism. Economic growth, inequality, culture, and political freedom all contribute to the development of liberalism among individuals. Second, the factors work together, complicating the story; a variable might be a suppressor, mediator, or moderator of other variables. Both findings suggest promising topics for future research into how political

contexts channel the effects of other individual characteristics. For example, researchers might investigate whether class or wealth work differently in democracies and non-democracies or whether the effect of gender varies across cultures. Third, the finding that unfree political contexts hinder the liberalizing effect of education implies the importance of political change before value change. The apparent success of the "third wave" of democratization (Huntington 1993b) encouraged the optimistic, if not naïve, belief that the democratic world should welcome non-democracies such as Russia and China into the World Trade Organization, nurture their affluence, and expect liberal democracy to fructify. This belief has led Western countries, international organizations, and corporations to avoid pushing too hard on the human rights front (Menon 2015; Ratuva 2014; Roy 1996).

Readers of this chapter may be concerned about a possible endogeneity problem. What is the direction of the potential causal relationship? Does political freedom influence individual value preferences? Or do people's value orientation enable certain political regimes' survival? Both could be true; this chapter does not answer these questions. My data analysis reveals only patterns of association. Aware of this limitation, I use verbs like "intertwine" or "associate" instead of verbs implying causal effects. Nevertheless, I wish to contend that political environment does have the capacity to influence individuals' opinions. Especially in non-democracies, the state more often influences its people than vice-versa. As I will discuss more fully in the next chapter, radical changes in political institutions often take place before people's value preferences change. Sudden events such as military successes in civil wars or coup d'états can thus be seen as "natural experiments" allowing me to identify the temporal order of events (Dunning 2008; Vincente 2010). These natural experiments divide historically similar populations into different environments, with the population's opinions often diverging

afterwards. In Chapter 4, I compare mainland China and Taiwan to illustrate the following causal chain: institutional differences -> education reforms -> individual value divergence.

Overall, the chapter challenges the view that economic affluence, education, the free market, and exposure to diverse opinions and lifestyles alone foster the value and behavioural basis required for liberal democracy (Fukuyama 2006; Glaeser et al. 2007; Inglehart and Welzel 2010; Lipset 1959). Although these factors correlate positively with democratization, political context also makes a difference. For example, some regimes may energetically resist political reform and social change. As Bueno de Mesquita and Downs (2005: 78) note, "Although development theorists are right in assuming that increases in per capita income lead to increases in popular demand for political power, they have consistently underestimated the ability of oppressive governments to thwart those demands." Similarly, we should not expect education to inexorably bring about liberalization. Political reform is needed to maximize the liberalizing effect of education and lay the foundation for liberal democracy.

Chapter 4

Linking Political Freedom, Level of Education, and Liberal Values: A Comparative Study of Education Reform in Taiwan and Mainland China

1 Introduction

Social scientists commonly regard liberal values as the ideological backbone of democracy. They have repeatedly demonstrated that the countries most likely to become democratic and develop vigorous civic institutions are those in which liberal values are most widespread and deeply held (Fukuyama 2006; Gibson et al. 1992; Saha 2000; Welzel and Inglehart 2009). Analysts also agree that citizens with higher levels of formal education are the most likely to hold liberal values (Glaeser et al. 2007; Inglehart 2015). Recent research shows, however, that the effect of education on liberal values is not uniform across societies. For example, while in democratic societies, education encourages liberalism, in authoritarian societies, it matters less and may even push some categories of the population toward illiberalism (Zhang, Brym and Andersen 2017). Most analysts believe that they observe the latter effects because authoritarian regimes control educational curricula, enabling them to encourage citizens to hold authoritarian attitudes (Hahn 2010; Vickers et al. 2003).

This chapter shows that the relationship between regime type, education, and political values is more complex than is commonly believed. Taking Taiwan and the People's Republic of China (hereafter, China) as its focal cases, it substantiates the claim that educational reform is a meso-level variable linking macro-level political institutions with micro-level attitudinal change.

However, it demonstrates that the linking mechanism operates differently in democratic and authoritarian settings. While in democratic settings, liberal education reforms affect people in the intended and expected pro-liberal direction, in authoritarian settings, educational reform may fail to strengthen pro-regime attitudes. Nonetheless, in the latter case, educational reform provides a means of allowing people to signal that they accept the existing distribution of power despite their misgivings. From this point of view, education in authoritarian countries increases regime stability without increasing regime legitimacy. It has the effect the regime wants, but it operates differently from the way most analysts believe.

Taiwan and China are helpful cases for comparative purposes because they share important qualities yet differ on the focal variable, political freedom. Both are Confucian societies that have enjoyed decades of rapid economic growth (Huntington 1993b; International Monetary Fund 2016). Culture and economic growth are therefore unlikely to be responsible for value differences. A major difference is that Taiwan experienced a democratic transition beginning in the 1980s and established a democratic regime, while the Communist Party still rules China, imposing strict ideological control, in part through a highly centralized and regulated education system. Comparing Taiwan and China can thus shed light on the connections between regime type, educational reform, and liberal values while controlling for relevant cultural and economic factors.

I begin by reviewing the relevant public opinion and civic education literature. I then offer a brief history of political transformation and education reform in both societies. Next, I analyze data from the Taiwan Social Change Survey and the Chinese General Social Survey to compare value change in both societies, in particular, the relationship between value change and the operation of their education systems. Based on the above considerations, I hypothesize that

civic education encourages the spread of liberal attitudes in Taiwan's democratic political environment but fails to encourage the spread of authoritarian ideas in China's authoritarian political environment, although it does increase regime stability.

Interestingly, I find education is *not* a liberalizing force regardless of context (for another view, see Inglehart and Baker 2000; Welzel and Inglehart 2009). In addition, I show that education can maintain or increase the legitimacy of authoritarian regimes *without* instilling liberal attitudes in the citizenry. The latter finding challenges the literature on authoritarian resilience, which attributes regime robustness to successful mass persuasion (Nathan 2003; Zhao 1998). In my view, arguments about authoritarian resilience overestimate state capacity in propaganda and underestimate people's capacity to exercise critical judgment and resistance. Instead, I regard civic education in authoritarian regimes as a power-signalling tool that allows rulers to demonstrate their power while testing citizens' obedience. People's opinions may not change in the direction the government desires, but the education system gives them the opportunity to demonstrate their obedience (cf. Huang 2015; Zaslavsky and Brym 1978). In this manner, the regime achieves social stability without gaining legitimacy.

2 Civic Education, Political Freedom, and Value Liberalization

Education is the core mechanism required to shape a cultural infrastructure and forge social solidarity (Dewey 1916; Gellner 2008). Many studies confirm that education influences people's values, inculcating mainstream perspectives that people use to interpret their society (Glaeser et al. 2007; Inglehart 2015; Saha 2000; Torney-Purta et al. 2001; Warwick 1998). Moreover, the influence endures long after people complete their formal education. Insofar as civic education

provides political socialization for the younger generation, it is especially important in establishing appropriate norms for citizens' attitudes and behaviour (Hahn 2010; Westheimer and Kahne 2004).

Civic education usually includes the study of national history, national identity, and the structure and functioning of the political system, including its constitutional principles (Barber 2012). Civic education in democratic systems also stresses the study of human and civil rights (Ben-Porath 2007; Galston 2004; Westheimer and Kahne 2004). Such civic knowledge permits individuals to internalize their country's civic virtues and to participate in politics and public debate (Ben-Porath 2007; Galston 2004). As Gellner (1999, 140) claims,

> It was by educating peasants, both in the villages and in the towns, that a nation was forged. They were eager to learn, the schoolmaster was the nation-builder, and the professor was to become the national leader. They were obliged to learn, by the conditions prevailing in the world they were entering. This process of education required a history which they could be taught, and this was in due course discovered or invented, in varying proportions.

Because civic education is important for social solidarity, national identity and the operation of democracy, modern democratic societies pay close attention to the political knowledge taught in school. For example, in the United States, the National Assessment of Educational Progress regularly assesses students' civic knowledge. Similarly, in the 1990s, the Council of Europe initiated the Education for Democratic Citizenship project aimed at promoting knowledge of the advantages of democracy and respect for human rights (Hahn 2010).

Analysts claim that civic education is equally important for non-democratic governments, but for a different reason: non-democratic governments control and manipulate the civic education curriculum to prevent the emergence of democratic values and hinder democratization

(Jowett and O'Donnell 2014).[8] For example, after 1989, the Communist Party of China (CPC) implemented a "patriotic education campaign," especially in universities and colleges, to prevent events like the Tiananmen Square uprising from recurring (Brady 2009; Wang 2008; Zhao 1998). The Party's efforts to control civic education spread from China to Hong Kong and Macao after the 1997 and 1999 reunifications (Lee 1999; Chow 2014).

China is not alone in this regard. In Russia, Putin has sought to use civic education to bolster his regime. The study of history is used as a propaganda tool to ensure people's loyalty not only to their motherland but also to the current political order (Liñán 2010). The governments of Singapore and Turkey have also sought to cultivate "unreflective patriotism" (Çayır and Gürkaynak 2008; Ho 2010). In such societies, attempts to manipulate civic education are usually implemented by establishing firm curricular guidelines and enforcing the use of specific textbooks and other materials with carefully planned narratives (Brady 2009; Nozaki 2008; Zhao 1998).

The examples just cited suggest that the attitudinal orientations reflected in civic education depend on the larger political context, especially the level of freedom in society. In a society that enjoys political freedom, civic education fosters democratic and tolerant attitudes. In non-free societies, the reverse *may* be true. (In a later section of the chapter I will argue that the story is more complex.) It seems plausible, therefore, that education's liberalizing effect will be stronger in a society that has experienced democratization and is politically freer.

[8] Even in democracies, government bodies manipulate the contents of curricula if they involve conflicting narratives about foreign countries and other controversial topics (Jones 2005; Nozaki 2008).

3 Taiwan's democratization and reforms in civic education

Taiwan has been under the authoritarian rule of the Kuomintang (KMT) or Nationalist Party since it lost control over China to the CPC in 1949. By placing Taiwan in a state of emergency and implementing martial law, KMT dictator Chiang Kai-shek and his son, Chiang Ching-kuo, remained in power until the late 1980s. Under martial law, the Taiwanese had no regular national elections for president or legislative representatives.

In the 1970s, a group of democratic pioneers, human rights activists, and lawyers organized to promote democracy in Taiwan. They formed the Democratic Progressive Party (DPP) in 1986. In addition, Chiang Ching-kuo faced mounting pressure for democratization from the United States, the most powerful sponsor and ally of his regime. Because Chiang realized democratization was inevitable, he adopted a relatively tolerant strategy toward his opponents. Instead of installing in office the mainlanders trusted by his father and associates, Chiang Ching-kuo started selecting local elites for important positions to appease the Taiwanese people. In response to external requests for democratization, he released opponents from prison and permitted the establishment of opposition political parties (Winckler 1984).

The efforts of democratic activists, the succession crisis in Chiang Ching-kuo's later years, and the influence of the United States led to gradual liberalization and the end of martial law in 1986 (Copper 2010). The education system started to change too. Before 1987, the government mandated a particular state-produced textbook for each subject and level of instruction. After 1988, the authorities let private publishers produce their own versions of textbooks if they conformed to official guidelines. Deregulation opened more space for writers

and publishers to be heard, and it gave schools, parents, and students options in deciding what to learn (Chen 2002; Chang 2009).

Democratization was expedited in the late 1980s. In 1988, Chiang Ching-kuo died. His successor, Lee Teng-hui, was born in Taiwan and sympathized with the democratic movement. He cooperated with opposition parties to achieve political reconciliation and democratization. Taiwan's state of emergency was terminated in 1991. A more representative National Congress was elected the following year. Since 1992, regular national elections have been held every four years for the presidency and every three years for Congress. In elections, the opposition Democratic Progressive Party (DPP) gradually gained support. DPP Congress members called for reforms in the education system. Much of their criticism focused on the curriculum's "China-centred ideology," its praise for the Chiang family and the KMT regime, and its encouragement of obedience at the expense of dissent. In reaction to DPP legislators' requests, Taiwan's Ministry of Education approved a more progressive agenda. It increased the proportion of education on Taiwan's geography, history, and culture, removed authoritarian elements in history and civics textbooks, and further deregulated the production of textbooks, opening the field to private publishers.

In 2000, DPP candidate Chen Shuibian won the Taiwan presidential election, and Taiwan achieved its first peaceful transfer of power from the KMT to the DPP (Wong 2003). As Chen Shui-bian started his first presidential term, his government and the DPP legislature introduced new reforms in the education system (Copper 2010). One of their main goals was to do away with KMT indoctrination in civic education (Lin 2003). The philosophy of the reform, as described by the Ministry of Education, was the "implementation of democracy, advancement of social well-being… to attain the ideal world of universal brotherhood" (Lin 2003: 137). In other

words, after the transition, the government started to promote democratic and liberal values in civic education. Chen Shui-bian's education reforms also emphasized Taiwanese identity instead of Chinese identity. The reforms are evident in the changed curriculum, especially in history and social science textbooks (Chen 2002; Corcuff 2002; Su 2006; 2007), but even in music classes (Ho 2003).

4 Taiwan's Education Reforms: What Changed?

The education reforms implemented since the mid-1980s include apolitical goals, such as updating textbooks with the latest scientific and technological developments. However, the reforms were also politically motivated insofar as they sought to impart humanistic, liberal attitudes and promote de-Chinafication (Chang 2009; Chu and Nathan 2008; Ho 2003; Hughes 2011; Lin 2003; Liu 2000; Law 2002). Let us briefly consider each of these goals in turn.

4.1 Promotion of Democratic Attitudes

The DPP sought to separate the new, democratic Taiwan from the old, authoritarian Taiwan and communist China. By promoting relevant attitudes through education, it hoped to foster a younger generation of democratic citizens with a new identity. It wanted students to become "reflective, open-minded, determined, self-controlled, tolerant of diverse views, and democratic" (Lin 2003: 137).

In 1994, during Lee's presidency, the National Council for Social Studies released new curriculum guidelines. It identified the following core values students should learn from civic

education: “individual rights, the common good, justice, equality of opportunity, diversity, truth and patriotism” (Taiwan Ministry of Education 1994). In her comparison of the 1983 and 1994 curriculum guidelines, Liu finds a significant increase in the frequency of certain keywords, including democracy, fair government, and civil society, and a significant decrease in the frequency of other keywords, including nationalism (2000: 76-77).

In 2000 and 2006, Taiwan’s Ministry of Education initiated new reforms in the curricular guidelines (Corcuff 2002; Chang 2009), with an emphasis on human and civil rights in history and civics courses (Hwang 2001). Criticisms of human rights violations during Taiwan’s authoritarian era were included. The new guidelines replaced the idea of fulfilling a citizen’s duties, notably military service and paying taxes, with an encouragement of open expression (Liu 2013). And in fact, after years of democratic education, Taiwan’s youth, especially its educated youth, have become increasingly involved in voting and public debate, in contrast to declining voter turnout and increasing political indifference among younger cohorts in many other established democracies (Chou and Fu 2016; Muyard 2015; O’Neil 2007).

4.2 De-Chinafication

The KMT sought legitimacy by proclaiming itself the legal government of greater China. It justified its brutal rule by claiming to act in the interests of the nation as a whole, and it promoted Chinese national identity and traditional Confucian ideologies on the grounds that it was defending society from destructive competitors, notably communism and democracy. Part of its strategy involved promoting Chinese national identity in the school curriculum. In the Chiang Kai-shek era, Taiwanese textbooks on Chinese history, geography, civics, and society contained a significant proportion of material about China, even though most Taiwanese would never visit

the country. Streets in Taipei were named after mainland Chinese cities. Schools placed Confucian values, such as loyalty, filial piety, chastity, and righteousness, in a central position in moral education (Bi and Fang 2013). Understandably, education reformers in the post-KMT era set the abolition of Chinese identity as their main goal.

Values related to Chinese identity and the prospect of Chinese unification had already been dwindling in the curriculum guidelines. In the 1980s, Taiwan's Ministry of Education increased the amount of Taiwanese history and geography in the "Society" course offered in middle school. In 1997, it created a course called "Knowing Taiwan," which emphasized Taiwanese national awareness. With the start of the new millennium, the pace of change quickened. In 2001 and 2002, the Minister of Education promoted a nativization agenda, reducing the hours assigned to "Chinese History" and assigning more hours to "Knowing Taiwan" (Hughes 2011). In primary school, children had to learn Taiwanese, Hakka, or an aboriginal language in addition to Mandarin (Ho 2003). Multiculturalism, fostering respect for all ethnic and cultural groups in Taiwan, was increasingly emphasized (Su 2006).

5 Post-1989 China: Civic Education Reform in Reverse

China has taken a radically different political path. Political control has tightened in the past few decades in spite of economic reforms, market openness, and impressive development. Western observers often refer to Chinese development as a type of authoritarian resilience maintained through ideological control secured, in considerable measure, by the education system (Nathan 2003; Zhao 1998).

The Leninist state that lasted until Mao's death in 1976 mounted repeated ideological campaigns against Western values, including democracy, freedom, and human rights, while emphasizing gender equality, anti-imperialism, and anti-colonialism (Leung 2003). True, in Mao's last years, China softened its Marxist-Leninist-Maoist orthodoxy and toned down its nationalist and anti-imperialist rhetoric. The change was partly the result of China's strategic move to distance itself from the Soviet camp and move closer to the United States. The change continued in the early Deng era (1978-88) when the economy was in desperate need of foreign investment and international trade. To a degree, China embraced Western lifestyles. Official publishers introduced liberal and even anti-communist authors to Chinese readers (Liu 2000). Anti-Japanese propaganda did an about-face and began emphasizing the thousands of years of friendship and economic collaboration between the two countries (Hughes 2008). Reflections on, and critiques of, communism and Maoism were tolerated in the 1980s to such an extent that some intellectuals and students openly called for democratization (Zhao 2004).

However, the Tiananmen Square protests of 1989 led China's rulers to reverse these trends, reinforcing ideological control of university students and enacting a variety of education reforms (Yan 2014; Zhao 1998). The former included a year of obligatory military training for undergraduate students beginning their studies in 1990, especially those attending prestigious schools that participated in the protests (Rosen 1993). Some military training became obligatory for all later cohorts of college and university students. As part of the long-term endeavour to better control the education system, China initiated a series of reforms to change the content of curricula in post-secondary institutions, middle schools, and primary schools (Fairbrother 2008).

By 1989, the traditional Marxist-Leninist-Maoist doctrine had lost its appeal, so the regime turned to nationalistic and patriotic themes to gain support (Jones 2005; Yan 2014; Zhao

2004). Today, the regime tries to undermine values that have the potential to hurt it, such as support for democracy, human rights, and civil disobedience. At the same time, it encourages values that help the government maintain people's loyalty and social stability, such as trust in government and governmental officials.

6 Research Question: Do Education Reforms Work?

Though scholars acknowledge that Taiwan's democratization led to and guided its education reforms, it is not yet clear whether the reforms have achieved their intended goals (Chen 2002; Corcuff 2002; Su 2007). Lin (2003) believes citizens view the reforms cynically and do not take the new education materials seriously. Huang (2015) argues that propaganda only serves as a power-signalling tool—the government does not expect to see genuine support; all it really needs is a repeated demonstration of people's obedience. Others are more confident, assuming that the implementation of reforms has led to value change in the planned directions (Liu 2002; Corcuff 2002; 2005; Zhao 1998). These arguments have not been tested empirically.

Similar debates surround the effects of China's education reforms. Some analysts say Chinese political education does not successfully implant pro-regime values in its youth. Nor does it affect the wider public (Chan 1999). Others claim the government's attempts have rendered people less likely to express dissident beliefs and more likely to conform (Huang 2015). In this thinking, observed value change is insincere, representing a kind of political signalling demonstrating only that people are willing to behave.

I will not enter into the debate on social desirability bias in non-democratic settings except to say that a respondent's willingness to express socially desirable values at least indicates that education has effectively implanted certain pro-regime proclivities in his or her mind, regardless of whether they are sincerely held. The question I seek to answer is this: Has value change taken place in the direction intended by education reforms in the two settings under examination? To assess the effect of education reform, I consulted the Taiwan Social Change Survey and the Chinese General Social Survey, comparing changes in several attitudinal items between 1985 and 2014 in Taiwan and between 2003 and 2013 in China, the only years for which relevant data are available. Since I was concerned only with those influenced by the education reforms, I focused on population cohorts born between 1960 and 1990.

From Taiwan, I selected questionnaire items tapping reform-targeted values. I divided them into two groups: values the regime wants to promote ("pro-values") and those it wishes to downgrade ("anti-values"). In the public opinion and civic culture literature, willingness to disagree with government decisions is commonly used to measure democratic orientation (Inglehart and Baker 2000; Welzel and Inglehart 2009; Zhang, Brym, and Andersen 2017). That item is available in the Taiwan surveys. Because preparedness to disagree with government decisions has been increasingly emphasized as a virtue in curricula and textbooks since the 1980s, I expected the level of support to rise in cohorts born after the 1970s.

When it comes to Taiwanese anti-values, there is no better example than Chinese national identification. Before democratization, the KMT promoted Chinese national identity. However, as mentioned, opposition parties and grassroots social movements rejected Chinese national identity and called for the regime to address local concerns, satisfy local demands, and build

local identification. Thus, I expected the level of support for unification with China to decrease in cohorts born after the 1970s.

In China, support for disagreeing with the government decisions is an anti-value since, as noted earlier, the government has used education reforms to discourage it. Trust in governmental officials is a pro-value. It is strongly encouraged as it helps to lubricate interactions between the government and the people, thus leading to social stability, which the government desires. I selected appropriate questionnaire items to measure both types of values in China. Comparing pro- and anti-attitudes in the two settings of interest allowed me to test the hypothesis that support for pro-values increases and support for anti-values decreases to the degree that education reform is effective.

7 Data and Methods

7.1 The Taiwan Social Change Survey and the Chinese General Social Survey

The Taiwan Social Change Survey (TSCS) is operated by the Academia Sinica, Taiwan. The TSCS project has been fielded annually since 1985 and semi-annually in more recent waves. It measures demographics and a wide range of behaviours and attitudes in nationally representative samples (Fu et al. 2014). The TSCS data use a 3-level stratified probability proportional to size (PPS) sampling method. The three levels are town/city, villages/precinct and individual in household (Gingerich et al. 2011). Generated by such procedures, the data are probabilistic and representative of the residents of Taiwan. The number of respondents in each wave is around 2,000. In addition to general demographic information and key modules, each wave of the TSCS

contains a special module on a selected topic, such as health, social networks and political orientations. In this chapter, a total of 11 waves of TSCS data are employed; six concern civil disobedience, a reform-pro item, and the other five concern unification with China, an item discouraged by the reforms. Table 4-1 displays the details of the focal questions and the waves of data that I analyze.

The Chinese General Social Survey (CGSS) has been fielded every two years since 2003. It is operated by the Renmin University of China and the Hong Kong University of Science and Technology. It measures demographics and a wide range of behaviours and attitudes in representative samples covering 28 of China's 34 provincial-level administrative units (six units are not included in CGSS for political reasons; for details see Chapter 2, page 39). Each wave of CGSS data is based on a nationwide, representative sample of residents of mainland China. Like the TSCS, CGSS data are based on a multi-stage stratified PPS sampling method. In China, the layers of PPS are provinces, counties and neighbourhoods - blocks in urban areas and villages in rural areas (Bian and Li 2012). CGSS data are also composed of a core module surveyed every wave and a special module. As Table 4-1 displays, I analyzed a total of eight waves of data: four asked the respondents whether they trusted government officials and the other four asked whether they believed a citizen had the right to criticize the government.

7.2 Dependent Variables

As pointed out in Section 6, this chapter examines whether government-sponsored education reforms achieve their intended goals. Therefore, in both Taiwan and mainland China, I need to analyze value items that are involved in the education reforms of the respective societies. Preferably, the value items should include values endorsed by the government and values that are

discouraged. For Taiwan, I selected survey waves containing data on attitudes to civil disobedience (a reform-pro value) and unification with China (a reform-con value) as the dependent variables. For China, I selected survey waves containing data on attitudes to trust in government officials (a reform-pro value) and the right to criticize government officials (a reform-con value). Details of the selected survey waves, question-wording, and my recoding strategies appear in Table 4.1.

Both surveys measure the values of interest in an ordinal manner, asking respondents how much they agree/disagree with certain statements. Table 4.1 shows the inconsistencies in response options over different survey waves. Some items offer four response options, while others offer five. To ensure comparability, I standardized questions in scales with values ranging from 1 to 10 and treated them as numeric values.

In addition to the above inconsistencies, there is another important limitation to be noted. Comparability is limited because questions are worded differently. I considered other international survey programs that cover China and Taiwan, including the World Values Survey (WVS), the International Social Survey Program (ISSP) and the Asian Barometer Survey (ABS) program. However, their variables for political orientation are less relevant given my research interests. Moreover, these datasets often provide only one or two waves of valid data containing variables of interests. Thus, even though the TSCS and the CGSS have minor differences in question wording, they are the best choice given their availability in variables and coverage.

A related issue concerns how one can compare different items. For example, in both mainland China and Taiwan, I look at items tapping "civil disobedience." In Taiwan, the question is "Do you agree that people should follow all decisions on national affairs made by the government?" In China, the CGSS team asked, "Do you think people have the right to criticize

the government?" (see Table 4-1). Limited data availability is just one justification for my decision to compare responses to these two questions. As I show below, my concern is not the accuracy of differences in value change. Rather, I want to know whether intended value consequences occurred and whether the changes are in the directions expected by policy makers. In other words, I am not comparing and calculating exact differences across the value items in the two contexts; I am only looking at value change patterns and whether they support or falsify my hypotheses.

Table 4-1 Dependent Variables and Corresponding TSCS / CGSS surveys

	Type of Item	Dependent Variable	Corresponding Waves of Surveys	Question	Responses and Recodes
Taiwan TSCS	Reform-Pro Value	Civil Disobedience	1985-1, 1990-1, 1996-2, 1998-2, 2000-1, 2010-1	Do you agree that "people should follow all decisions on national affairs made by the government"?	Strongly Agree = 1 (most obedient) Agree = 4 Disagree = 7 Strongly Disagree = 10 (most disobedient)
	Reform-Con Value	Unification with China	1992-2, 1998-2, 2005-1, 2010-1, 2014-1	Do you agree that "there should be unification if Taiwan and China have similar development levels"?	Strongly Disagree = 1 (most separationist) Disagree = 3.25 Neutral = 5.5 Agree = 7.75 Strongly Agree = 10 (most unificationist)
Mainland China CGSS	Reform-Pro Value	Trust in Government Officials	2005, 2010, 2011, 2012	"Do you trust government officials?"	I don't trust them at all = 1 I somewhat don't trust them = 4 I somewhat trust them = 7 I completely trust them = 10
	Reform-Con Value	Civil Disobedience	2005, 2008, 2010, 2013	"Do you think people have the rights to criticize the government?"	Strongly Agree = 1 (most traditional) Agree = 3.25 Neutral = 5.5 Disagree = 7.75 Strongly Disagree = 10 (most disobedient)

7.3 Independent Variables

Turning to the independent variables, I measured "education" dichotomously, indicating whether the respondent completed at least college. Controls include gender (0=female, 1=male), birth year, and marital status (single=0, 1=married, 2=other), as previous studies of liberal attitudes find them relevant (Andersen and Fetner 2008; Flanagan and Lee 2003; Inglehart 2015; Zhang, Brym, and Andersen 2017). These items were coded consistently for Taiwan and China. Other control variables differ across the two contexts. For Taiwan, ethnicity is coded as Fukienese=0, Hakka=1, mainland Chinese=2, and other=3. In China, ethnicity is a dummy variable: Han, the ethnic majority=0 and other=1. An additional control variable for the Chinese analysis is Communist Party membership, included because it taps a characteristic found to be attitudinally significant in the Chinese context (Zhang, Brym, and Andersen 2017). See Table 4.2 and Table 4.3 for descriptive statistics for all variables.

Table 4-2 Descriptive Statistics of Taiwan Data, 1985-2014

Variables	N	Percentage or Mean (S.D. in parentheses)
Independent Variables		
Gender		
Female (=0)	22074	49.54 percent
Male	22487	50.46 percent
Age	44561	42.01 (14.30)
Ethnic Origin (Father's Side)		
Fukienese (=0)	32168	72.19 percent
Hakka	5525	12.40 percent
Mainlander	4955	11.12 percent
Other Groups	1913	4.29 percent
Marital Status		
Never Married	9150	20.70 percent
Married or Cohabiting	33829	76.53 percent
Divorced, Separated, or Widowed	1226	2.77 percent
Higher Education or Not		
High School or Less	34896	78.39 percent
College or More	9620	21.61 percent
Dependent Variables		
Civil Disobedience	15261	5.92 (2.46)
Support of Unification	9061	5.52 (2.53)

Note:

1. Statistics on demographic variables are based on all waves of surveys;
2. Statistics on Dependent Variables are based on relevant waves of surveys.

Table 4-3 Descriptive Statistics of China Data, 2005-2013

Variables	N	Percentage or Mean (S.D. in parentheses)
Independent Variables		
Gender		
Female (=0)	39172	51.45 percent
Male	36971	48.55 percent
Age	76143	46.93 (15.71)
Ethnic Origin (Father's Side)		
Han People (=0)	70115	92.08 percent
Ethnic Minorities	6028	7.92 percent
Communist Party Membership		
None (=0)	67488	88.63 percent
CCP Member	8655	11.37 percent
Marital Status		
Never Married	7294	9.58 percent
Married or Cohabiting	61483	80.75 percent
Divorced, Separated, or Widowed	7366	9.67 percent
Higher Education or Not		
High School or Less	67781	89.04 percent
College or More	8345	10.96 percent
Dependent Variables		
Trust in Government Officials	39540	6.32 (2.22)
Civil Disobedience	36603	4.10 (2.92)

Note:

1. Statistics on demographic variables are based on all waves of surveys.
2. Statistics on Dependent Variables are based on relevant waves of surveys.

7.4 Statistical Models

I first fitted separate OLS regression models predicting each dependent variable in each survey. This step helped to identify predictors and control variables with a stable and significant impact on value orientations. Several key predictors were detected in this step, including survey year, birth year (age), gender, ethnicity, marital status and, in mainland China, Communist Party membership. After preliminary investigations I merged the survey waves containing the same dependent variable into new datasets. Regression analyses on the merged data found the key predictors to remain significant in Taiwan and China.

I next conducted four analyses, one for each dependent variable. In each analysis, I fitted two sets of models. After creating a baseline model with all the control variables, the higher education variable, and birth year, I introduced the interaction term between education and birth year to see if educational level worked differently for younger generations. In all four cases, AIC values were lower for the second model, indicating that it fits better than the first model without interactions. For all models, I fitted both regular and robust OLS regression models but found no noteworthy differences in their estimates. I retrieved final estimates from the robust models.

To ensure that the final models are indeed the best fit, I tested for all other possible interactions – education by survey year, gender, ethnicity, marital status and Communist party membership. The rationale for fitting these models is indicated in Appendix for Chapter 4 (page 130). Among all the interaction models, the ones with "education by birth year" are the best fit according to the information criteria statistics and log-likelihoods. Details can be found in Appendix Table A-2 (page 131). The final models with "education by birth year" are reported in Table 4-4 and Table 4-5.

8 Taiwan Findings

8.1 Civil Disobedience

I will begin by looking at people's attitudes to disagreeing with government decisions. As Table 4.1 shows, the question reflecting this value in the Taiwan surveys is worded as follows: "Do you agree that people should follow [obey, respect] all decisions on national affairs made by the government?" The findings appear in Table 4.4, Model 1A, and Figure 4.1—TW[A]. Model 1A corroborates the hypothesis that younger people and those with higher education tend to be more open to civil disobedience. However, the interaction term is negatively significant (-0.03, $p<0.001$). This means most of the change has occurred in the less-educated group. Figure 4.1—TW[A] shows the fitted values of predicted civil disobedience, with the interaction between birth year and higher education as the focal effect. It also shows the 95 percent confidence interval for the final OLS regression model. Figure 4.1—TW[A] indicates that the more highly educated respondents are consistently relatively disobedient. The 1960 birth cohort achieves a score of 6.7 and the 1990 cohort a score of 6.8. However, respondents who did not receive a higher education are more likely to favour civil disobedience over time, with the 1960 cohort scoring 6.0 and the 1990 cohort scoring 6.8. Within confidence intervals, both educational groups' degree of civil disobedience is the same in the 1985 and 1990 birth cohorts. In addition, male respondents show higher civil disobedience than females, and other control variables have no significant differences across categories.

Table 4-4 Final Regression Models Predicting Dependent Variables, Taiwan

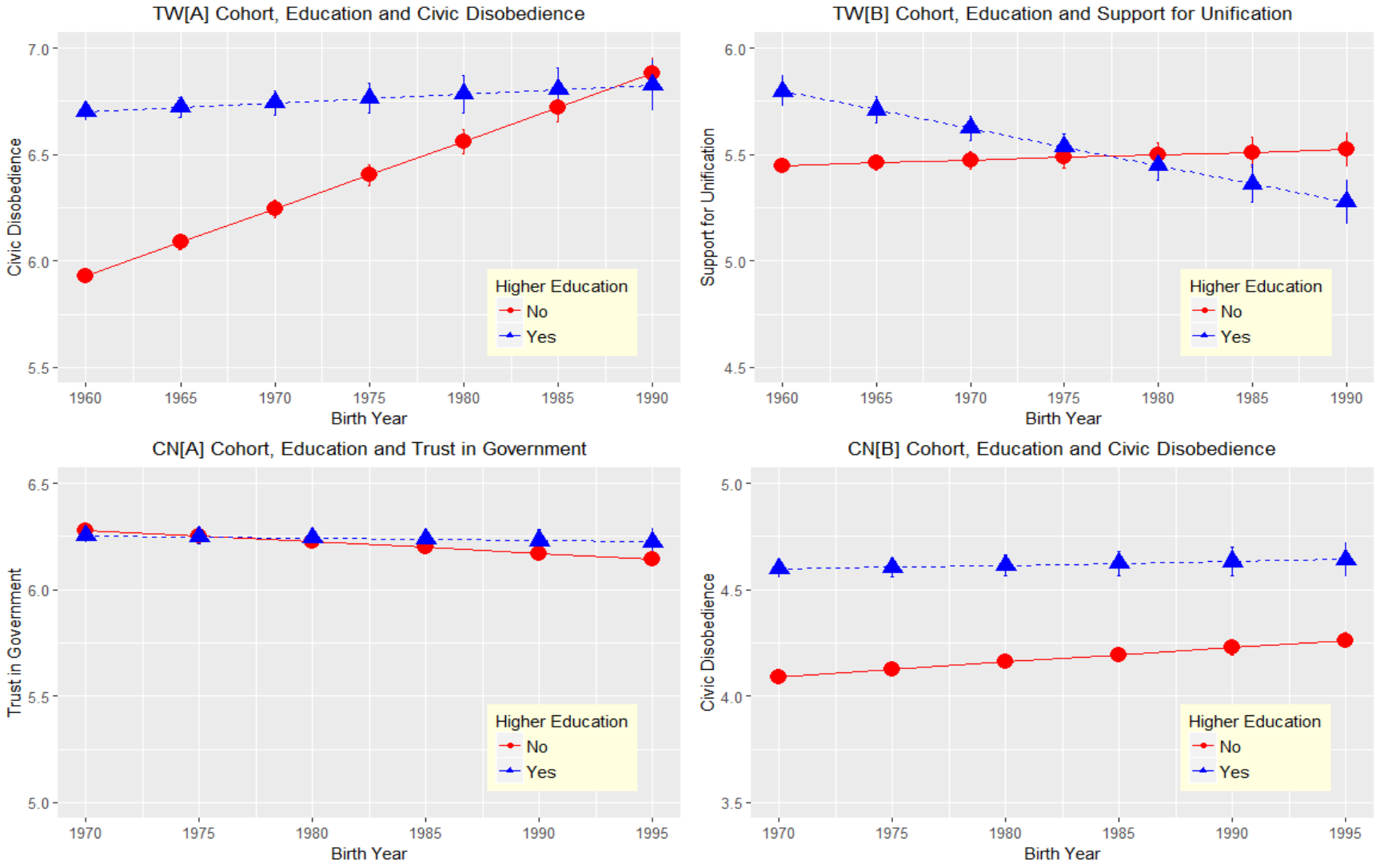
	Model 1A Support for Civil Disobedience In Taiwan	Model 1B Support for Unification with China In Taiwan
(Intercept)	-56.74***	1.33
	(3.79)	(4.83)
Male	0.16***	0.36***
	(0.04)	(0.06)
Ethnicity (Fukien = 0)		
1.Hakka	-0.11	0.25**
	(0.07)	(0.08)
2.Mainland	0.10	0.91***
	(0.07)	(0.10)
3.Other	-0.14	0.44***
	(0.10)	(0.10)
Marital Status *(Single = 0)*		
1.Married	0.04	0.16*
	(0.06)	(0.08)
2.Other	0.02	0.09
	(0.10)	(0.19)
Birth Year	0.03***	0.00
	(0.00)	(0.00)
Higher Education	54.89***	39.27***
	(7.45)	(8.73)
Birth Year * Higher Education	-0.03***	-0.02***
	(0.00)	(0.00)
R^2	0.09	0.12
Adj. R^2	0.09	0.11
Num. obs.	13111	7555
RMSE	2.36	2.39

Table 4-5 Final Regression Models Predicting Dependent Variables, China

	Model 2A Trust in Government Officials	Model 2B Support for Civil Disobedience In mainland China
(Intercept)	16.28***	-11.27**
	(1.60)	(2.11)
Male	-0.05*	0.03
	(0.02)	(0.03)
Ethnic Minority	0.08*	-0.34***
	(0.04)	(0.05)
Communist Party Member	0.05	-0.25***
	(0.03)	(0.05)
Marital Status (Single = 0)		
1.Married	-0.06	-0.18***
	(0.04)	(0.05)
2.Other	-0.02	-0.22***
	(0.06)	(0.07)
Birth Year	-0.01***	0.01***
	(0.00)	(0.00)
Received Higher Education	-8.41	-10.52
	(4.55)	(5.89)
Birth Year * Higher Education	0.00	-0.01
	(0.00)	(0.00)
R^2	0.28	0.22
Adj. R^2	0.28	0.22
Num. obs.	33423	36002
RMSE	1.88	2.58

***p < 0.001, **p < 0.01, *p < 0.05

Figure 4-1 **Taiwan and China: Support for Values by Birth Year and Education. Fitted values from final regression models. All variables except education and birth year freedom are set to typical values (i.e., means for quantitative variables and proportions for categorical variables).**



8.2 Support for Unification with China

Table 4.4, Model 1B, displays the education and cohort effects on support for unification with China. Since the dependent variable represents a value that the government increasingly downplayed in curricula as democratization intensified, I hypothesized that younger cohorts and more highly educated people would change their opinions the most. The estimates from Table 4.4, Model 1B, support this hypothesis. In Model 1B, birth year and higher education have a significant negative impact. Being younger and more highly educated makes a person less likely to support unification with China.

However, for cohorts born before 1975, that is, for people educated in the pre-reform years, higher education is associated with support for unification. For the 1975 and 1985 birth cohorts, there is no association between education and support for unification within confidence intervals. For the 1990 birth cohort, the early pattern reverses; education is associated with favouring independence. Figure 4.1—TW[B] displays this reversal. We see that less-educated people were never enthusiastic about unification with China. Confidence intervals indicate almost no change in their preference for unification across cohorts. The lion's share of value change has occurred in the more highly educated group. The de-emphasis of Chinese identity in textbooks and curricula is associated with a significant decline in support for unification as we move from the 1970 to the 1990 birth cohorts. As for other control variables, males and married people show higher and more significant support for unification than females and unmarried people. Compared to Fukien Taiwanese, the Hakka people and mainlanders (who usually have more cultural and social connections to China) support unification more strongly.

9 China Findings

9.1 Trust in Government Officials

For China, the first dependent variable is the question, “How much do you trust government officials?” I hypothesized that since the Chinese government has increasingly mandated curricula to inculcate trust in government officials, trust should increase across cohorts if education is effective. The findings of the regression analysis appear in Table 4.5, Model 2A, and Figure 4.1—CN[A].

In Model 2A, neither education nor the interaction term between education and birth year is significant. This means that education has not influenced people’s trust in government, as is often assumed. Moreover, the non-effect of education persists over succeeding cohorts, regardless of the government’s intensified attempts over time to influence curricula following the Tiananmen Square uprising. Figure 4.1—CN[A] visualizes this relationship. It shows that as we move from the 1970 to the 1995 birth cohort, China’s population does not change much in terms of trust (note the scale on the y-axis). Within confidence intervals, there is no difference by educational status. Members of the 1995 cohort do not express higher trust in government officials than members of the 1970 cohort. Civic education has apparently failed to increase people’s trust in government officials. When we turn to the control variables, we see women, ethnic minorities, and senior citizens have relatively high trust in government officials.

9.2 Civil Disobedience

For China, the second dependent variable is the question, “Do you agree that it is acceptable that people criticize the government?” Table 4.5, Model 2B, and Figure 4.1—CN[B] display the findings for this variable. Analysis again suggests that China’s attempts to use civic education to shape public opinion have largely failed. The Chinese government strongly discourages civil disobedience, so education reform, if effective, should make people more likely to oppose criticism of the government. However, as we can see from Model 2B and the effect plot, respondents with higher education register almost no change in attitudes to civil disobedience across birth cohorts. Respondents without higher education tend to be open to taking a critical stance toward government decisions, as their support for this item slightly increases from 4.09 to 4.26. These findings challenge the view that the Chinese government’s education reforms have succeeded in implanting state ideological doctrines in the minds of citizens.

10 Discussion and Conclusions

All governments, democratic or not, seek to influence citizens’ value orientations through their education systems. However, my analyses find that such attempts work differently in democratic and authoritarian societies. In democratizing Taiwan, education reform has discouraged support for unification with China and encouraged openness to disagreeing with government decisions. This finding suggests a direct link between education reforms and value change. In contrast, in mainland China, government-led education reforms have had little of the expected effect on public opinion. The government encourages obedience and trust, but people’s attitudes indicate growing distrust of government officials and stable or increasing support for criticizing

government decisions over succeeding cohorts. In Chapter 3, the findings imply that democratic regimes promote liberal values and non-democratic ones encourage illiberal values. Findings in Chapter 4 are consistent with Chapter 3 but they reveal a more complex pattern: the two types of regimes not only differ in the content of education, but also in the effectiveness of educational attempts. Clearly, both chapters support the argument that education should not be conceived as a universally effective vehicle for value change; we need to consider the societal context in which education takes place.

The difference between Taiwan and China has important implications for the study of legitimacy in authoritarian societies. Governments in Taiwan and mainland China invest heavily in ideological education. Taiwan has managed to change its citizens' political opinions in the desired direction, but China has not. One reason for this divergent outcome may be that non-democratic governments can suffer from a lack of legitimacy because their power does not derive from the citizenry's formal consent (Zhao 2004). Consequently, they may seek to gain legitimacy by imitating democratic institutions such as elections (Zaslavsky and Brym 1978) and parliaments (Li 2002). However, in authoritarian systems, citizens may regard such institutional mimicry cynically. Many doubt that it actually establishes democracy. For example, Lin (2003: 138) describes Chinese students' reactions to educational reform as follows: Some "are optimistic about the curriculum. Some are pessimistic and lack confidence in the government and policymakers. Students seem not to care about the changes; to them, school is just work." Such responses suggest that the government's indoctrination attempts have largely failed.

The apparent tension between the Chinese government's strong desire to indoctrinate and its inability to succeed compels us to propose an explanation for authoritarian resilience that does not rely on the assumption that propaganda and ideological campaigns always work as intended,

increasing regime legitimacy (Brady 2009; Nathan 2003; Zhao 1998). Based on my findings, it seems that non-democratic regimes can enjoy stability without legitimacy if they create institutions that encourage people to act obediently without necessarily believing that the government is legitimate. From this point of view, proponents of post-1989 education reform in China may not expect citizens to support the regime genuinely, but they do expect them to demonstrate obedience. The education system provides ample opportunity for them to do so.

These considerations raise two important questions for future research on authoritarian legitimacy. First, what factors prevent people's discordant values from becoming disobedient actions? Second, under what conditions can a lack of legitimacy start to undermine the stability of authoritarian regimes? Answers to these questions will help us understand the "authoritarian resilience" (Nathan 2003) and the obstacles preventing democratization in countries like China.

The finding that democratic regimes effectively use education systems to bolster their legitimacy reminds us of the problem of culture hegemony (Althusser 2006; Gramsci 2000). As the Taiwanese case suggests, education reforms guided by a democratic government can generate a dominant ideology to which most citizens conform. However, a dominant ideology may help to achieve a consensus that rejects desirable alternatives. Liu and Hung (2002) correctly argue that in democratic contexts, education works as a tool of liberation. But they ignore the fact that cultural hegemony in democratic societies does not guarantee exposure to ideas that may extend the limits of human welfare. Nor does it protect the citizenry from insidious forms of mass persuasion. Education reform may have different effects in democratic and authoritarian societies, but the similarities should not be minimized.

Chapter 5 Conclusion

1 Bringing Political Context to Public Opinion Research

This dissertation reveals how societal contexts, especially the context of political freedom, can moderate mechanisms of value formation. Previous theories acknowledge the important roles of economic and cultural factors. While recognizing their value, I have sought to demonstrate that these explanations are insufficient. Economic explanations are often linear and invariant, optimistically assuming economic success and affluence will lead to value liberalization without exceptions. Cultural explanations are often static, if not deterministic, which is understandable given culture's relative stability. However, as Chapter 2 and Chapter 3 show, existing approaches fail when encountering cases like China and Russia. In those and other contexts, economic success does not foster freedom and liberty (Rosenfeld 2017). I believe the inadequacy of existing theory lies in the fact that modernization theories and cultural theories do not pay enough attention to the role of political regimes and political contexts.

A focus on structural forces sometimes leads to determinism. State-centered theories and the literature on nationalism (Gellner 1994) offer an antidote. For example, Theda Skocpol and followers (Skocpol 1979; Skocpol et al. 1999; Hall 1993) argue that the state apparatus and the personnel related to it have their own interests and agenda; they influence policy and values to some degree independently of a country's economy and culture. Following Skocpol, this dissertation asks why some societies follow a value path that differs from what one might expect given a country's economy and culture. Why do some regimes turn to nationalist ambition, chauvinism, and expansionism, despite rising affluence? Why do some countries with similar

cultures develop differently? Chapter 4 answers these questions by analyzing variations in political environment. Specifically, political freedom is a powerful contextual factor influencing the degree to which liberal values crystallize.

2 Value Formation as Influenced by Political Environment

The relationship between the political environment and the political culture has been debated in political science and sociology for years. Most studies agree that reciprocal causality exists: the political environment can shape the values and ideologies of a society, and the values and ideologies held by the people can change the political context. For example, many students of democratization and public opinion consider liberal values to trigger democratization (Fukuyama 2006; Gibson et al. 1992; Saha 2000; Welzel and Inglehart 2005). But this does not tell the whole story. Support for liberal values among a critical mass facilitates the emergence of social movements calling for democracy, but liberal attitudes also need a facilitative, democratic environment within which they can win support. Previous studies tend to focus on one side of the reciprocal relationship between values and democratic environment, and I do not reject the validity of their arguments. However, I choose to focus on the other side of the relationship: how political freedom shapes liberal values.

Chapter 2 shows that China's economic success has not automatically engendered liberalization, as modernization theorists would lead us to expect. Moreover, China's upper class, as the main beneficiary has more incentive to defend the authoritarian regime than to challenge it. Given China's increasing economic power, political influence, and global presence, this case,

despite its apparent exceptionalism, cannot be overlooked. We need an alternative or at least a supplementary explanation for value change in China.

What is the explanation? Seeking an answer in Chapter 3, I turn to some other significant exceptions. As other researchers scholars have found, exceptional cases are often non-democratic or semi-democratic: China, Russia, Singapore, and Turkey are frequently mentioned as exceptions (Brym 2016; Çayır and Gürkaynak 2008; Ho 2010; Liñán 2010; Makarychev and Medvedev 2015; Ortmann and Thompson 2016; Roy 1994; Shaykhutdinov et al. 2010; Zhang, Brym and Andersen 2017). All are successful cases of economic development but share few similarities with their cultural neighbours in terms of value change. This observation suggests that political freedom, not culture or economic development, is the key to understanding the variation. To test this hypothesis, I compared 88 societies, controlling for their economic and cultural contexts. The findings seem clear: political freedom is a critical contextual quality conditioning value formation. Individual-level predictors, such as individual educational attainment, are moderated by political freedom. Thus, Chapter 3 partially answers the question raised in Chapter 2. China's exceptionalism is a function of its political structure.

However, the possibility of mutual causality raises the possibility of endogeneity. As discussed, scholars have found both directions of causality to be valid (Almond and Verba 2015; Brady 2009; Bueno de Mesquita and Downs 2005). How can we be sure that political context changes people's value preferences, not vice versa? Ideally, running regression models with panel data would help to identify the causes and effects. Panel data would make it possible to examine both contextual and cross-time effects, thus increasing the likelihood that the relationships examined are causal and not merely associational. Unfortunately, data sets available for secondary analysis tend to be cross-sectional but not longitudinal; or longitudinal

but not comparative. Therefore, I undertook an historical analysis of two focal cases, mainland China and Taiwan, to illuminate how sudden regime change (without preceding change in public opinions) in the two societies caused their political cultures to diverge. Specifically, I focused on education reform in recent decades to see how the regimes' attempts have resulted in different patterns of public opinion.

3 Education System and the Fosterage of Civic Virtues

To fully understand the relationship between political environment and public opinion, the dissertation examines the role played by education systems. Many previous studies have suggested that the education system plays a central role in shaping a society's common understandings. Education fosters national identity, common moral sentiments, common political preferences – in a word, the civic virtues and shared beliefs required for social solidarity and cohesion (Barber 2012; Gellner 2008). The central role of education is reinforced by the prevailing mandatory education systems in almost all modern societies and the declining influence of religion.

What is more, as political regimes have the capacity to influence the curriculum, education policies, and investment in education and research projects (Geddes and Zaller 1989; Jowett and O'Donnell 2014; Saha 2000), it is reasonable to focus on how they influence education systems and, consequently, change how people think. Acting on this assumption, the dissertation examines how non-democratic regimes reinforce their rule through education systems.

4 Education, Legitimacy, and Authoritarian Resilience

The dissertation also contributes to democratization and authoritarianism studies. A major interest in this field is the puzzle of "authoritarian resilience" (Nathan 2003). Scholars want to understand how authoritarian regimes survive when they lack internal legitimacy (Huang 2015; Zaslavsky and Brym, 1978; Zhao 2004). Proposed explanations of regime robustness include powerful military and police forces and advanced techniques in censorship and surveillance (Greitens 2013; King, Pan and Roberts 2013; Zhao 1998). But being powerful and repressive is commonly held to be insufficient for regime survival (Kurzman 2009). As Max Weber (1984) noted, the need to use force is a sign of regime *weakness*; regimes need legitimacy in addition to the threat or actual use of force. Some scholars argue that economic performance and nationalism can serve as sources of legitimacy (Zhao 2004). Both are limited, however; when economic growth slows down or when nationalist passion is frustrated by failures in military conflicts or international affairs, people's support of the regime easily weakens (Wang 2008; Wallace and Weiss 2015). Therefore, regimes also rely on propaganda or mass persuasion (Brady 2009; Jiang 2012; Meyer 1977; Saha 2000).

My findings, especially those in Chapter 3 and Chapter 4, corroborate the argument that authoritarian regimes employ the education system as a tool of mass persuasion. The findings in those chapters add to the literature on the modern education system's role in shaping civil society and nationalism. In Chapter 3, I show that regardless of economic development and cultural background, education's effect on the support for liberal values is moderated by the level of political freedom, and Chapter 4 substantiates this claim by turning to two specific cases. As

noted above, Taiwan and mainland China have a common cultural background. They have both experienced rapid economic growth (Taiwan 1970-2000, China 1980-present). The difference is political: Taiwan has democratized; China has not. Taiwan has brought in liberal education reforms, while China has resorted to educational propaganda and authoritarianism. In both cases, the education system is employed to shape values. The results? After decades of educational reform, Taiwan has succeeded in creating a younger generation that views the regime as legitimate. China has been much less successful; nonetheless, in China, the education system buttresses the regime by giving students the opportunity to demonstrate their willingness to "go through the motions" of regime support without necessarily believing in the legitimacy of the regime. As the Chinese case shows, the education system helps explain authoritarian resilience, although not necessarily by increasing regime legitimacy.

5 Limitations and Future Research

This dissertation has several theoretical and methodological limitations. First, longitudinal, comparative data would provide a more convincing analysis of value change than I have offered. Researchers must choose one or the other. I have opted for comparative analysis because my main concern was to discover whether political freedom is influential when controlling for economic and cultural factors. Such a question demands comparative analysis covering many societies. I supplemented my analysis with a historical examination of Taiwan and mainland China, so I could provide some evidence of the direction of causality. Encouragingly, the timeline in Chapter 4 corresponds to the causal sequence, regime type→ education reform→ value change. Nonetheless, longitudinal data covering many societies would

provide more compelling evidence of the existence (or non-existence) and causal direction (if any) of the associations I have examined. Until such data are available, my findings on value change must be interpreted cautiously.

A second limitation of the dissertation is endogeneity due to potential reverse causation. This is not solely a technical problem attributable to the use of quantitative methods; it is also a theoretical issue. Scholars in political science and sociology are aware that political regime and individual value orientation influence each other (Almond and Verba 2015; Brady 2009; Bueno de Mesquita and Downs 2005). Democratic values lead to democratization; democratic regimes encourage democratic values. Democratization researchers often note the former, while public opinion studies, including this one, focus on the latter. As this dissertation does not involve longitudinal analysis, it might be argued that people's authoritarian attitudes enable non-democratic regimes to survive and eventually lead to an illiberal education system reproducing those value patterns.

I defend my position by pointing to the history of modern China. At least in the context of East Asia, considering the historical consequences of political and social changes is critical. Before 1949, China was ruled by the Kuomintang, a relatively tolerant regime that permitted hundreds of private universities, private publishers, and newspapers. In the 1940s, scholars, writers, and artists enjoyed a reasonably high level of freedom of speech. Even Communist supporters could publish criticisms of the regime (Wagner 2001). However, after the Communist military forces won the civil war (1946-49), the takeover by the Communist Party led to a gradual loss of freedom. In 1952, many private and foreign universities were taken over by the Communist Party (Jishun 2010; Chin 2013). In 1955, artists, writers, and poets who criticized the Party were arrested. In 1955-56, the state assumed ownership of all private publishers, both

newspapers and presses, converting them into branches of the Party. In 1957, the "anti-rightism" movement threw more than 500,000 intellectuals in jail (Liu 2000). The gradual loss of freedom of speech reached a peak during the Cultural Revolution (1966-76) (Mittler 2010). We thus see that: (1) A relatively liberal atmosphere existed under the Kuomintang. (2) No evidence shows that people's value preferences changed in such a way as to trigger regime change, which was, after all, based on military victory rather than electoral success. (3) Post-regime change, many intellectuals demanded democracy and liberalism until they were silenced. I conclude that in the case of mainland China, we can plausibly assert that a changing political environment led to value change, not vice versa.

A third weakness of this dissertation is that it fails to take international relations into account. The interests of the United States and its allies conflict with those of potential challengers such as Russia and China (Legvold 2014). Therefore, what appears to be a conflict between democracies and non-democracies may, in fact, be a conflict of geopolitical interest or a clash of civilization (Huntington 1993a). Is freedom the explanation? Is the democracy versus non-democracy dichotomy sufficient to explain the divergence of values that have been the focus of my attention? In Chapter 1 and Chapter 3, I raise concerns about Huntington's cultural theory insofar as it cannot explain why China differs from Japan, Korea, Taiwan and Hong Kong. I suggest that differences in political freedom may explain variations in values across East Asia. However, combining cultural and international perspectives renders the picture more complex: value change may be influenced jointly by culture and international relations. For example, East Asian societies share a cultural background, but they may differ in geopolitical situations and value orientations; unlike China, Japan, South Korea, and Taiwan may have experienced "mainstream" value change by virtue of their economic and military reliance on the USA. If so,

my argument about the importance of political freedom as an influence on value change may be questioned. What appears to be political context might be the interaction between culture and geopolitical interest.

This dissertation also fails to fully disentangle the complex roles played by individual-level predictors. For example, though my analysis controls for critical demographical variables, including gender, age, education, social status, and occupation, it sometimes lacks information on individual religious affiliation and commitment, political affiliation, and income. These variables can be highly relevant in shaping political beliefs. Another major concern is that education, the focal variable in Chapter 3 and Chapter 4, relates to many other demographics. This not only leads to a potential multicollinearity problem but also causes potential risks in misinterpretation of effects. For example, education is linked to family background, class status, occupation, marriage choice, income, and political orientation. Though many of the factors are considered in the regression analyses, it is still possible that I have misidentified other variables' effects as educational ones.

Finally, individual-level variables could mean different things across countries, especially across civilizations. For example, the situation of the Chinese peasantry described in Chapter 2 differs greatly from that of farmers in North America or Europe. Similarly, receiving a high school degree could have totally different implications in Canada and, say, rural India; in the former, a high school graduate may be considered less competitive in the labour market, while in the latter, he or she may be part of a local intellectual and social elite. In other words, while I have emphasized the comparability of societies, the findings should be interpreted with caution.

The limitations outlined above suggest directions for future endeavours. First, comparative longitudinal data are required to understand value change and its causes better.

Second, we need more research on the relationship between political values and political environments. We know that the two factors are tied together in a relationship of reciprocal causation, but we do not have answers to the following questions: Under what conditions does value change lead to political change? Under what conditions does political change result in value change? Are there circumstances when values change substantially without regime change or in which regimes change with little or no corresponding value change? What is the time lag between changes in one factor and changes in another? What circumstances account for variations in the time lag? Third, researchers involved in the sort of study I have attempted would be well advised to incorporate a geopolitical perspective into their work. Fourth and finally, additional work is needed to depict the influence of individual-level factors on values more accurately. Bearing in mind the limitations of this dissertation, the present work is properly seen as no more than an introduction to a vast program of research.

Appendices

Appendix: Chapter 3

In Chapter 3, I began with Model 1 with all predictors without interaction terms at all; then I added the education by freedom interaction term in Model 2. In Model 3, all the contextual factors such as GDP per capita, Gini coefficient and the dummy variables of culture zone are included. Though Model 3 is the one of theoretical interest, and by far it is the best fit according to the model selection statistics reported in Table 3-3, I continued to test all other possible interactions: individual education by all other contextual qualities. Model 4 tests the "quality of education" hypothesis (Psacharopoulos and Patrinos 2004) by considering whether variation in GDP per capita (an indicator of development level) is associated with variation in education. If this is the case, the "freedom x education" interaction in Model 3 may be spurious. Model 5 tests the effect of the GINI coefficient to see whether income inequality whether people with different educational backgrounds think differently. After all, in unequal societies, opportunities to receive education are unevenly distributed among demographic groups (Holsinger and Jacob 2009) and observed educational effects are due to social status rather than the content of education. Model 6 tests whether culture interacts with education. This model considers the fact that culture zones are also associated with political freedom levels (e.g., East/Southeast/South Asia and the Middle East and North Africa are on average less free). If culture is found to be relevant, it might also complicate our story.

The tests and statistics generated are reported in Table A-1 (A for Appendix) below. As AIC values, BIC values and log-likelihoods indicate, Model 3 is still the best fit model compared with later ones. Significance tests also yield the same conclusion that only political freedom interacts with individual's education attainment in predicting people's political orientations.

Table A-1: Statistics for Model Selection in Chapter 3

	AIC	BIC	Log-Likelihood
Model 1: Individual vars + Freedom	1149116	1149532	-574519
Model 2: Individual vars + Edu x Freedom	1149098	1149556	-574506
Model 3: Individual vars + Contextual Vars + Edu x Freedom	**1149083**	**1149627**	**-574490**
Model 4: Individual vars + Contextual Vars + Edu x GDP per capita	1149092	1149636	-574495
Model 5: Individual vars + Contextual Vars + Edu x GINI	1149137	1149681	-574517
Model 6: Individual vars + Contextual Vars + Edu x Culture Zones	1149166	1149923	-574512

Appendix: Chapter 4

In Chapter 4, regression models are fitted to predict four value items in the two focal societies, Taiwan and mainland China. For each of the dependent variable, I fitted the models in the following order: first, all the individual predictors with no interaction terms in Model 1. Then I fitted Model 2 with the focal interaction term, education by the year of birth. Model 2 allows me to detect educational influences and their changes over different age cohorts.

To ensure that Model 2 is the best fit, I tested all other possible interactions and compared these models and their information criteria statistics with Model 2. This step also helps to rule out alternative explanations. For instance, could the changes in Taiwanese public opinions be attributed to demographic changes such as the rise of ethnic minorities supporting separation? Or could the trend discovered in Model 2 (education x cohort) be spurious and the observed cohort differences be simply macro-level liberalization over time? To deal with such concerns, I fitted the following models: Model 3 contains the interaction term of education by survey year, testing the value changes over time (instead of by age cohorts) in a society. Model 4 examines whether educational effects vary across male and female respondents. Model 5 tests whether education influences ethnic groups differently (e.g. the Fukienese versus the native Taiwanese in Taiwan; or, the Han people versus all other minorities in mainland China). Model 6 investigates on marital status' potential interaction with education. In mainland China, one extra model was fitted: the interaction term of Chinese Communist Party membership with education.

The model selection statistics reported below in Tables A-2 (a total of four tables) show that in all the comparisons, my models of interest (Model 2, education by birth year) are the best fit across all the dependent variables. In addition, no other interaction models yield significant results. The insignificant competing models also help to corroborate my finding in Model 2:

impact of education varies only across age cohorts. This finding supports my inference that educational reforms lead to changes in curriculum, exposing different age cohorts to different materials. Therefore, I decide that the final models reported in Chapter 4 should be Model 2.

Appendix Tables A-2: Statistics for Model Selection in Chapter 4.

Table A-2-1 Support for Civil Disobedience in Taiwan

	AIC	BIC	Log-Likelihood
Model 2: Birth Year * Education (Final model reported in Table 4-4)	**59720**	**59862**	**-29867.2**
Model 3: Survey Year * Education	59754	59867	-29866.1
Model 4: Gender * Education	59763	59868	-29862.2
Model 5: Ethnicity * Education	59764	59877	-29841.3
Model 6: Marital Status * Education	59766	59893	-29841.1

Table A-2-2 Support for Unification with China in Taiwan

	AIC	BIC	Log-Likelihood
Model 2: Birth Year * Education (Final model reported in Table 4-4)	**34596**	**34711**	**-17292.1**
Model 3: Survey Year * Education	34612	34718	-17290.1
Model 4: Gender * Education	34612	34721	-17289.1
Model 5: Ethnicity * Education	34614	34723	-17282.9
Model 6: Marital Status * Education	34614	34730	-17280

Table A-2-3 Trust in Government Officials in mainland China

	AIC	BIC	Log-Likelihood
Model 2: Birth Year * Education (Final model reported in Table 4-4)	**110619**	**110726**	**-55410.70**
Model 3: Survey Year * Education	110842	110941	-55410.70
Model 4: Gender * Education	110845	110944	-55410.65
Model 5: Ethnicity * Education	110845	110944	-55409.75
Model 6: Marital Status * Education	110845	110944	-55409.06
Model 7: CCP membership * Education	110845	110953	-55296.29

Table A-2-4 Support for Civil Disobedience in mainland China

	AIC	BIC	Log-Likelihood
Model 2: Birth Year * Education (Final model reported in Table 4-4)	**170303**	**170430**	**-85151.49**
Model 3: Survey Year * Education	170324	170434	-85151.43
Model 4: Gender * Education	170326	170436	-85150.78
Model 5: Ethnicity * Education	170329	170439	-85150.05
Model 6: Marital Status * Education	170329	170439	-85149.00
Model 7: CCP membership * Education	170330	170448	-85136.28

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