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

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Abstract: *The postmaterialist thesis holds that postmaterialist and liberal values tend to be strongest in affluent locations and among people in higher socioeconomic positions. We demonstrate the degree to which China fails to conform to these expectations and seek to account for Chinese exceptionalism. We use multilevel models fitted to 2006 Chinese General Social Survey data to test the postmaterialist thesis. In general, we find expected associations for postmaterialism but not for liberalism. Indicators of individual-level status, including household income, middleupper class status, urban residence, and majority ethnic group status are not associated with liberalism. Provincial-level affluence is not positively associated with either postmaterialism or liberalism, while income inequality is positively associated with liberalism. We conclude that in highly collectivist cultures like China's, economic development can have unexpected effects on value change. Growing inequality, which people in lower-status positions perceive as a threat, can promote liberalism, while people who benefit most from rising affluence and growing inequality may be more inclined to support traditional than liberal values.*

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Introduction

According to Ronald Inglehart's postmaterialist 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; Inglehart 2008). Most research on this topic pertains to Western countries (Ike 1973; Calista 1984; Blondel and Inoguchi 2002; Kotzé and Lombard 2003). However, the theory implies that all countries that industrialize and modernize will embrace two orthogonal sets of values in due course, and to varying degrees: postmaterialism (values pertaining to quality of life and individual autonomy and creativity) and liberalism (anti-authoritarian, non-nationalistic, nontraditional, prodemocratic 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; Trommsdorff 1983; Morris and Peng 1994; Reisinger et al. 1994; Jackman and Miller 1996; Inglehart and Carballo 1997; Schwartz and Bardi 1997; Flanagan 1980; Flanagan and Lee 2000; Inglehart and Baker 2000; Chang and Chu 2002; Park and Shin 2006; see also Pešić 2006; Majima and Savage 2007; Nathan 2007; Theocharis 2011; Bomhoff and Gu 2012; Jasny 2013).

Two main ideas emerge from this literature. First, one may discern materialist-postmaterialist and traditional-liberal value dimensions in all societies, with the proviso that different scholars use different terms for these value dimensions.¹ 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. We accept the validity of the first proposition but contend that the second proposition 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.

We explore this issue using data from the 2006 Chinese General Social Survey. We 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. We also find that liberalism is unaffected by the GDP per capita of Chinese provinces. We 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, requiring modification of their central argument. Our 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).

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 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, which is 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 become 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 2012). 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; Pavlovic 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, 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 neighbors over maritime petroleum rights, but invigorated fundamentally 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; Vincelette et al. 2011; Lin and Wang 2012; Reilly 2013; Brym 2016a; Brym 2016b). Accordingly, Gu (2011) found that wealthy people tend to hold the most traditional values in China.

China is an excellent laboratory in which to test our claims because it exemplifies a setting which has (1) witnessed rapid economic growth for an extended period (Inglehart's precondition for the spread of postmaterialist and liberal values), but still (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 opening of the country to the wider world since the late 1970s have variously affected different segments of Chinese society, presumably causing substantial variation in statuses across provinces, classes, and ethnic groups and between urban and rural areas, thus allowing us to see whether such differences are associated with variation in values, as the postmaterialist thesis contends.

On the other hand, our study shares a deficiency that is common to all extant work on the postmaterialist thesis: it is cross-sectional, not longitudinal. That is, we do not measure value change over time among a panel of respondents. Therefore, we cannot speak authoritatively about event sequences, including cause-and-effect relationships. Strictly speaking, our 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 regarding value change over time that future longitudinal analysis will hopefully be able to assess more rigorously.

Data

We use data from the 2006 Chinese General Social Survey (CGSS) to test our claims (Bian and Li 2012; CGSS 2006). 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 twenty-eight

provinces, autonomous regions, and direct-controlled municipalities. (For simplicity's sake, we refer to these administrative units simply as "provinces" throughout.) Taiwan, Hong Kong, Macau, Tibet, and Qinghai and Ningxia provinces were excluded from the survey, apparently for political reasons, such as disputed sovereignty and ethnic conflict. The 2006 wave of the CGSS is particularly useful for our purposes because it is the only wave to include questions on a range of values relevant to traditionalism-liberalism and materialism-postmaterialism.

Dependent Variables

We chose six questions from the 2006 CGSS as indicators of the two value dimensions. We made our 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. We recognize that the wording of relevant questions in the 2006 CGSS does not always exactly mirror the wording of questions used by Inglehart and his associates. However, we regard them as sufficiently alike to allow for a test of 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 that Inglehart employs, our aim is to test Inglehart's thesis, so we are obliged to use items that are identical, or very similar to, those he employs.

Variables for the materialism-postmaterialism dimension include attitudes toward environmentalism (Brechtin and Kempton 1994; Inglehart 1995; Inglehart and Baker 2000; Franzen and Meyer 2010; Fairbrother 2012), policy preferences regarding government investment (Abramson and Inglehart 1992; Inglehart and Rabier 1986; Pavlović 2009; Inglehart 2015), and self-evaluation of happiness (Inglehart and Baker 2000; Welzel, Inglehart, and Klingemann 2001; Inglehart 2003; Inglehart et al. 2008). These items reflect how people prioritize different lifestyles, their subjective well-being, and how much they care about a sustainable environment—in a word, how much people prioritize quality-of-life issues over survival concerns.

Items used to measure the traditionalism-liberalism dimension include support for democracy (Inglehart 2003; Inglehart and Welzel 2009; Welzel and Inglehart 2009), tolerance of foreign culture (Inglehart, Moadell, and Tessler 2006; Inglehart and Welzel 2009), and lack of obedience toward 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 1 displays the wording of the six questions, their associated response options, and our coding decisions. For all questions, we assigned

Table 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 0 = yes, I already have/am willing to 1 = no. I am not interested	1 = very unhappy 3.25 = unhappy 5.5 = neutral 7.75 = happy 10 = very happy 1 = no, I am not interested 10 = yes, I already have/am willing to -3, -2, -1 if the 1st, 2nd, 3rd item belongs to the materialist item category;
	Lack of environmental consciousness vs. environmental consciousness	Have you participated, or would you like to participate, in an environmental group?	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 post-materialist item category.
	Support for materialist gov't. programs vs. support for postmaterialist gov't. 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).		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

low scores to materialist and traditionalist responses and high scores to postmaterialist and liberal responses. Within each index, we weighted questions equally. The means of each set of three questions became our dependent variables: scales of postmaterialism and liberalism.² In order to assess the reliability of the indexes, we calculated Cronbach's α , 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. A confirmatory factor analysis (not reported here) supported our decision to group happiness, environmental consciousness, and preferences regarding government investment into a materialism-postmaterialism index, and attitudes toward democracy, obedience to authority, and foreign cultures into a traditionalism-liberalism index.

Individual-Level Predictors

Examining the effects of income and class was an important part of our analysis. We 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 our statistical models), working class, middle class, and capitalist class. Given the small number of respondents in the capitalist class ($n = 85$), we collapsed the middle class and capitalist class categories, labeling the union of these two sets "middle/upper class."

According to postmaterialist theory, father's social status is important insofar as the early experience of economic security encourages people to favor liberalism and postmaterialism. Respondents in 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.

We 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 in years, formal education in years, ethnicity (the Han and Manchu = 0, other = 1)³, type of residence (rural = 0, urban = 1), and Communist Party membership (nonmember = 0, member = 1). The literature suggests that young, highly educated people will be more sympathetic to liberalism and postmaterialism than are 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 are men (Inglehart and Rabier 1986; Inglehart and Norris 2000). To the degree that majority status is associated with social and economic

Table 2

Descriptive Statistics, Chinese General Social Survey, 2006

Variables	<i>N</i>	Percentage or mean (s.d. in parentheses)
Independent variables and controls		
Gender		
Female (=0)	5,466	53.85 percent
Male	4,685	46.15%
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%
Minority	625	6.16 percent
Total	10,151	
Rural/urban		
Rural (=0)	4138	40.76 percent
Urban	6013	59.24 percent
Total	10,151	
Party membership		
Nonmember (=0)	8,622	84.94 percent
CCP or CYLC member	1,529	15.06 percent
Total	10,151	
Annual household income 2005 (in 1,000 s of CNY)	9,234	25.17 (16.22)
Social class		
Peasants (=0)	4,647	48.14 percent
Working class	4,217	43.68 percent
Middle/upper class	790	8.18 percent
Total	10,151	
Father's social class when respondent was 18 yrs. old		
Peasants (=0)	5,800	60.45 percent
Working class	2,839	29.59 percent
Middle/upper class	956	9.96 percent
Total	10,151	
Dependent variables (1–10 Scale)		
Materialism vs. postmaterialism	10,151	5.914 (1.891)
Traditionalism vs. liberalism	9,933	5.149 (1.660)

Table 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

Notes: Provinces were sorted by descending order of GDP per capita. GDP per capita is from Chinese Yearbook of Statistics (2006). Gini coefficients were calculated from the Chinese General Social Survey (CGSS) 2006 data based on household income.

advantage, it is consistent with the postmaterialist thesis to expect that majority ethnic group members will tend to support liberal and postmaterialist values more than minority ethnic group members do.

In North America, variation in the standard of living is greater between rich and poor neighborhoods within cities than between urban and rural settings. In China, the opposite is true (Logan and Bian 1993; Bian 2002). Accordingly, we included rural vs. urban residence as a dummy variable tapping economic advantage and disadvantage. It is consistent with postmaterialist theory to expect that urban residence will 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 observers might assume that Communist Party members tend to be anti-liberal, support authoritarianism and social stability, and 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.⁴ Table 2 shows descriptive statistics for our individual-level predictors and dependent variables.

Provincial-Level Predictors

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

Following previous research (Andersen 2012), we also 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, a provincial Gini index was included in our 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.

We 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 3 for provincial-level descriptive statistics.

Statistical Methods

We employed hierarchical linear models to assess the correlates of traditional-liberal and materialist-postmaterialist values at the individual and provincial levels. Our models specify individual respondents (level 1, $n = 10,151$) as nested within provinces (level 2, $n = 28$). All models include

Table 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 (yes = 1)		-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 (yes = 1)		0.266** (0.083)		0.309*** (0.075)
Urban (yes = 1)		-0.510*** (0.062)		0.149** (0.056)
Party membership (yes = 1)		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	41,195	33,280	37,500	30788
BIC value	41,231	33,393	37,536	30901

Notes: * = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$. Our sample includes 10,151 adult respondents in twenty-eight provinces, autonomous regions, and directly controlled municipalities.

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 accomplish two goals. First, they provide a more rigorous test of the postmaterialists' claims about the role of economic conditions, which, although they imply economic growth at the societal level, work at the individual level. Second, they allow us to test for contextual influences on values net of individual-level characteristics.

Besides these three fixed effects models, we also 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 we excluded them from the final models reported in Table 4.⁵

Findings

Materialism-Postmaterialism

We now turn to the findings from the statistical models. Table 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. We discuss this issue in more detail below.

When individual-level predictors are included in Model 1B, we find support for the postmaterialist 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 are 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 expectations derived from postmaterialist theory.

Consistent with postmaterialist theory, we 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 tend to 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, which challenges the notion that higher status positions tend to be associated with postmaterialism.

Model 1B also allows us 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 expectations derived from Inglehart's work, we find that respondents with a father in the working class or middle/upper class are no more postmaterialistic than are respondents with a peasant father.

Intriguingly, Model 1B suggests that rural residents are significantly more postmaterialistic than urban residents are. 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 although attending school for the same number of years as urban residents do. Our data do not allow us to test whether such factors are associated with rural residence, but we do know that rural residents are more disadvantaged economically than are 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 in 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 than urban residents do to fight the environmental crisis. We believe that is why, contrary to what postmaterialists would expect, rural residence, a low status, is associated with favorable attitudes toward postmaterialism in China. Context matters.

We also note that, while Inglehart assumes homologous affluence effects at the individual and contextual levels, our findings suggest that 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 that Inglehart tends to ignore.

Traditionalism-Liberalism

Table 4, Models 2A and 2B, display the results for the traditionalism-liberalism index. Here we find a different pattern of association. Many of the results are inconsistent with postmaterialist theory.

Consider Model 2A. 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 toward government, and more tolerant of cultural diversity—in short, more liberal. We 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 has been (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 workers see immigrants 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 likely to be associated with 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, our finding that inequality has a positive effect on liberalism is consistent with the view that, given its 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 are to support liberalism. Working class people support liberalism most strongly—more than middle/upper class people do. This finding represents yet 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 5 displays fitted values for our three focal variables—respondent's class, father's class, and the provincial Gini coefficient. Using Models 1B

and 2B, we calculated fitted values for each focal variable (Fox 2003). These fitted values were computed by letting the variable of interest vary through its range while holding all other variables in the models to their means.

Table 5 demonstrates that support for postmaterialism differs significantly by social class, net of other factors. Specifically, postmaterialism scores are about 3 percent higher in the working class than in the peasantry. Middle/upper class respondents scored about 6 percent higher on the postmaterialism scale than do respondents in the working class. However, for liberalism the story is different. Although liberalism is about 3 percent higher among the working class than among the peasantry, it is about 4 percent *lower* among the middle class than among 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 2 percent *less* supportive of postmaterialism than a person living in a low-inequality province ($Gini \leq 0.45$), a person living in a high-inequality context is, on average, 7 percent *more* supportive of liberalism than a person 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 5
Fitted Values of Final Models on Postmaterialism and Liberalism Indices

Dependent variable	Model 1B	Model 2B
	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

Discussion and Conclusions

Our 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 us from making conclusive arguments about how economic growth affects values, but our cross-sectional results suggest that the associations between status and the two value dimensions we have examined are more complex than postmaterialist theorists would have us believe.

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

As for liberalism, middle- and upper-class Chinese are not significantly more liberal than Chinese peasants. They enjoy better economic conditions but they are not less xenophobic, authoritarian or more desirous of democracy, although postmaterialist theory suggests that they should be. Similarly, members of the ethnic majority group enjoy better economic conditions than do 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. We also find evidence contradicting the 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 that inequality plays a more important role than does affluence in shaping people's attitudes (Alesina, Di Tella, and MacCulloch 2004; Andersen and Fetner 2008; Milligan 2012). Given our measurement of traditionalism-liberalism, our 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, especially, liberalism, 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 needs to the need for safety, the need for love and belonging, the need for esteem, and, 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 needs are met but lower-level needs do not have to be satisfied entirely before

higher-level needs emerge (Maslow 1943: 388–89). On 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 shape values accordingly. However, in Maslow's view—and this is a point Inglehart and his associates seem largely to have ignored—motivations generated by need-fulfilment are not the only determinants of behavior. As Maslow (1943: 371) emphasized, “the situation or the field in which the organism reacts must be taken into account” too. 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 our 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 proponents of postmaterialist theory.

We emphasize once again that, while consistent with our findings, our interpretation reaches beyond the evidence we have amassed. We need longitudinal data to test our hypotheses rigorously. At a minimum, however, we hope to have cast doubt on the judgment that higher individual social status necessarily has a positive effect on postmaterialism and especially liberalism in all social contexts.

Notes

1. “Traditional vs. liberal” is sometimes called “traditional vs. secular-rational” (Inglehart and Baker 2000; Bomhoff and Gu 2012) or “authoritarian vs. liberal” (Flanagan and Lee 2000; 2003). “Materialist vs. postmaterialist” (Flanagan 1980) is sometimes called “survival vs. self-expression” (Inglehart and Baker 2000).

2. For all but one item, we converted responses to a 1-to-10 scale according to the different levels of agreement (from “strongly disagree” to “strongly agree”). The question on “preference regarding government investment” asks, “Assuming the local government is going to invest/provide funding for some projects/programs, please tell us the top three ones you would support.” Response options include: (1) environmental protection, (2) medical services, (3) policing, (4) education, (5) gyms and stadiums, (6) retirement insurance, (7) fighting poverty, (8) reducing unemployment, (9) unemployment insurance, and (10) museums and the arts. Following earlier definitions of postmaterialism, we categorized responses (1), (4), (5) and (10) as postmaterialist. Respondents received 3 points if a postmaterialist item was ranked first, 2 points if a postmaterialist item was ranked second, and 1 point if a postmaterialist item was ranked third. Materialist items (options 2, 3, 6, 7, 8, and 9) received negative scores (–3 if ranked first, –2 if ranked second, and –1 if

ranked third). Summing the scores produced a measure of support for postmaterialism. After standardizing all six variables, we calculated mean values for the materialist-postmaterialist items and for the traditionalism-liberalism items.

3. The Han form the overwhelming majority at nearly 92 percent of the population. The Manchu constitute less than 1 percent of the population. Their socioeconomic position is higher than that of the Han.

4. For all covariates, we used multiple imputations ($n = 5$) to handle missing data (Allison 2002). For reporting hierarchical linear model results, the MI package in R was used to pool the results and produce estimates from imputed data sets.

5. We also used robust regression diagnostics (Andersen 2008) within and between provinces to explore for influential cases, multicollinearity, and heteroscedasticity. We did not detect any significant problems.

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