

Liberalism, Postmaterialism, and the Growth of Freedom

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An influential analysis by Przeworski and Limongi (1997) argued that a pro-democratic culture may help existing democracies survive, but political culture does not contribute to the process of democratization, which is entirely done by elites. We challenge this conclusion, arguing that it neglects the very nature of democratization. For (as Human Development theory argues), democratization is a liberating process that maximizes human freedom by establishing civil and political rights. Consequently, the aspect of political culture that is most relevant to democratization is mass aspirations for freedom – and if a given public emphasizes these values relatively strongly, democratization is likely to occur. To test this thesis, we use data from the Values Surveys, demonstrating that a specific component of postmaterialism ('liberty aspirations') had a major impact on the extent to which societies gained or lost freedom during the Third Wave of democratization. This effect holds up in tests of Granger causality, remaining strong when we control for prior levels of freedom. No other indicator, including GDP/capita and social capital, can explain away the impact of liberty aspirations on democratization. Mass liberty aspirations play a role in democratization that has been greatly underestimated.

Introduction

Since Schmitter and O'Donnell's (1986) 'Transitions from Authoritarian Rule', the study of democratization has become one of the most dynamic fields in comparative politics (for recent overviews of the literature, see Geddes, 1999; Bunce, 2000; Vanhanen, 2003). The thesis that economic development is conducive to democracy has been an established claim of modernization theory since it was propounded by Marx; this claim was given empirical support by Lipset, who demonstrated several decades ago that 'the more well-to-do a nation, the better the chance that it sustains

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democracy' (Lipset, 1959, p. 32). So far, however, only a handful of quantitative studies have dealt with the impact of economic development on *transitions* to democracy (see Hanan & Carrol, 1981; Burkhart & Lewis-Beck, 1994; Muller & Seligson, 1994; Inglehart, 1997, chapter 6; Przeworski & Limongi, 1997; Welzel, 2002). Most quantitative studies analyze *levels* of democracy at a given time or the number of years a society has spent under democratic rule.¹ These analyses leave it uncertain whether economic development only sustains existing democracies, or whether it also promotes the emergence of new democracies.

A highly influential analysis by Przeworski and Limongi (1997) focused on the *emergence* of democracies. Using a global sample, they classified political regimes as either democratic or autocratic and then identified all cases of regime change from autocracy to democracy between 1950 and 1990. Their major conclusion is that economic development may be conducive to the *survival* of existing democracies, but it has no impact on regime changes that *establish* democracies (pp. 176–177). The authors claim that this finding invalidates modernization theory, confirming the elite-focused approach of O'Donnell and Schmitter (1986) according to which democratization is 'an outcome of actions, not just conditions' (p. 176).

To reach this conclusion, Przeworski and Limongi compare regime changes from autocracy to democracy across seven categories of per capita income. They find that a regime change toward democracy is *not* more likely to occur in the richest category of countries than in the poorest category (p. 160)—which they interpret as disproving the claim that economic development is conducive to changes toward democracy.

Unfortunately, Przeworski and Limongi's analysis is invalidated by the fact that they fail to take into account the existence of huge variations in regime stability between rich and poor countries. Poor countries tend to be much more unstable than rich ones – so they have far more regime changes in *both* directions. Poor countries show relatively large numbers of shifts toward democracy simply because they are *unstable* – but these changes are more than offset by even larger numbers of shifts *away* from democracy.

It is crucial to control for this instability, in calculating the extent to which regime changes into one direction are offset by changes in the *opposite* direction, in order to reach any meaningful conclusion about the impact of economic development on the process of democratization. The relevant question is whether economic development produces more changes toward democracy than toward autocracy. Modernization theory implies that economic development does exactly this.

Using Przeworski's and Limongi's own data (p. 162, Table 2), we calculated the balance between shifts toward democracy and shifts toward autocracy—dividing the number of changes toward democracy by the number of changes toward autocracy. The larger this ratio is, the more heavily shifts toward democracy outweigh shifts toward autocracy. We calculated this ratio for each of Przeworski and Limongi's seven

Table 1 Economic Development and the Balance of Regime Changes between Autocracy and Democracy

Per-capita income in \$US ^a	Probability of switch from autocracy to democracy ^b in relation to probability of switch from democracy to autocracy ^c
Up to 1,000	0.10
1,001–2,000	0.24
2,001–3,000	0.64
3,001–4,000	1.50
4,001–5,000	3.13
5,001–6,000	6.25
6,001–7,000	11.75
Above 7,000	28.33

^aFrom Table 3 in Przeworski and Limongi (1997, p.162).

^bP_{AD} (Autocracy → Democracy) in Table 3 from Przeworski and Limongi (1997, p. 162).

^cP_{DA} (Democracy → Autocracy), same source.

income groups. The results of this exercise produce a dramatically different picture from the one they presented.

Table 1 and Figure 1 demonstrate that the balance of regime changes shifts monotonically in favor of democracy as levels of economic development rise. In countries with per capita incomes below \$1,000, changes toward democracy emerge only one-tenth as often as changes toward autocracy. But in countries with per capita incomes above \$7,000 changes toward democracy emerge 28 times as often as changes into autocracy. Each \$1,000 unit increase in per capita income roughly *doubles* the proportion of changes toward democracy.

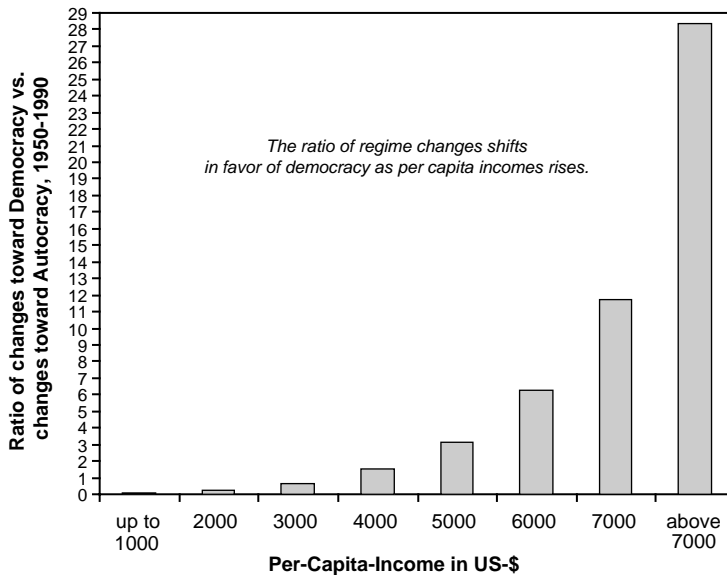


Figure 1 Economic Development and Regime Changes.

Taking the balance of regime changes into account reverses Przeworski and Limongi's conclusions: economic development *does* contribute to the emergence of democracy and it does so dramatically. Economic development acts on the regime selection process, introducing a strong bias in favor of democracy. Democratization reflects societal conditions, and not simply the choices of elite actors. As Geddes puts it (1999, p. 117):

Przeworski and Limongi interpret their findings as a challenge to modernization theory, although it seems to me a revisionist confirmation—in fact, the strongest empirical confirmation ever.

A more recent analysis by Boix and Stokes (2003) strongly supports this conclusion.

Przeworski and Limongi's finding gave rise to a widespread belief that a pro-democratic culture may help existing democracies to survive and flourish, as Putnam (1993), Inglehart (1997) and Gibson (2001) had argued – but that it does not contribute to the *process* of democratization. Curiously enough, although political culture plays a prominent role in quantitative discussions of democratic *consolidation and performance* (Diamond, 1992; Linz & Stepan, 1996; Hofferbert & Klingemann, 1999; Rose, 2001; Newton, 2002; Norris, 2003; Dalton, 2004), it is almost totally absent from quantitative analyses of democratic *change*, that is, progress toward or retrogression from democracy.

This article uses empirical data from societies around the world to demonstrate that political culture has a major impact on the dynamics of democratization. More specifically, one particular aspect of political culture – the presence of mass liberty aspirations – plays a major role in shaping the extent to which given societies democratized during the Third Wave of democratization, from the late 1980s to the early 1990s.

It is clear that economic development is only part of the story. Getting rich does not automatically make a country democratic – if it did, the oil exporting countries would be model democracies (see Ross, 2001). Instead, we argue that the impact of economic development on democracy works primarily through its tendency to give rise to cultural changes that place increasing emphasis on human emancipation and self-expression.

The choices of elites and international events, such as the end of the Cold War, are also unquestionably important: though a number of East European countries had already developed the mass-level preconditions for democratization by the 1980s, these mass preferences could have little impact as long as the threat of intervention by the Red Army was present. But as soon as that threat was withdrawn, societal factors that had seemed to be irrelevant up to that point, such as mass values, suddenly became crucial elements in deciding whether democracy would emerge.

This article will first examine why it was that political culture has largely been omitted from recent empirical analyses of democratization. We suggest that democratization can be interpreted as part of a broader process of human development, as Sen has argued; and that democratization's crucial contribution is

that it increases human freedom of choice by establishing civil and political liberties. Accordingly, growing mass emphasis on freedom of expression and political participation inherently give rise to pressures for democratization. In its historical origins, democracy was limited to a minority of the population and was primarily an elite attainment. But in the course of the twentieth century, democratization increasingly became a mass phenomenon, and the rise of mass emphasis on individual freedom played a major role in the Third Wave of democratization. Postmaterialist values are the best available indicator of these values – particularly if one focuses on those indicators of postmaterialism that explicitly refer to freedom of choice and freedom of expression, constructing an indicator of Postmaterialist Liberty Aspirations or liberty aspirations. Quantitative analysis of survey data from scores of countries demonstrates a strong impact of Postmaterialist Liberty Aspirations on the process of democratization, as measured by the growth (or decay) of civil and political freedom. We test the robustness of this finding against a number of alternative explanatory factors, controlling for previous levels of democracy and for per capita GDP and social capital. We find that human development theory provides a useful framework within which to interpret the process of democratization.

Theoretical Discussion

Modernization theory is the most often tested general theory of democratization (see Diamond, 1992; Boix & Stokes, 2003; Vanhanen, 2003). However, it is surprising how little attention has been paid to the major reason that modernization theorists thought explains *why* economic development is conducive to democracy. Lipset (1959), Dahl (1973) and others (see Huntington 1991, p. 69) were aware of the fact that economic development cannot by itself generate democracy. Simply being rich does not establish democratic institutions; this requires collective action. One obvious possibility is that economic development tends to bring democratization in so far as it reshapes prevailing public preferences. And modernization theorists from Lipset to Dahl argued that the reason why economic development favors democracy is that it tends to produce pro-democratic mass preferences, making prevailing value orientations incompatible with unquestioning obedience to authoritarian rule and favorable to democratic principles (Dahl, 1997). Modernization theorists did not attempt to test this assumption since appropriate cross-national survey data were not then available that would enable them to do so. Instead, social scientists have focused on analyzing the impact of economic development on democratization (among others Bollen & Jackman, 1985; Helliwell, 1992; Burkhart & Lewis-Beck, 1994; Przeworski & Limongi, 1997; Boix & Stokes, 2003). But although the impact of economic development on democracy had been tested and confirmed repeatedly, the reason *why* this effect exists, was largely forgotten.

One reason for this omission is that the elite-centered approach to democratization (O'Donnell & Schmitter, 1986), claims that democratization proceeds through strategic elite actions that are autonomous from public preferences (Schmitter & Karl,

1991; Higley & Gunther, 1992; Marks, 1992; Przeworski, 1992). Moreover, the assumption that political culture does not contribute to democratization, is consistent with habituation theory (Rustow, 1970), which argues that pro-democratic values can only emerge through learning by living under existing democratic mechanisms (Rohrschneider, 1994). And if a pro-democratic culture can only emerge under democratic institutions, it cannot lead to them (Miller & Jackman, 1998).

When examined more closely, these assumptions do not justify the elimination of political culture as an explanatory factor for democratization. As the elite-centered approach argues, it is indeed clear that democratization always includes strategic elite actions: the people who make crucial societal decisions are elites by definition (even if they were not elites a year earlier). But democratization also involves the mobilization of civil society, mass movements and public campaign activities, including petitions, boycotts, strikes and demonstrations (Diamond, 1992; Bernhard, 1993; Markof, 1996; Foweraker & Landman, 1997; Paxton, 2001; Gibson, 2001). Even if large mass mobilization is absent, there are usually clear clues about mass preferences. These clues are strategically important – providing elites an assessment of their social strength (Casper & Taylor, 1996). Thus, there is reason to assume that mass priorities become relevant in transitions toward or away from democracy. For mass priorities provide a source of public pressure that can favor democratization.

Contrary to the claims of habituation theory, a large body of empirical evidence demonstrates that people do *not* learn to value democracy only if they have lived under democratic institutions. Even in the most authoritarian systems, people can – and do – come to place increasing emphasis on political self-expression and participation. If this never happened, no democracy would have ever come into existence (Huntington, 1991). And data from the Values Surveys demonstrates that an intergenerational shift toward increasingly pro-democratic attitudes gradually emerged among Eastern European and East Asian publics, even though they were living in authoritarian societies.² For rising levels of economic development, and the emergence of the knowledge society, gives people a greater sense of existential autonomy and more decision-making freedom in their daily lives, so that people experience themselves as autonomous agents and place increasing emphasis on political freedom and self-expression – even in highly authoritarian societies (Inglehart & Welzel, 2005). Emerging liberty aspirations inherently tend to bring mass support for democratic principles. Economic development brings significant differences between societies in pro-democratic values – and these differences play a role in democratization.

Both Muller and Seligson (1994) and Inglehart (1997, chapter 6) used aggregate level measures of people's life satisfaction, interpersonal trust and political moderation from the World Values Surveys, to test whether there was a positive linkage between pro-democratic values, and *levels* of democracy and the longevity of democracy. Civic culture and social capital theories (Almond & Verba, 1963; Putnam, 1993; Gibson, 2001) imply that these orientations help existing democratic

institutions to flourish. But it was not claimed that these specific mass orientations caused democracy to emerge. There is no obvious reason why high levels of satisfaction, trust and moderation should create an impetus for democracy, within undemocratic regimes; they might even be conducive to the stability of authoritarian regimes. For these mass orientations are not intrinsically focused on the core elements of democracy, such as freedom of choice, self-determination and political participation.

But certain mass orientations *are* intrinsically focused on the core ideals of democracy – and they play a key role in the process of democratization. Most quantitative studies of democratization have used the Freedom House scores, equating progress in democratization with the growth of civil and political freedom. This is reasonable since freedom is a central element in many definitions of democracy (Dahl & Lindblom, 1953, pp. 277–278; Rose 1995, p. 458; Foweraker & Landman, 1997, pp. 228–230). Nonetheless, civil and political freedom does not rank equally high in all definitions of democracy. If one believes that simply holding elections for high office constitutes democracy, these freedoms are not important. But more demanding definitions of democracy dismiss ‘illiberal democracies’ as shams, precisely because they do not offer genuine freedom of choice. Civil and political freedom is a crucial element of ‘liberal’ democracy (Bollen & Paxton, 2000), the form of democracy that is most relevant to human development (Sen, 1999, p. 156). For liberal democracy is a manifestation of human freedom: It empowers ordinary people with civil and political rights. A theory of democratization that focuses on human development – that is the growth (or shrinkage) of human freedom – makes it evident that mass liberty aspirations should have a powerful effect on democratization.

Hypotheses and Analytical Design

Mass liberty aspirations give rise to public pressure for growing freedom – and to public resistance against the curtailment of freedom. Widespread emphasis on liberty in an illiberal regime, increases the pool of potential regime opponents, developing nascent civil societal groups who coordinate a liberation movement. At the same time, widespread liberty aspirations increase the mass support that such movements can mobilize in campaigns against an illiberal regime. Thus, when an illiberal regime is challenged, relatively widespread liberty aspirations provide public pressure for freedom. But liberty aspirations also motivate people to defend civil and political freedom where the initial level of freedom is high. Thus, liberty aspirations not only increase the gains of freedom in illiberal regimes – they should also reduce the losses of freedom that might occur in already liberal regimes.

Changes toward less or more freedom are a matter of degree. Accordingly, we hypothesize that variations in mass liberty aspirations are reflected in corresponding gradations of regime change in freedom. Relatively strong mass emphasis on liberty

aspirations tends to bring a growth of civil and political freedom, and inhibits a decline of freedom.

But freedom can only grow or shrink in relation to its previous extent. Thus, the impact of liberty aspirations on freedom can only be examined when one controls for prior levels of freedom. We hypothesize that mass liberty aspirations will have a uniformly positive effect on subsequent levels of civil and political freedom, when one controls for the prior level of freedom.

Analytical Design

As Huntington (1991) has demonstrated, regime changes toward more or less freedom tend to cluster in coherent ‘waves’, sweeping through many countries at the same time. Our analysis will examine the changes that occurred during the most recent major wave of democratization. This makes it possible to analyze any given explanatory factor’s impact on freedom, while controlling for the each society’s level of freedom *before* this wave. Doing so enables one to analyze a factor’s dynamic impact, explaining *changes* in levels of freedom. Since stability is simply the inverse of change, this is also an analysis of stability in freedom.

Focusing one’s analysis on a particular wave of regime changes makes it possible to take the impact of international events into account. In so far as regime changes reflect uniform trends that affect different countries in similar ways, the changes can not be attributed to the effects of societal conditions within the given societies. Conversely, if different societies respond to the same events in different ways, the differences probably reflect different internal conditions.

We will first identify the timing of a major wave of democratization – that is, of changes in levels of civil and political freedom. We will then measure the differences between levels of freedom before this wave (i.e., pre-transition freedom) and levels of freedom after this wave (i.e., post-transition freedom). This will enable us to analyze whether mass liberty aspirations had a significant effect on post-transition freedom, controlling for pre-transition freedom. Needless to say, mass liberty aspirations should be measured before post-transition freedom and after pre-transition freedom.

As recent analyses by Kurzman (1998) and Dorenspleet (2000) have shown, a massive wave of regime changes occurred in the late 1980s and early 1990s, manifesting a Great Transition in the world of political regimes. This wave occurred later, and was more concentrated than the timing that Huntington originally established for the Third Wave, as Figure 2 demonstrates.

For every 2-year interval since 1973, Figure 2 plots the number of nations in the world that experienced substantial losses or gains in freedom.³ The plot makes it clear that prior to 1988, there was no clear global trend; but from 1989 to 1997, a Great Transition took place in which regime changes toward more freedom massively outnumbered regime changes in the opposite direction. Our analyses are based on this historical watershed: we analyze whether mass liberty aspirations, measured

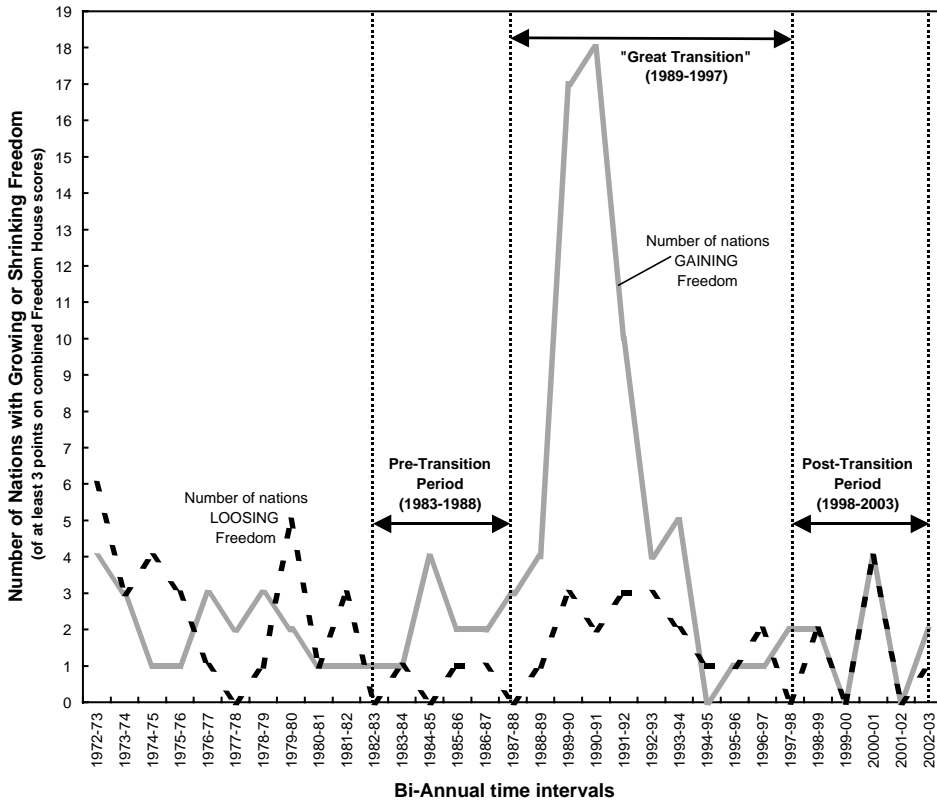


Figure 2 The Great Transition.

during the Great Transition, had an effect on post-transition freedom – *controlling* for pre-transition levels of freedom.

Data and Measurement

Change and Stability in Levels of Freedom

To measure a regime’s level of freedom, we summed up each society’s scores for civil rights and political rights, using the figures provided annually by Freedom House (Freedom House, 2002).⁴ Using this composite index, we contrast levels of freedom before and after the Great Transition shown in Figure 2. As this figure indicates, the most massive wave of changes in civil and political freedom started around 1989 and ended around 1997. Hence, we analyze the post-transition levels of freedom sustained after 1997, controlling for the pre-transition levels of freedom that were present before 1989. To minimize the impact of measurement error, we take the sum of each society’s freedom levels over 6-year periods before and after the Great Transition. Thus, we analyze the levels of freedom that a society sustained over the 6-year period

after 1997 (from 1998 to 2003), *controlling for* the freedom levels that were present during the 6-year period before 1989 (from 1983 to 1988).

Liberal Postmaterialism or Liberty Aspirations

Civil and political freedom entitles people to public self-expression and participation, allowing them to voice their opinions and giving them a say in decisions that affect their lives (Sen, 1999; Rose, 2000). Mass emphasis on such liberties have been measured for several decades by Inglehart (1977, 1990, 1997), who used them to create indices of postmaterialist values. But 'postmaterialism' includes a broader range of values than liberty values, including idealist goals, such as living in an unpolluted environment or living in a more humane society. It has been demonstrated that both types of goals do indeed tap an underlying postmaterialist dimension (and that postmaterialism itself is a component of a still broader dimension of self-expression values) but for present purposes, it makes sense to focus on the items that explicitly refer to civil and political liberties.

Thus, although the full blown postmaterialism scale combines three liberty goals (items 1-3, 2-2 and 2-4 in the lists below) with three idealist goals (items 1-2, 3-2 and 3-3), we will create an index of postmaterialist liberty aspirations using only the three liberty items. This combination is close to Inglehart's four-item index of postmaterialism but is not identical to it because the four-item version only includes the two liberty items from the second list (2-2, 2-4) and not the one from the first list (1-3),⁵ which makes a considerable difference (as we will see).

List 1

- 1-1 A high level of economic growth
- 1-2 Making sure this country has strong defense forces
- 1-3 Seeing that people have more say about how things are done at their jobs and in their communities
- 1-4 Trying to make our cities and countryside more beautiful

List 2

- 2-1 Maintaining order in the nation
- 2-2 Giving people more say in important government decisions
- 2-3 Fighting rising prices
- 2-4 Protecting freedom of speech

List 3

- 3-1 A stable economy
- 3-2 Progress toward a less impersonal and more humane society

3-3 Progress toward a society in which Ideas count more than money

3-4 The fight against crime

In order to create a measure of postmaterialist liberty aspirations, we sum up the scores on the three liberty items, using the data from the Values Surveys, in order to obtain the broadest possible cross-national coverage of mass attitudes.⁶ Each respondent assigned a priority to each of the three liberty items, ranging from first, to second, to no priority; this makes it possible to create a six-point index, on which '0' indicates the lowest and '5' the highest priority, placed on liberty.⁷ When we calculate national averages, this ordinal index becomes a continuous scale, yielding fractions from 0 to 5. The distributions of all national samples show single-peaked distributions, centered on the national means, with no bimodal distributions on this index of postmaterialist liberty aspirations. Hence, the national averages provide reasonable indications of a public's central tendency in emphasizing liberty.

Our major hypothesis is that relatively strong liberty aspirations promote *progress* toward freedom in *illiberal* regimes, and help to resist the *decline* of freedom in *liberal* regimes. If this is true, one should find a uniformly positive impact of mass liberty aspirations on post-transition levels of freedom, controlling for pre-transition levels of freedom.

In order to analyze the causal impact of mass liberty aspirations on post-transition levels of freedom, we measure liberty aspirations at a time *before* the post-transition levels of freedom (which are measured during 1998–2003). Accordingly, we use measures of postmaterialism from the second and third World Values Surveys conducted in 1989–91 and in 1995–97, respectively. Whenever available (which applies to 41 societies), we used the earlier measure from 1989 to 1991 in order to locate liberty aspirations as close as possible to the pre-transition measure of freedom and as far as possible from the post-transition measure of freedom. Otherwise, we used the 1995–97 measures of liberty aspirations, which applies to 20 societies.⁸ The measures from the two waves correlate at $r = 0.91$ ($N = 30$), indicating that Postmaterialist Liberty Aspirations did not change drastically from the early to the mid-1990s. The average date of survey is 1992, and in every case, the survey data are measured before 1998–2003 – the post-transition level of freedom that they are hypothesized to affect.

Empirical Analyses

Zero-Order Correlations

Table 2 displays the zero-order correlations between post-transition levels of freedom during 1998–2003, and various measures of postmaterialism taken in 1989–1997. It is evident that the liberal and idealist components of postmaterialism have different implications, with Postmaterialist Liberty Aspirations showing a stronger linkage with civil and political freedom than idealist postmaterialism. Thus our distinction

Table 2 Aggregate Correlations between Different Versions of Postmaterialism and Subsequent Measures of Civil and Political Freedom

	Civil freedom 1998–2003	Political freedom 1998–2003	Civil and political freedom 1998–2003
Idealist postmaterialism 1989–97	0.39**	0.39**	0.39**
Postmaterialist liberty aspirations (two items) 1989–97	0.64***	0.60***	0.63***
Postmaterialist liberty aspirations (three items) 1989–97	0.74***	0.70***	0.73***

Note: Entries are Pearson correlations (r). Survey data from first available survey of WVS II–III.

Number of nations (N): 61.

Significance levels: * $P < 0.10$; ** $P < 0.01$; *** $P < 0.001$.

between these two components is both conceptually and empirically justified. Moreover, it makes a difference whether the postmaterialist liberty aspirations index is based on two items or three. The three-item index produces correlations ranging from $r = 0.70$ to $r = 0.74$ (the two-item version correlates only at 0.60–0.64). For these reasons, the subsequent analysis concentrates on the three-item measure of postmaterialist liberty aspirations.

The correlations between postmaterialist liberty aspirations and subsequent levels of democracy are strong, but what is causing what? The linkage between mass liberty aspirations and post-transition levels of freedom in Figure 3 could be explained in two contrasting ways: (1) relatively high levels of liberty aspirations could have helped to bring higher levels of freedom, and to preserve high levels of freedom where these levels have already been high during the pre-transition period; or (2) relatively strong liberty aspirations are themselves produced by prior freedom, so that the apparent impact of mass values on post-transition freedom simply reflects the fact that freedom is autocorrelated over time.

Which of these two alternatives is true can be tested by controlling for pre-transition levels of freedom. Doing so assures two things: (1) one explains post-transition freedom only insofar as it is unexplained by pre-transition freedom; and (2) liberty aspirations explain post-transition freedom only insofar as they themselves are not explained by pre-transition freedom. In so far as the effect of mass liberty aspirations on post-transition freedom holds when we control for pre-transition levels of freedom, it passes the test of ‘Granger causality’.⁹

As Figure 4 indicates, mass liberty aspirations measured over 1989–97 *do* show a significantly positive impact on post-transition freedom over 1998–2003, when we control for pre-transition freedom over 1983–88. The impact of postmaterialist liberty aspirations holds when we controls for a society’s prior level of freedom, which means that it is not simply an artifact of freedom’s autocorrelation over time; these mass values seem to have a significant causal impact according to the standards of Granger causality. Moreover, let us note that this sample includes both societies that

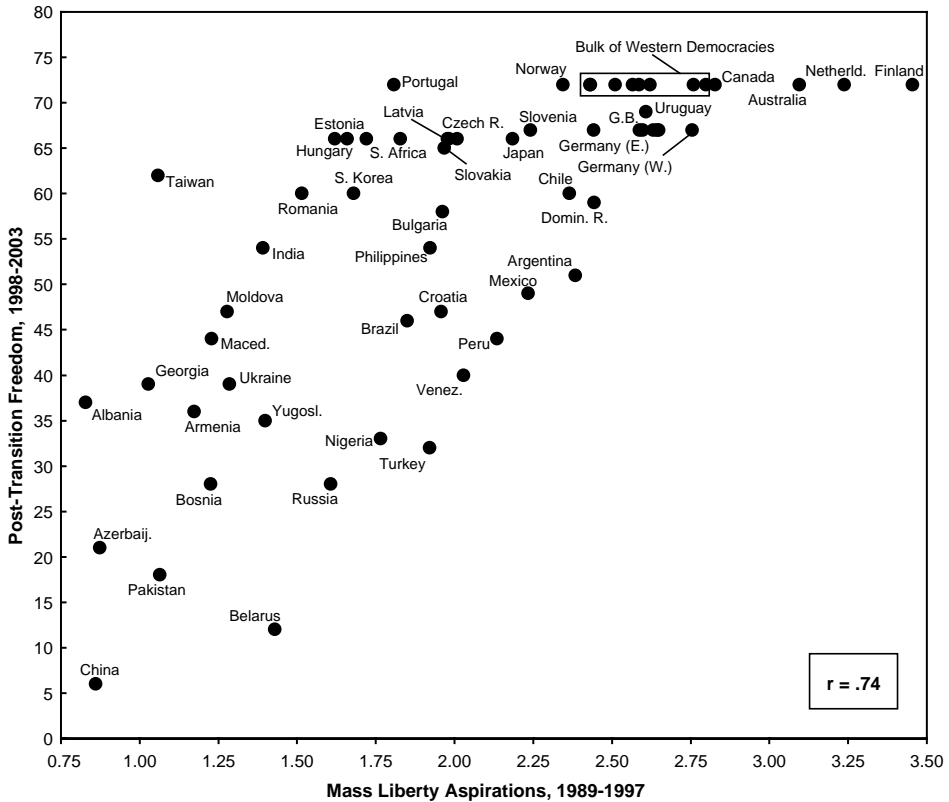


Figure 3 The Linkage between Postmaterialist Liberty Aspirations and Freedom.

had high pre-transition levels of freedom (such as Great Britain, Spain and Argentina) and societies that had low pre-transition levels of freedom (such as Chile, South Africa, Taiwan or Poland). Despite this variety in levels of pre-transition freedom, the effect of liberty aspirations on post-transition freedom is uniformly positive. This means that mass liberty aspirations *both* promoted rising levels of freedom in authoritarian societies *and* helped reduce the erosion of freedom in democratic societies. By controlling for pre-transition levels of freedom, we have eliminated the possibility that the impact of liberty aspirations on post-transition freedom simply reflects the effect of pre-transition freedom.

Regression Results

There are still a number of possible reasons why our finding might be spurious, and we should test for them. The first reason is a methodological one: in regression analyses one's results could prove to be inconclusive if they violate the linearity assumptions involved in ordinary least-squares regression. Hence we will check sensitivity measures concerning problems of heteroskedasticity, collinearity and

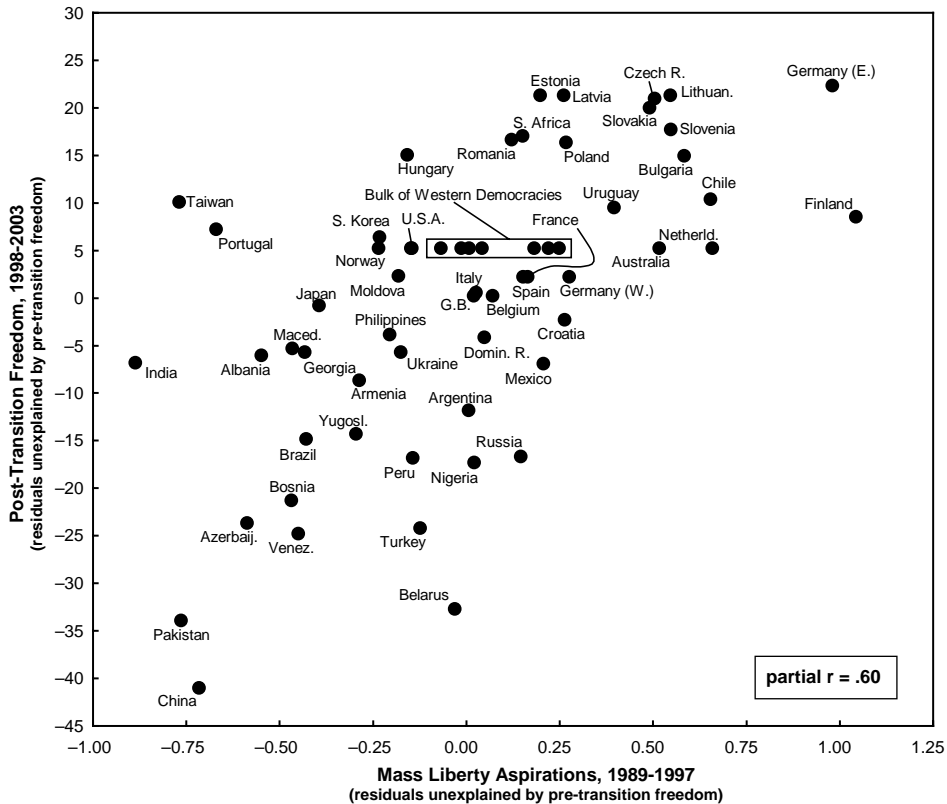


Figure 4 The Partial Effect of Postmaterialist Liberty Aspirations on Freedom.

influential cases. A second possibility involves variable selection: Are our results robust if we examine civil rights and political rights separately – or if we use completely different indicators of democracy? A third possibility involves case selection: Do our results hold up when we exclude societies whose pre-transition level of freedom already were high? And do they hold up when we exclude societies whose liberty aspirations were measured close to the post-transition period in 1995–1997, or when we use weights to correct the World Values Survey sample in ways that makes its representation of liberal and illiberal regimes similar to that in the world as a whole?

Another and more substantive question is whether our results hold up when we take into account other factors that the democratization literature suggests are important. For example, do our results hold when we include per capita GDP or measures of social capital as additional predictors of post-transition freedom? The following regression analyses test these possibilities.

Sensitivity checks of Model 2-1 (see Table 3 below) show the following results. The White-test for heteroskedasticity yields a chi-square measure of 8.54, which is inot significant even at the 0.05-level. This implies that no serious problems of

Table 3 Testing the Effect of Postmaterialist Liberty Aspirations on Democratization against *Different Measures of Democracy*

	Model 2-1 DV: Civil and political freedom 1998–2003	Model 2-2 DV: Civil freedom 1998–2003	Model 2-3 DV: Political freedom 1998–2003	Model 2-4 DV: Electoral democracy 2001 (Vanhanen)	Model 2-5 DV: Constitutional democracy 1997–2001 (Polity IV)
Pre-transition level of DV 1983–1988	–0.03 (–0.24)	0.06 (0.53)	–0.09 (–0.65)	0.18 (1.16)	0.14 (0.75)
Postmaterialist liberty aspirations (three items) 1989–1997	0.76*** (5.70)	0.71*** (5.31)	0.77*** (5.80)	0.53*** (3.43)	0.53** (2.91)
Adjusted R^2	0.53	0.54	0.49	0.45	0.37
Number of nations	61	61	61	59	40

Entries are standardized regression coefficients (β) with T -ratios in parentheses. Survey data from earliest available survey of WVS II–III.
Significance levels: * $P < 0.10$; ** $P < 0.01$; *** $P < 0.001$.

heteroskedasticity cause underestimated standard errors of the effects in Model 2-1. Likewise, a collinearity measure – the variance inflation factor – yields a value of 2.26, which is below the critical threshold of 4.0. There do not seem to be problems of collinearity in Model 2-1. Finally, a measure to control for particularly influential cases, bounded influence estimation (see Model 4-2 below), demonstrates that our results are not distorted by influential cases. In summary, our results do not seem to be seriously distorted by violations of basic OLS-assumptions.

Models 2-2 to 2-5 are variations of Model 2-1 that use different indicators of democracy as the dependent and lagged dependent variable, respectively. In particular, we examine the two component measures of civil and political freedom, Freedom House’s civil rights measure (Model 2-2) and its political rights measure (Model 2-3). In addition, we employ two entirely different measures of democracy: Vanhanen’s (2003) measure of electoral democracy¹⁰ and the constitutional democracy indicator produced by the Polity IV project.¹¹ The results indicate that using alternative indicators makes hardly any difference. Using alternative measures of democracy slightly reduces the impact of mass liberty aspirations on post-transition democracy, but this is to be expected, since liberty aspirations focus specifically on civil and political freedom – which the Freedom House measures are specifically designed to measure. Nevertheless, even when we use alternative measures of democratization, our basic result holds up: Mass liberty aspirations have a significant positive impact on post-transition levels of democracy, controlling for pre-transition levels of democracy.

The models in Table 4 vary the timing of the years over which pre-transition levels and post-transition levels of freedom are measured, testing whether the effect we

Table 4 The Impact of Postmaterialist Liberty Aspirations on Changing Levels of Civil and Political Freedom, Controlling for Variations in the Timing of the Dependent and the Lagged Dependent Variable

	Variations in the timing of the lagged dependent variable (DV is level of civil and political freedom over 1998–2003)			Variations in the timing of the dependent variable (Lagged DV is level of civil and political freedom over 1983–88)		
	Model 3-1 Lagged DV in 1983–84	Model 3-2 Lagged DV in 1985–86	Model 3-3 Lagged DV in 1987–88	Model 3-4 DV in 1998–99	Model 3-5 DV in 2000–01	Model 3-6 DV in 2002–03
Postmaterialist liberty aspirations (three items) 1989–1997	0.73*** (5.35)	0.71*** (5.20)	0.72*** (5.49)	0.68*** (4.78)	0.72*** (5.27)	0.73*** (5.44)

Entries are standardized regression coefficients (β) with *T*-ratios in parentheses. Number of nations (*N*) is 61. All models run under control of the lagged dependent variable. Effects of the lagged dependent variable not displayed. Survey data from earliest available survey of WVS II–III.

Significance levels: **P* < 0.10; ***P* < 0.01; ****P* < 0.001.

found is an artifact of using specific time periods. As Figure 2 demonstrates, the time periods we used to measure levels of freedom before and after the Great Transition are by no means arbitrary – they are located immediately before and after the Transition; and our measure of liberty aspirations is located precisely within the Transition. It might conceivably make a difference if one focuses on slightly different measures of freedom before and after the Transition – but, as Table 4 demonstrates, this is not the case. If anything, it seems that liberty aspirations have a slightly stronger impact on somewhat later measures of post-transition freedom, implying that the shadow of these values falls slightly farther into the future than the year immediately following their measurement.

The models in Table 5 manipulate the composition of the sample, testing whether our finding holds for different subgroups of cases or when particular groups of cases are assigned different weights. Model 4-1 excludes cases that already had high levels of freedom before the Great Transition. This controls for the possibility that our finding only reflects an effect on consolidation, meaning that liberty aspirations only helped to stabilize freedom where its initial level was already high. But even when we exclude these cases, mass liberty aspirations still show a significantly positive effect on post-transition freedom controlling for pre-transition freedom. This means that liberty aspirations helped to increase freedom even where its initial level was low.

Is it possible that some of our measures of liberty aspirations are temporally so close to our measure of post-transition freedom that the ‘causes must precede effects’ rule is not sufficiently satisfied? To test this possibility, Model 4-2 includes only those societies in which liberty aspirations were measured in 1989–1991 – seven to nine years before our measure of post-transition freedom. Again, the effect of mass liberty aspirations on freedom remains significantly positive.

Table 5 The Impact of Postmaterialist Liberty Aspirations on Changes in Civil and Political Freedom, Controlling for the Impact of Different *Case Selections*

	Dependent variable: Post-transition level of civil and political freedom 1998–2003			
	Model 4-1 Sample split: societies with high pre- transition levels of freedom excluded	Model 4-2 Sample split: only societies whose liberty aspirations are measured in 1989–91	Model 4-3 Bounded influence estimation: using weights for influential cases	Model 4-4 Weighted analysis: using weights correcting WVS sampling bias in levels of freedom
Pre-transition Level of DV 1983–1988	–0.22 (–1.52)	0.04 (0.23)	–0.06 (–0.44)	0.08 (0.67)
Postmaterialist liberty aspirations (three items) 1989–1997	0.75*** (5.12)	0.63*** (3.84)	0.78*** (5.93)	0.76*** (5.09)
Adjusted R^2	0.40	0.40	0.54	0.67
Number of nations	40	41	61	61

Entries are standardized regression coefficients (β) with T -ratios in parentheses. Survey data from earliest available survey of WVS II–III.

Significance levels: * $P < 0.10$; ** $P < 0.01$; *** $P < 0.001$.

Models 4-3 and 4-4 assign different weights to particular types of societies. Model 4-3 is based on a sensitivity analysis indicating influential cases using the DFFITs statistics. Looking for cases whose DFFITs surpass a threshold of 0.45^{12} , reveals four influential cases (DFFITs in brackets): Belarus (0.60), China (0.69), Finland (0.47), Portugal (0.53) and Taiwan (0.67). To correct for distortions caused by influential cases in small samples, Welsch (1980) developed bounded influence estimation, which downweights influential cases to the extent to which their DFFITs exceed the threshold.¹³ Using these weights in a weighted least-squares regression, yields the results of Model 4-3. Since this model shows hardly any difference from Model 2-1, we can conclude that our finding is not caused by the distortions of particular influential cases.

The World Values Survey sample is not a random sample of the global universe of nations. It is much more difficult to carry out representative national surveys in authoritarian societies than in liberal democracies. Thus, the sample underrepresents (but does not exclude) societies that had a low level of freedom throughout the pre-transition and post-transition periods. To correct for sampling bias, we calculated 16 possible combinations of pre- and post-transition levels of freedom. Then we compared the representation of these combinations in the global universe and the sample. Finally we calculated weights that make the representation of these combinations in the sample identical to that in the universe.¹⁴ Based on these weights we estimated the weighted least-squares regression shown in Model 4-4. The results differ only slightly from the results in Model 2-1 – and insofar as they differ,

they make the effect of mass liberty aspirations even *stronger*. Our findings do not seem to be an artifact of the sampling bias of the World Values Survey.

Finally, let us examine the most substantive possible shortcoming of our analysis. So far, we have not examined the impact of important factors discussed in the democratization literature. Do our results hold when we control for the effects of other important factors such as a society's objective characteristics and cultural factors? Although we have argued that objective factors can not bring freedom by themselves (without intervening motivational factors), we include them since they have received so much attention in the literature (for an overview, see Gasiorowski & Power 1998). A major factor emphasized by modernization theory is per capita GDP, the most widely used indicator of economic development. Model 5-1 adds this factor to the equation.¹⁵ Income inequality and group fragmentation are widely considered to be detrimental to democracy. We include these factors in Models 5-2- and 5-3, using the Gini coefficient of income inequality and the Alesina index of ethnic fractionalization.¹⁶ Still another factor that has been widely discussed is a society's religious tradition. A number of authors have argued that high levels of freedom are linked with a Protestant cultural heritage. To control for this possibility we introduce in Model 5-4 the percentage of Protestants in a society. Finally, diffusion theories hold that democracy spreads in regional chain reactions, so that freedom in one country reflects the level of freedom in other nearby countries. To control for this possibility we assign each country its regional average on the dependent variable and use this as an additional independent variable in Model 5-5.¹⁷

The results in Table 6 are straightforward. Regardless of which structural factor we include, the effect of mass liberty aspirations on post-transition freedom remains significantly positive. None of the structural factors discussed in the democratization literature has an impact equivalent to that of liberty aspirations. Indeed, only per capita GDP and regional diffusion show significant effects, adding 5 per cent (GDP/capita) and 9 per cent (regional diffusion) to what liberty aspirations alone explain. This makes sense: With a given level of liberty aspirations, additional economic resources give people additional means that they can invest in striving for freedom; and higher levels of freedom in a given region, make this cause more salient.

Another type of factor that has been emphasized in the democratization literature by Putnam (1993), Inglehart (1997), Hofferbert and Klingemann (1999), Gibson (2000), Newton (2000), Rose (2000), Norris (2003) and Dalton (2004) includes subjective cultural factors, most of which refer to the concept of 'social capital' or a 'civic culture'. These factors include generalized interpersonal trust, tolerance of outsider groups, active membership in voluntary associations, political trust and overt support for democracy, rather than autocracy. Interestingly enough, liberty aspirations have been almost entirely ignored in this literature—which makes it all the more interesting to see how they perform when controlling for the chief indicators emphasized thus far in the political culture literature.

Table 6 The Impact of Postmaterialist Liberty Aspirations on Changes in Civil and Political Freedom Controlling for Socio-Structural Factors

	Dependent variable: Post-transition level of civil and political freedom 1998–2003				
	Model 5-1	Model 5-2	Model 5-3	Model 5-4	Model 5-5
Pre-transition level of DV 1983–1988	−0.17 (−1.24)	−0.02 (−0.13)	−0.18 (−1.08)	−0.04 (−0.31)	−0.12 (−0.97)
Postmaterialist liberty aspirations (three items) 1989–97	0.57*** (3.99)	0.69*** (4.82)	0.84*** (5.02)	0.68*** (4.82)	0.61*** (4.82)
Gross Domestic Product/capita 1995	0.39** (2.88)				
Ethnic fractionalization index 1990s (Alesina)		−0.16 (−1.66)			
Gini-coefficient for income inequality 1995			−0.14 (−1.32)		
Percent protestants around late 1980s				0.16 (1.56)	
Region average of dependent variable					0.38*** (3.85)
Adjusted R^2	0.57	0.52	0.52	0.45	0.61
Number of Nations	61	59	43	61	61

Entries are standardized regression coefficients (β) with T -ratios in parentheses. Significance levels: * $P < 0.10$; ** $P < 0.01$; *** $P < 0.001$.

As Table 7 demonstrates, when we take liberty aspirations into account, *none* of the major political culture indicators that figure larger in the democratization literature – whether trust, tolerance or system support – appears to have a significant impact on post-transition freedom, controlling pre-transition levels of freedom. This finding is not an artifact of unusual variable specifications. For example, as far as tolerance of outgroups,¹⁸ political trust,¹⁹ association activity²⁰ and regime support²¹ are concerned, we experimented with various specifications but none worked better than the ones used here.²² This might seem to be particularly surprising in the case of overt support for democracy, because it explicitly measures the extent to which people say favorable things about democracy: the linkage with democracy seems so obvious that it is often assumed to be self-evident that overt support for democracy is the ultimate measure of a democratic political culture. When examined more closely, this assumption does not hold up, however. Overt support for democracy can be expressed for a variety of motives, which do not necessarily reflect intrinsic support for the values that are crucial to democracy (Inglehart & Welzel 2003). Indeed, overt support for democracy is often more widespread in authoritarian societies than in established democracies: it can reflect a shallow lip service to a fashionable word. Liberty aspirations, by contrast, reflect intrinsic support for the core values of democracy. And precisely because they do not make any explicit reference to the term democracy itself, they are not inflated by social desirability effects. It should be noted

Table 7 The Impact of Postmaterialist Liberty Aspirations on Change in Civil and Political Freedom Controlling for Socio-Cultural Factors

	Dependent variable: Post-transition level of civil and political freedom 1998–2003				
	Model 6-1	Model 6-2	Model 6-3	Model 6-4	Model 6-5
Pre-transition level of DV 1983–1988	–0.05 (–0.32)	–0.03 (–0.21)	0.02 (0.12)	–0.05 (–0.35)	–0.12 (–0.82)
Postmaterialist liberty aspirations (three items) 1989–97	0.72*** (5.27)	0.71*** (4.69)	0.70*** (5.01)	0.75*** (5.55)	0.79*** (5.79)
Interpersonal trust 1989–97	0.09 (0.89)				
Tolerance of potential outsiders 1989–97		0.05 (0.40)			
Voluntary activity in associations 1989–97			–9.09 (–0.98)		
Political trust 1989–97				0.11 (1.18)	
Preference for democracy mid 1995–97					0.09 (0.90)
Adjusted R^2	0.51	0.50	0.49	0.52	0.53
Number of nations	61	61	60	61	60

Entries are standardized regression coefficients (β) with T -ratios in parentheses. Survey data from earliest available survey of WVS II–III.

Significance levels: * $P < 0.10$; ** $P < 0.01$; *** $P < 0.001$.

that most of the political culture indicators used here show significant zero-order correlations with post-transition freedom. However, the fact that these correlations break down when we control for liberty aspirations, demonstrates that these alternative political culture indicators are relevant to civil and political freedom only insofar as they are linked with liberty aspirations. Figure 5 illustrates this point, showing that a cultural indicator's linkage with civil and political freedom is a linear function of its linkage with liberty aspirations. These other aspects of political culture may be conducive to democracy once it is established; but they do not seem to play a major role in the transition to democracy.

Conclusion and Discussion

This article demonstrates something new: that a specific component of postmaterialist values – liberty aspirations – has a strong and significant positive impact on post-transition freedom, controlling for pre-transition freedom. In other words, these mass values have a significant causal impact on democratization. This finding proves to be robust in the face of various methodological and substantive re-specifications. Mass liberty aspirations have been neglected in the previous literature, but they seem to play a major role in democratization. Relatively stronger liberty aspirations

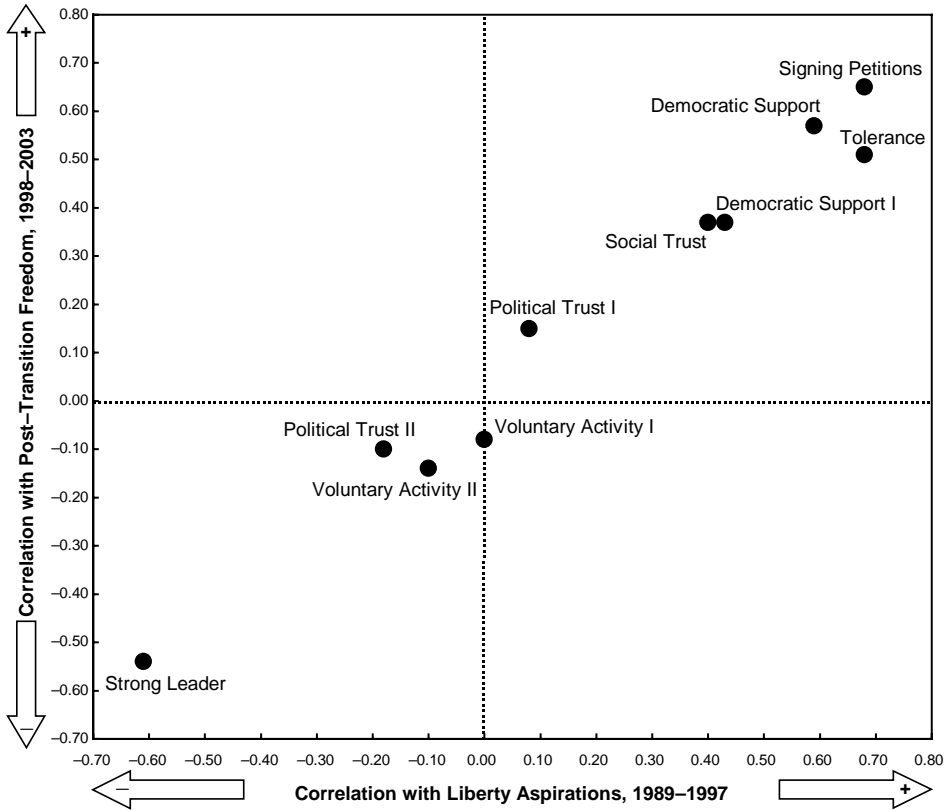


Figure 5 Correlations with Freedom as a Function of correlations with Postmaterialist Liberty Aspirations.

enhance people’s motivation to support, demand and campaign for freedom. This helps both to defend democracy against authoritarian challengers, and to establish democratic regimes in authoritarian societies.

Some important qualifications are needed. Mass liberty aspirations operate as a social force that tends to channel collective actions in directions that make democratic outcomes more likely. But mass liberty aspirations alone do not determine collective actions, especially not strategic elite actions. Changes in civil and political freedom are always decided by elite actions; important decisions are, by definition, made by elites, so elites are always the proximate cause of democratization. The central question is: To what extent are the elites independent from mass pressures? The extent to which elite actions are independent from mass demands is reflected in the residuals of our models, which indicate how much of the variance in freedom is unexplained by mass factors. If we attribute all the unexplained variance to elite-level actions, elite actions account for about 45 per cent in the societies’ changes in civil and political freedom. This is substantial. But, contrary to the claims

of elite-centered theories, elites are by no means unconstrained by mass-level pressures – which explain over half of the variance in the process of democratization.

Another qualification of our finding is needed. Mass liberty aspirations help determine the extent to which a society achieves civil and political freedom. But they do not determine precisely *when* the changes take place. The data in Figure 2 make it clear that international factors play a decisive role in the timing of democratization. Relatively high levels of liberty aspirations, similar to those measured over 1989–1997, may well have existed earlier but did not bring democratization. International factors, such as the nullification of the Brezhnev doctrine, had to occur before these aspirations could have an impact: as long as the Red Army was poised to prevent liberalization in Central and Eastern Europe, underlying societal factors were thwarted. Thus, mass liberty aspirations operate only within the limits of favorable external conditions. Within these limits, however, mass liberty aspirations seem to play a major role. By contrast, external conditions did not help to establish or stabilize freedom in societies where mass liberty aspirations were weak or absent. External conditions can inhibit liberty aspirations from taking effect, but they cannot create them where they do not exist.

Whether these results apply to a broader horizon of time cannot be tested since we lack sufficient survey data from earlier times. It seems likely that liberty aspirations have played a role in earlier cases of democratization, but it is evident that these aspirations are much more widespread today than they were in earlier times. Mass emphasis on liberty varies widely cross-nationally, and is closely linked with levels of economic development. Moreover, these differences seem to have a major impact on whether a society moves toward or away from democracy.

Human development theory as outlined by Welzel *et al.* (2003) helps illuminate why this is true. For democratization is a liberating process that empowers people by granting them civil and political rights. Mass liberty aspirations give rise to social pressure for freedom. Thus the development of human freedom is not only shaped by objective factors such as economic resources and legal rights. It is also shaped by political culture, which manifests itself in prevailing mass orientations. Our findings indicate that mass political culture is not only a significant factor in consolidating existing democracies. It also plays an important role in democratization.

Notes

- [1] More recent studies include Arat (1991), Hadenius (1992), Helliwell (1993), Lipset *et al.* (1993), Burkhart and Lewis-Beck (1994), Barro (1997), Vanhanen (1997), Gasiorowski and Power (1998).
- [2] For more information about the World Values Survey, see the WVS web site <http://www.worldvaluessurvey.com> and Ronald Inglehart *et al.* (eds.), *Human Beliefs and Values: A cross-cultural sourcebook based on the 1999–2002 Values Surveys* (Mexico City: Siglo XXI, 2004). This sourcebook comes with a CD ROM containing data from 80 societies and documentation on these surveys. The European surveys used here were gathered by the European Values Survey group (EVS). For detailed EVS findings, see Loek Halman, *The*

European Values Study: A Sourcebook Based on the 1999/2000 European Values Study Surveys. Tilburg: EVS, 2001. For more information, see the EVS website, <http://evs.kub.nl>.

- [3] We reversed the polarity of the 1–7 scales for civil and political rights so that larger figures indicate higher levels of freedom. We added the two scales and subtracted the number 2 obtaining a 0–12 overall index for legal freedom. For each year we counted all states in the world that changed by at least 4 points, downwards or upwards, on this scale.
- [4] For the quality of these measures and their relationship to other indices of democracy, see Bollen and Paxton (2000). We use the Freedom House measures instead of alternative measures because our theoretical focus on human choice emphasizes legal freedom.
- [5] The question is worded as follows: ‘People sometimes talk about what the aims of this country should be for the next ten years. On this card are listed some of the goals which different people would give top priority. Would you please say which one of these you, yourself, consider the most important?’ (Interviewer instruction: code one answer only under ‘first choice’). Then it is continued: ‘And which would be the next most important?’ (Interviewer advice: code one answer only under ‘second choice’). This continues in the same way to the next two lists.
- [6] Data from the World Values Survey/European Values Surveys can be obtained from the International Consortium for Political Research (ICPSR) under the study-number 6160. Information on questionnaire, methods and fieldwork can be obtained from the World Values Association’s homepage: <http://www.worldvaluessurvey.com>. For data provided by the European Values Study see <http://evs.kub.nl> and Halman (2001).
- [7] Codes were assigned as follows: 0 if no liberty item is ranked first or second rank; 1 if one liberty item is ranked second; 2 if two liberty items are ranked second, or if one is ranked first; 3 if one liberty item is ranked first and one is ranked second; 4 if one liberty item is ranked first and two are ranked second, or if two liberty items are ranked first; 5 if two liberty items are ranked first and one is ranked second.
- [8] For the following 41 societies, postmaterialist values were measured using the second World Values Surveys from 1989 to 1991: Argentina, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile, China, Czech Republic, Denmark, Estonia, Finland, France, UK, Germany (East), Germany (West), Hungary, Iceland, India, Ireland, Italy, Japan, Latvia, Lithuania, Mexico, The Netherlands, Nigeria, Norway, Poland, Portugal, Russia, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey, Uruguay, USA. For the following 20 societies, postmaterialist values have been measured using the third World Values Surveys from 1995 to 97: Albania, Armenia, Australia, Azerbaijan, Bangladesh, Croatia, Dominican Republic, Georgia, Ghana, Macedonia, Moldova, New Zealand, Pakistan, Peru, Philippines, Romania, Taiwan, Ukraine, Venezuela, Yugoslavia.
- [9] According to Granger (1972), the effect of an independent variable X on a dependent variable Y can only be considered as causal insofar as the effect holds when one controls for prior levels of Y .
- [10] Following Dahl’s (1973) idea that democratic elections involve both a competitive and a participative component, Vanhanen uses the de-concentration of electoral power (100 minus the share of parliamentary seats of the largest party) as an indicator of competition and voter turnout (in percent) as an indicator of participation. Vanhanen combines the two measures multiplicatively to create his overall index of democracy (which is standardized to 100 as its maximum).
- [11] The indicator is based on information about institutional provisions for ‘executive recruitment’, ‘executive constraints’, and ‘political competition’, all of which are designed to impose limitations on executive power (Gurr & Jagers, 1995; Marshall & Jagers, 2000). See: www.bsos.umd.edu/cidcm/inscr/polity

- [12] Following Welsch (1980), the formula to calculate this threshold is:

$$2 * \sqrt{\frac{k + 1}{n - k + 1}}$$

where n is the number of units and k the number of predictors. Models 1-8 and 1-9 have $n=62$ units and $k=2$ predictors. Inserting these figures into the formula yields a value of 0.45.

- [13] This is done by dividing the threshold value (here: 0.45) by an influential case's DFFITs. All other cases obtain weights of 1.0.
- [14] For reasons of space restrictions this is not documented here but can be downloaded from our webpage:?????????.
- [15] We used other indicators of socioeconomic development, too, including the Human Development Index, per capita energy consumption, the size of the industrial workforce and the workforce in services. The results do not differ from the ones using GDP, except for the fact that these alternative measures of socioeconomic development prove to be insignificant.
- [16] As an alternative to the Gini-coefficient we used the income share of a society's richest and poorest quintile. As an alternative to Alesna's index of ethnic fractionalization, we used his indices of linguistic and religious fractionalization. We also used Roeder's index of ethnic fractionalization. None of these alternative measures changes our results.
- [17] We calculate these regional averages in a way that does not include a country's own value, so that the measure is entirely exogenous to each country. In addition, regional averages in the level of civil and political freedom over 1998–2003 have been calculated on the basis of all countries of the world, not only the sample of the World Values Survey.
- [18] Table 7 measures tolerance by the percentage of people not mentioning people with AIDS and homosexuals as disliked neighbors. We also experimented with a tolerance scale that covers all disliked groups. This version did not work better than the one used here.
- [19] Table 7 summarizes trust into the judicial system, the civil service and the police. We also used alternative aggregate measures of political trust, for example by adding people's confidence in all types of institutions. None of these versions worked better than the one used in Table 7.
- [20] Table 7 summarizes active membership in associations devoted to the provision of common goods, including social welfare associations, church associations, educational and environmental associations. Alternatively we aggregated membership in any type of associations. This variant does not work better than the one in Table 7.
- [21] Following Klingemann (1999), Table 7 uses a measure that balances approval of democracy against approval of authoritarian alternatives. Neither using approval of democracy solely nor approval of authoritarian alternatives solely works better than the composite indicator used in Table 7.
- [22] We used other political culture indicators as well. To mention only two, we used a measure of civic honesty that indicates people's disapproval of dishonest behavior such as cheating on taxes. In addition, we used a measure of political moderation indicating how many people in a society prefer incremental reforms to revolutionary change and strict conservation. These measures did not show any significant effect. Actually, we found no political culture indicator whatsoever that could explain away the effect of mass liberty aspirations.

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Appendix (additional variables in Table 4)

World system position: logged \$US exports per capita 1994, Human Development Report 1998.

Western Christian Tradition: percentage Protestants plus Catholics in late 1980s, Britannica Book of the Year 1995.

Democratic Tradition: Number of years between 1850 and 1990 in which a country scored at least +6 on the –10 to +10 autocracy–democracy scale from Gurr and Jagers (1995).

Ethno-Linguistic Fractionalization: Rae-index of fractionalization calculated from the number and proportion of a country's language groups, data taken from Britannica Book of the Year 1995.

Income Inequality: Gini-index of income inequality 1995, taken from Human Development Report 2000.

The following variables are created from the World Values Surveys, using the earliest available survey from the second and third waves:

Tolerance Scale: percentage respondents not mentioning homosexuals and HIV-infected people as unacceptable neighbors.

Trust in Other People: percentage of respondents believing 'most people can be trusted'.

Ideological Moderation: percentage opting for 'gradual reforms' when asked their preferred mode of societal change.

Active Membership in Associations: sum of 'active memberships' in religious associations, education, arts and music associations, environmental associations, and charitable associations.

Support for Democracy: Sum of people's support for 'Having a strong leader who does not have to bother with parliament and elections' and 'Having the army rule', minus their support for 'Having a democratic political system' and 'Democracy may have problems but it's better than any other form of government', yielding a scale from -6 (maximum support for autocracy) to +6 (maximum support for democracy).