THE DISTINCTIVE TRAJECTORY OF NORMS GOVERNING GENDER EQUALITY AND SEXUAL ORIENTATION*

Introduction

As we have seen, high levels of economic and physical security encourage a shift from Materialist to Postmaterialist values. This makes people more favorable to a variety social changes, ranging from greater emphasis on environmental protection to democratization. It is also bringing growing acceptance of gender equality and homosexuality.

Throughout history, most societies instilled norms limiting women to the roles of wife and mother, and stigmatizing homosexuality and any other sexual behavior not linked with reproduction.² High levels of security bring growing acceptance of gender equality and other behavior that was discouraged by agrarian societies, which require high fertility rates to maintain their populations. During the past century these cultural norms have been changing slowly in high-income societies, mainly through intergenerational population replacement – but this process recently reached a threshold at which rapid cultural change began, leading to major societal-level changes such as growing numbers of women holding positions of authority and the legalization of same-sex marriage.

^{*} This chapter is based on Inglehart, Ponarin and Inglehart, 2017.

Advanced industrial societies no longer require high fertility rates, and they have dropped sharply. Effective birth control technology, labor-saving devices, improved childcare facilities and very low infant mortality make it possible for women to have full-time careers and children – with or without a husband. Traditional Pro-fertility norms are no longer needed and they are giving way to Individual-choice norms, which allow people to choose their own behavior.

But basic cultural norms don't change immediately. As the persistence of religion demonstrates, they generally change slowly. Although leading nineteenth-century social theorists agreed that religion was heading toward extinction, a larger share of the world's population held traditional religious values in 2004 than in 1980.³ But, as we will see, norms concerning gender equality, divorce, abortion, and homosexuality are now changing with remarkable speed, although this shift from Pro-fertility norms to Individual-choice norms is opposed by virtually all major religions.

People are reluctant to give up traditional norms governing gender equality and sexual behavior, as is evident from persistent opposition to abortion, same-sex marriage and gender equality even in such economically secure societies as the USA. Adherence to traditional lifestyle norms is stronger still in countries suffering from insecure conditions that make people cling to familiar norms. But when a society attains high levels of existential security, and survival comes to be taken for granted, people become increasingly open to new norms.

If economic development is conducive to the emergence of individual-choice norms, we would expect these norms to be more widespread among the publics of rich countries than poor ones –which is precisely what we find.

When a society reaches a sufficiently high level of economic and physical security that younger birth cohorts grow up taking survival for granted, it launches an intergenerational shift from survival-norms to individual-choice norms. But the effects of reaching this threshold do not manifest themselves immediately: until they reach adulthood, the birth cohorts formed under the new conditions have little influence. Even when they begin to enter adulthood, they are still a minority and it takes additional decades before they become a majority of the adult population. Consequently, we are not dealing with a phenomenon in which economic growth in one year brings a corresponding increase in emphasis on individual-choice norms the next year. Instead, we are

dealing with a process of intergenerational population replacement that may reflect thresholds reached forty or fifty years earlier.

Nevertheless, intergenerational population replacement has gradually made individual-choice norms increasingly acceptable in high-income societies – and they seem to have reached a tipping point at which the prevailing outlook shifts from rejection to acceptance of new norms. At this point, the influence of conformism reverses polarity: instead of inhibiting tolerant attitudes, it encourages them, sharply accelerating the pace of cultural change.

Thus when a society attains high levels of existential security, rapid cultural changes can occur - but this happens only after a lag of several decades between the time when secure conditions emerge, and the time when new norms become predominant. For example, Western economic miracles, welfare states and the Long Peace all emerged fairly soon after 1945. But the political consequences of these events only began to manifest themselves twenty years later, when the first postwar birth cohort became politically relevant as young adults: the Student Protest Era erupted in 1968, when those born from 1945 to 1955 were in their teens and early twenties.⁴ Student protest in advanced industrial societies continued throughout the 1970s but was still a minority phenomenon that evoked strong negative reactions. But by the 1980s, the older members of the postwar birth cohorts were in their thirties and forties, occupying influential positions in society. By the 1990s, Postmaterialists had become as numerous as Materialists, and norms that were considered deviant in the 1960s became politically correct. Conformist influences began to reverse polarity among growing segments of the adult population of high-income countries, bringing rapid cultural change. As we will demonstrate:

- These value changes involve very long time-lags between the onset of the conditions leading to them, and the societal changes they produce. There was a time-lag of 40–50 years between when Western societies first attained high levels of economic and physical security after World War II, and the occurrence of such relevant societal changes as legalization of same-sex marriage.
- 2) One distinctive set of norms concerning gender equality, divorce, abortion and homosexuality supports a pro-fertility strategy that was essential to the survival of pre-industrial societies but eventually became superfluous. This set of norms is now moving on a trajectory that is distinct from that of other cultural changes.

3) Although basic values normally change at the pace of intergenerational population replacement, the shift from Pro-fertility norms to Individual-choice norms has reached a tipping-point where conformist pressures have reversed polarity and are now accelerating value changes they once resisted, bringing major societal changes such as legalization of same-sex marriage.

Theory and Hypotheses

Our analysis deals with two distinct phenomena:

- 1. The first is a shift from "Pro-fertility Norms" (emphasizing traditional gender roles and stigmatizing any sexual behavior not linked with reproduction) to "Individual-Choice Norms" (supporting gender equality and tolerance of homosexuality). Decades ago, Lesthaeghe and Surkyn⁵ and Van de Kaa,⁶ demonstrated that the intergenerational shift from Materialist to Postmaterialist values led to lower human fertility rates in Western Europe. This chapter deals with another, more recent shift in societal norms concerning gender equality and tolerance of gays and lesbians. This cultural change has important political consequences, encouraging new legislation concerning gender and sexual orientation.
- 2. The second phenomenon involves the speed of cultural change which normally moves at the glacial pace of intergenerational population replacement. When the conditions shaping a society's younger generation's pre-adult years differ substantially from those shaping older groups, intergenerational value change occurs. It proceeds with a multi-decade time-lag between the emergence of the societal conditions conducive to the change, and the time when a society as a whole has adopted new values.

But the process can reach a tipping point at which prevailing opinion becomes favorable to the new norms and conformist pressures reverse polarity. In high-income countries, the shift from Pro-fertility norms to Individual-choice norms recently reached this point. Instead of resisting the effect of intergenerational population replacement, conformism now reinforces it, bringing rapid cultural change.

The Values Surveys have monitored norms concerning gender equality and sexual orientation in successive waves of surveys from 1981 to 2014. Although deep-seated norms limiting women's roles and stigmatizing homosexuality persisted from Biblical times to the twentieth century, these surveys now show dramatic changes in high-income countries from one wave to the next, with growing support for gender equality and tolerance of gays and lesbians.

This is changing society. For most of recorded history, samesex marriage did not exist in large societies. In 2000 it was legalized in The Netherlands, followed by a growing number of other countries. Similarly, until recently women were second-class citizens in most countries, not obtaining the vote (even in developed countries) until well into the twentieth century. In recent years, women have been elected to top political office in many countries.

Cultural Evolution and the Shift to Individual-Choice Norms

Many thousands of societies have existed, most of which are now extinct. They instilled a wide variety of norms concerning gender equality and reproductive behavior. Some agrarian societies encouraged having large numbers of children, while others emphasized higher investment in fewer children. But all pre-industrial societies that survived for long, encouraged much high human fertility rates than those of today's high-income societies. Preindustrial societies encouraged high fertility rates because they faced high infant mortality rates and low life expectancies, making it necessary to produce large numbers of children in order to replace the population. Even West European societies (which emphasized higher investment in fewer children), produced six to eight children per woman. In striking contrast, contemporary West European societies now produce from 1.1 to 1.9 children.

Economic factors reinforced the tendency for agrarian societies to have high fertility rates: having many children was economically beneficial, but as development proceeded, having many children became an economic liability.

Not all pre-industrial societies encouraged high fertility rates. From Biblical times to the twentieth century, some societies (such as the Shakers) required celibacy – but these societies have disappeared. Virtually all societies that survive as independent nations today,

inculcated gender roles and reproductive norms encouraging high fertility rates. Accordingly, the public of every low-income or lower-middle-income society included in the Values Surveys – without a single exception – places relatively strong emphasis on Pro-fertility norms. These norms encourage women to cede leadership roles to men and devote themselves to bearing and raising children. They also stigmatize any form of sexual behavior that is not linked with reproduction, such as homosexuality, abortion, divorce or masturbation.

In some countries the daughters or widows of kings, from Cleopatra to Catherine the Great, could inherit the throne, with one woman ruling the country while the rest were second-class citizens. Because tiny numbers of women were involved, this had a negligible impact on the society's human fertility level, making it compatible with traditional Pro-fertility norms. Much more recently, women's suffrage movements emerged, with women winning the right to vote around 1920 in historically Protestant democracies and around 1945 in historically Catholic democracies. This was a major advance, but allowing women to vote once every few years still had little impact on fertility rates. Traditional Pro-fertility norms began to erode noticeably in the 1960s and 1970s when the post-war birth cohorts first became politically relevant.

Rising Existential Security and Cultural Change

Survival has become increasingly secure. Life expectancies, incomes and school attendance rose from 1970 to 2010 in every region of the world.⁸ Poverty, illiteracy and mortality are declining globally.⁹ And war, crime rates and violence have declined dramatically for many decades.¹⁰

The world is now experiencing the longest period without war between major powers in recorded history. This, together with the postwar economic miracles and the emergence of the welfare state, produced conditions under which a large share of those born since 1945 in Western Europe, North America, Japan, Australia and New Zealand grew up taking survival for granted, bringing intergenerational shifts toward Postmaterialist values and Self-expression values (as Chapter 2 demonstrated). Most societies no longer require high fertility rates, which have dropped dramatically – especially in high-income societies

where life-expectancy rates have almost doubled in the past century¹¹ and infant mortality rates have fallen to one-thirtieth of their 1950 level.¹² For many years, it has no longer been necessary to women to produce six to eight children in order to replace the population.

But deep-rooted cultural norms change slowly. Virtually all major world faiths emphasize pro-fertility norms – and they do so vigorously. Pro-fertility norms are not presented as matters of individual judgment. They are held to be absolute values, violation of which will bring eternal damnation. It was necessary to make these cultural sanctions strong because Pro-fertility norms require people to suppress strong natural urges. "Thou shalt not commit adultery" goes against deep-rooted desires; requiring women to devote their lives to child-bearing and child-rearing entails major sacrifices; and defining homosexuality as sinful, unnatural behavior imposes severe self-repression and self-hatred on gays and lesbians.

These norms are no longer necessary for societal survival, but deep-rooted values resist change. Nevertheless, modernization brings high levels of economic and physical security.¹³ People grow up taking survival for granted, making them increasingly open to new ideas. As Chapters 3 and 4 demonstrated, Self-expression values – which include tolerance of homosexuality – have become widespread in societies with secure living conditions.

Evolutionary Modernization Theory

Evolutionary modernization theory argues that the degree to which people experience threats to their survival has pervasive effects on their society's cultural norms. Western Europe's postwar economic miracles and welfare states led to the emergence of a predominantly Postmaterialist generation born after 1945, but this generation did not become politically visible until 20 years later, when they reached adulthood – contributing to the student protest era of the late 1960s and 1970s. At that point, there was a huge gap between the values of this first postwar birth cohort and all older cohorts.

But the 20-year-olds eventually became 30-year-olds and then 40-year-olds and then 50-year-olds. As postwar birth cohorts replaced older cohorts, their values gradually spread. Today, Western Europe's social norms are profoundly different from those of 1945. In 1945,

homosexuality was still criminal in most West European countries; it is now legal in virtually all of them. Church attendance has declined dramatically, fertility rates have fallen below the replacement level, and women have won high political office. But there was a time-lag of 40 to 50 years between the onset of the conditions conducive to these changes, and the point where new values were accepted by society as a whole.

The long time-lags between the onset of conditions conducive to deep-rooted cultural changes and the time when they transform a society means that current socioeconomic conditions don't explain current cultural changes. The intergenerational shift to Individual-choice norms in Western countries has now attained enough momentum that it seems unlikely to reverse itself. But, as we have seen, these countries are currently experiencing economic stagnation, rising inequality and high unemployment, which is often blamed on massive immigration. Many recent immigrants are Islamic and hostility to them is compounded by highly publicized Islamic terrorism. Today, women and gays do not seem threatening, but Muslim immigrants do. Accordingly, in recent years, ethnocentric populist parties have won unprecedentedly large shares of the vote in national elections. Clearly, not all aspects of cultural change are moving at the same pace.

In pre-industrial societies, tolerance of abortion, homosexuality and divorce remains extremely low and conformist pressures inhibit people from expressing tolerance. In Egypt, for example, fully 99 percent of the public condemned homosexuality in recent surveys – which means that even the homosexuals were condemning homosexuality.

But intergenerational population replacement has gradually made individual-choice norms increasingly acceptable in high-income societies – initially among the student population and then among society as a whole. A tipping point is being reached where the prevailing outlook shifts from rejection to acceptance of new norms, and instead of inhibiting tolerant attitudes, conformism and social desirability begin to encourage them. As attitudes become more tolerant, gays and lesbians come out. Growing numbers of people realize that some of the people they know and like are gay, leading them to become more tolerant – encouraging more gays to come out, in a positive feedback loop.¹⁴

In short, when a society attains high levels of existential security and people grow up taking survival for granted, rapid cultural

changes can occur – but this happens with a time-lag of several decades between when secure conditions first emerge, and when new norms become predominant.

Hypotheses

This theory generates the following hypotheses:

Hypothesis 1. A syndrome of Individual-choice norms exists, in which the publics of some societies endorse a coherent set of traditional Profertility norms, while the publics of others support a set of Individual-choice norms concerning gender equality and divorce, abortion and homosexuality. Support or opposition to the various components of this syndrome go together.

Hypothesis 2. High levels of existential security are conducive to Individual-choice norms. The publics of societies with high per capita GDP, high life expectancy and low infant mortality (the three indicators of existential security used here) will be likelier to support Individual-choice norms than those with low levels. Similarly, within given countries, the most secure strata will be likeliest to support Individual-choice norms.

Hypothesis 3. Over the past 50 years, existential security levels have risen substantially in developed countries, producing large differences between the values of younger and older cohorts. Consequently, as younger cohorts replace older ones, we should observe an intergenerational shift from Pro-fertility norms to Individual-choice norms.

Hypothesis 4. Because this shift reflects the level of existential security that prevailed during the pre-adult years of people who were born several decades ago, the strongest predictor of a society's level of support for new values will not be its current levels of per capita GDP, life expectancy and infant mortality, but levels that prevailed several decades ago.

Hypothesis 5. Although intergenerational population replacement involves long time-lags, cultural change can reach a tipping point at which new norms become perceived as dominant. Social desirability effects then reverse polarity: instead of retarding the changes linked

with intergenerational population replacement, they accelerate them – bringing rapid cultural change.

Hypothesis 6. When they become dominant, the new norms can have major societal-level consequences, such as gender quotas on electoral lists, or legalization of same-sex marriage.

Data and Methods

We test these hypotheses against data from the Values Surveys, which cover the full range of economic development, including 22 low-income countries, 29 lower-middle income countries, 20 upper-middle income countries and 28 high-income countries, as classified by the World Bank in 2000 (these countries are listed in Appendix A_{3.I}).¹⁵ The Values Surveys also cover all major cultural zones, including the

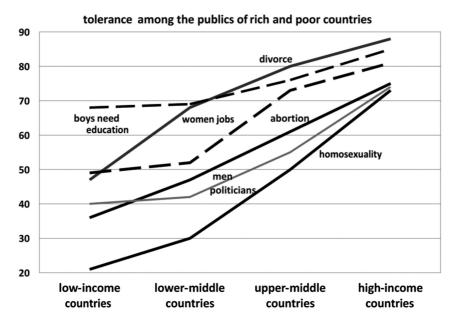


Figure 5.1 Six aspects of tolerance, by level of economic development. Percentage expressing tolerant views on given topic. Question wording is shown in Table 5.1.

The questions concerning divorce, abortion and homosexuality are measured on 10-point scales, with codes 6 through 10 being coded as tolerant. The questions concerning gender equality have tolerant and intolerant responses. The countries included in each category are listed in Appendix A_{3.1}.

most populous countries in each group. The questions analyzed here were asked in identical form in successive waves of these surveys.

Our dependent variable is Individual-choice norms. Although value change occurs at the individual level, we are primarily interested in how this leads to societal-level changes. Value change does not automatically change a society's laws and institutions, but it does make such changes increasingly likely. Individual-level cultural change leads to societal-level change in two ways: first, democratic elites and institutions are necessarily responsive to mass preferences, but even autocratic leaders are not immune to them. Moreover, because elites grow up within a given society, in the long run they tend to reflect its prevailing norms.

It is sometimes suggested that aggregating individual-level data to the societal-level is somehow tainted. This interpretation is mistaken. Over 60 years ago, in his classic article on the ecological fallacy, Robinson pointed out that the relationships between two variables at the individual level are not necessarily the same as those at the aggregate level. 16 This is an important insight, but it does not mean that aggregating is wrong – it simply means that one can't assume that a relationship that holds true at one level also holds true at another level. Social scientists have been aggregating individual-level data to construct national-level indices such as fertility rates for so long that they seem familiar and legitimate - but they are no more legitimate than aggregated subjective data. Its infant mortality rate is an important national-level attribute of any country - but all of the living or dying is done by individuals. Similarly, income inequality is a valid and meaningful national-level variable, although it is based on the incomes of individuals.

In this chapter, Individual-choice norms are measured at both the individual level and the societal level. We happen to find similar causal relationships at both levels: relatively secure individuals and relatively secure countries rank highest on these norms. But because this chapter focuses on how cultural change leads to sociopolitical changes, our key analyses are done at the societal level.

Table 5.1 shows a national-level factor analysis that demonstrates that three questions concerning acceptance of divorce, abortion and homosexuality and responses to three questions concerning acceptance of gender equality have a strong tendency to go together. Each question's factor loading shows how strongly responses to

Table 5.1 *Pro-fertility norms vs. individual-choice norms* (*Principal component factor analysis*)

Response:	Factor loading:
Homosexuality is never justifiable	90
When jobs are scarce, men have more right to a job than women	89
Divorce is never justifiable	89
On the whole, men make better political leaders than women do	88
Abortion is never justifiable	80
A university education is more important for a boy than for a girl	78

High *positive* scores indicate support for Individual-choice norms. *Source*: National-level data from 80 countries included in the Values Surveys.

that question are correlated to an underlying Pro-fertility versus Individual-choice dimension. Loadings around .90 indicate that they go together in an almost one-to-one relationship. The publics of some societies tend to be strongly favorable to gender equality and relatively tolerant of divorce, abortion and homosexuality, while the publics of other societies tend to have unfavorable attitudes toward all six questions. Consequently, we used the responses to these six questions to measure the extent to which a society (or an individual) supports traditional Pro-fertility norms or Individual-choice norms.¹⁷

Our key independent variable is an index of Existential Security, based on factor scores from a principal components analysis of each country's levels of life expectancy, infant mortality and GDP/ capita.¹⁸ They also tap a single dimension, showing loadings of .97, –.97 and .90 respectively in 1960. Reliable cross-national data are available since 1960, enabling us to construct this index at various time points.

Although people who emphasize Individual-choice norms also tend to emphasize Postmaterialist values, the shift from Pro-fertility to Individual-choice norms shows distinctive behavior and is moving at a much more rapid pace than the shift from Materialist to Postmaterialist values.¹⁹

Empirical Analyses and Findings

Hypothesis 1. A syndrome of Individual-choice norms exists, in which the publics of some societies endorse traditional Pro-fertility norms, while others support Individual-choice norms concerning gender equality and divorce, abortion and homosexuality.

As Table 5.1 demonstrates, acceptance or rejection of all six indicators of Individual-choice norms does go together, with the publics of some societies being relatively favorable to gender equality, divorce, abortion and homosexuality, while others reject them. One dimension emerges, with Pro-fertility norms and Individual-choice norms at opposite poles.

Hypothesis 2. High levels of existential security are conducive to Individual-choice norms.

As Figure 5.1 demonstrates, the publics of high-income countries are much likelier than those of low-income countries to hold tolerant attitudes toward all six indicators of Individual-choice norms. Averaged across the six items, in low-income countries only 38 percent of the public has tolerant attitudes, compared with 80 percent in high-income countries.²⁰ These findings support the hypothesis that high levels of existential security are conducive to Individual-choice norms – but before testing this hypothesis more conclusively, let us explore a key characteristic of our main independent variable, Existential Security:

Hypothesis 3 holds that, in so far as societies have attained high levels of existential security, support for Individual-choice norms will become more widespread over time. This has indeed happened, as Figure 5.2 demonstrates. Support for these norms increased in 40 of the 58 countries from which we have at least ten years of time-series data – and, in keeping with the claim that these changes are linked with existential security, it increased in 23 of the 24 high-income countries, with the one deviant case (Italy) showing only a minuscule decline.

Hypothesis 3 also holds that the strongest predictor of a society's support for Individual-choice norms will not be its *current* level of Existential Security (as measured by per capita GDP, life expectancy and infant mortality) but the level that prevailed several decades before these norms were measured.

Figure 5.3 compares the predictive power of a country's level of Existential Security as measured at various time-points before the

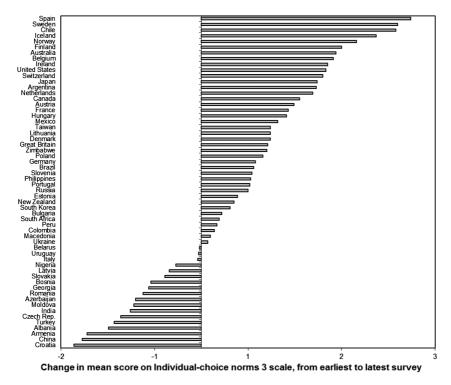


Figure 5.2 Changes in Individual-choice norms from earliest available survey to latest available survey in all countries having time series of at least ten years.

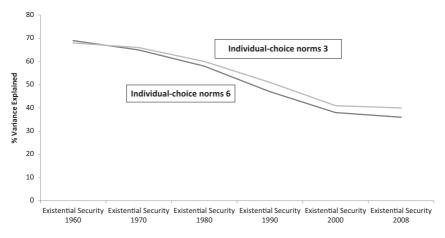


Figure 5.3 Impact of a country's level of Existential Security at various time points on adherence to Pro-fertility norms vs. Individual-choice norms around 2009. Cell entry is the percentage of variance in Individual-choice norms in latest available survey that is explained by a country's score on the Existential Security index measured in given year.

survey in which Individual-choice norms were measured (around 2009). 21 Our two earliest measures – Existential Security in 1960 and 1970 – are the strongest predictors of Individual-choice norms around 2009 (each explaining almost 70 percent of the cross-national variation). Surprising as it may seem - but as predicted by Hypothesis 3 – these much-earlier measures explain far more variance than does Existential Security measured in 1980, 1990, 2000 or at the time of the survey. This is remarkable. Normally, the strongest version of a predictor is one measured shortly before the dependent variable.²² Thus, voting intentions measured a week before an election are usually stronger predictors of the actual vote than voting intentions measured a month before the election – which are a stronger predictor than voting intentions six months or a year before the election. As Silver demonstrates, if a survey carried out one year before the election indicates that a US Senate candidate has a five-point lead over her opponents, the probability that she will actually win is only slightly better than would be predicted by a random coin flip.²³ But as the survey gets closer to the election, its predictive power gets steadily stronger. A survey carried out one week before the election showing the same five-point lead has an 89 percent likelihood of accurately predicting the result, and a survey carried out one day before the election has a 95 percent likelihood of being accurate. The appropriate time-lag depends on the topic being explored, but time-lags of more than a few years are unusual.²⁴

Here, our strongest predictor of a public's acceptance of Individual-choice norms in 2009, is an index of Existential Security based on their country's Life Expectancy, Infant Mortality and per capita GDP almost 50 years before the dependent variable. Why?

We are dealing with exceptionally deep-rooted cultural norms that were already established in Biblical times and showed little change for many centuries. The usual time series analysis approach, in which change on the dependent variable is predicted by slightly earlier changes in the independent variables is not appropriate here, for the dependent variable – Individual-choice norms – is linked with religious and cultural traditions that strongly resist change and largely do so through intergenerational population replacement. The emergence of low levels of infant mortality and high levels of life expectancy and economic security in 1960 were conducive to change in these norms – but it took decades for their impact to become manifest at the societal level.

All three components of the Existential Security index show this same unusual pattern: recent measures of life expectancy (and infant mortality and GDP/capita) have a much weaker impact on acceptance of new norms governing gender equality and reproductive behavior than do earlier measures – with the levels that existed in 1960 or 1970 explaining far more of the variance in Individual-choice norms in 2009, than more recent measures.

This also holds true of religiosity (as measured by the perceived importance of God in one's life). Religiosity is one of the most deeprooted of all mass attitudes and is very resistant to change. Here again, Existential Security in 1960 or 1970 is a significantly stronger predictor of religiosity in 2009, than is Existential Security in 2000 or 2008, as Figure 5.4 demonstrates.

This also holds true of Postmaterialist values. Existential Security in 1960 or 1970 explains about twice as much of the variance in a country's level of Postmaterialism in the latest survey (around 2010), as does Existential Security in 2000 or 2008, as Figure 5.4 also demonstrates. These values reflect the level of security that prevailed during a given birth cohorts' pre-adult years.²⁵

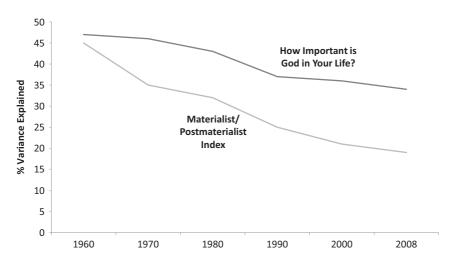


Figure 5.4 The impact of Existential Security measured at various time points, on religiosity and on Materialist/Postmaterialist values as measured in latest available survey.

Importance of God and Postmaterialist values were measured in the latest available survey for each country (the median year being 2008), in 96 and 94 countries respectively.

A recent article tested the hypothesis that high levels of existential security are conducive to Individual-choice norms, using regression analysis - a statistical technique designed to help sort out what is causing what.²⁶ The results of these analyses support Hypothesis 2, indicating that a society's level of Existential Security in 1970 explains fully 65 percent of the cross-national variation in its acceptance of Individual-choice norms around 2009. The findings also show that Postmaterialist values explain additional variance in support for Individual-choice norms. Postmaterialist value priorities emerge if one grows up taking survival for granted. They tap aspects of existential security, such as declining violence rates that are not captured by our Existential Security index. Accordingly, Existential Security in 1970 plus a nation's level of Materialist/Postmaterialist values explain 73 percent of the cross-national variation in support for Individual-choice norms. Since virtually all major religions instill Pro-fertility norms, we would expect religiosity to have a negative impact on Individual-choice norms. It does: adding religiosity to the equation modestly increases the explained variance, in the predicted negative direction.

This article also uses multi-level regression analysis to explore the cross-level interactions effects of existential security with individuallevel variables. It finds that, while education has no effect on support for Individual-choice norms in countries with low levels of Existential Security, education has a strong effect on support for Individual-choice norms in countries with high levels of Existential Security. In other words, we can't attribute the rise of Individual-choice norms to rising education levels per se: in less secure societies, education has little effect – but in countries with high levels of Existential Security, education is strongly linked with support for Individual-choice norms. This suggests that high-income societies have reached a tipping point where the new norms have become prevalent among the more educated strata. Other interaction effects indicate that religiosity has a stronger (negative) effect on support for Individual-choice norms in less secure countries, while income and Postmaterialist values have stronger effects on support for Individual-choice norms in *more* secure countries. In other words, religion plays a major role in reinforcing traditional Pro-fertility norms in societies with low levels of Existential Security, but gradually loses its power to do so as societies attain higher levels of security. Conversely, both income and Postmaterialist values have little impact

on norms governing gender roles and reproductive behavior in lesssecure societies, but have increasing impact in societies with high levels of Existential Security.

What is causing these changes? Analysis of the *changes* in support for Individual-choice norms from the earliest to the latest available survey indicates that a society's level of Existential Security is the strongest single predictor – by itself, accounting for 40 percent of the net change.²⁷ A country's level of Materialist/Postmaterialist values also has a significant impact on changing support for Individual-choice norms, and a country's level of religiosity also has a significant (negative) impact on change in support for Individual-choice norms.

Although a country's economic growth rate from 1990 to 2010 is a change indicator, it does not have a significant impact on changes in support for Individual-choice norms – in fact, high growth rates are *negatively* linked with changing support for Individual-choice norms. Though it may seem surprising, a country's *level* of existential security is a stronger predictor of changes in support for Individual-choice norms than its recent rate of economic *growth* – which actually points in the wrong direction.

Despite the maxim that only change can explain change, broader empirical evidence confirms this finding. High-income countries are likelier to show growing support for Individual-choice norms on all six of the Individual-choice indicators than less-prosperous countries. But countries with high economic *growth* rates in recent years were *less* likely to show growing support for Individual-choice norms than countries with low growth rates: high economic *levels* are a better predictor of increasing support for Individual-choice norms than high economic *growth* rates.

This is true because we are dealing with exceptionally deeprooted norms. Change does not begin until a high-security-level threshold is reached, and the results become manifest much later, through intergenerational population replacement. Ultimately, of course, the process *does* reflect change, since attaining this threshold reflects many decades of economic growth that contributed to high levels of existential security. Change *is* caused by change. But such long time-lags are involved that in the interim (which may be 50 years or more), a country's *level* of existential security provides a more accurate predictor of change than does its recent economic growth rate – or recent *changes* in life expectancy, infant mortality, and per capita GDP.

In recent decades, low-income and middle-income countries have had much higher economic growth rates than high-income countries: the countries with the highest growth rates are below the threshold at which people start adopting Individual-choice norms. This explains why high recent economic growth rates are *negatively* correlated with rising support for Individual-choice norms.

When support for Individual-choice norms reaches a level where the dominant opinion in a given social milieu comes to support Individual-choice, it can reverse the polarity of social desirability effects – producing much more rapid changes than those from intergenerational value change alone. This is unusual.

For example, as we saw in Chapter 2, the shift from Materialist to Postmaterialist values is mainly due to intergenerational population replacement. Although substantial short-term fluctuations occur, a given birth cohort's mean score on the Materialist/Postmaterialist values index changes very little from the earliest to the latest reading across a 38-year time span. But among the population as a *whole*, there was a substantial shift toward Postmaterialist values: the mean score on the Materialist/Postmaterialist index rose by 30 points for the combined six-nation sample. This change was overwhelmingly due to intergenerational population replacement: *within* a given birth cohort, the average net change was an increase of only five points.

The shift from Materialist to Postmaterialist values was almost entirely driven by intergenerational population replacement. Changes in religiosity show a similar pattern. Though religiosity has increased in most ex-communist countries, in recent decades it has declined in almost all high-income countries – and this decline almost entirely reflects intergenerational population replacement, as the preceding chapter demonstrated.

Changes in Individual-choice norms show a very different pattern, as Figure 5.5 (based on the same 14 high-income countries) demonstrates. Here, the effects of intergenerational population replacement are reinforced by large changes *within* given birth cohorts – with each cohort becoming substantially more supportive of Individual-choice norms in 2009 than it was in 1981.²⁸ Though intergenerational population replacement is linked with a .265 increase on the Individual-choice norms index, changes within given cohorts account for an even larger increase of .435 points. We can't prove that these intra-cohort

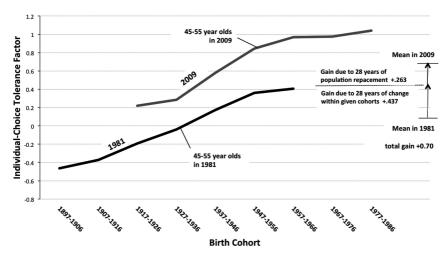


Figure 5.5 Changes in Individual-choice norms due to intergenerational population replacement, and to within-cohort changes, in 14 high-income societies. Based on mean factor scores on Individual-choice norms 3.

Source: Values Surveys in the 14 high-income countries listed in Figure 6.3.

shifts reflect changes in social desirability effects (which are inherently difficult to measure since they imply that one can't take one's measurements at face value) but this explanation seems plausible. If true, it supports the hypothesis that exceptionally rapid changes in Individual-choice norms are occurring in high-income societies because conformist pressures have reversed polarity.

Historical evidence also suggests that this was the case. During the 2004 US presidential election, same-sex marriage was so unpopular that, in order to increase turnout among social conservatives, Republican strategists put referenda banning same-sex marriage on the ballot in key swing states. The ban was approved in every case. From 1998 through 2008, there were 30 statewide referenda seeking to ban same-sex marriage, and all 30 of them succeeded. But the tide suddenly turned. In 2012, there were five new statewide referenda on the topic – and in four out of five cases, the public voted in favor of legalizing same-sex marriage. In recent cases, appellate courts generally struck down restrictions on same-sex marriage and in 2015 the US Supreme Court ruled that the Constitution guarantees a right to same-sex marriage: even elderly judges seemed to sense that a watershed social change is occurring and wanted to be on "the right side of history."

Hypothesis 6 holds that when new norms become culturally dominant they can have major societal-level consequences, such as growing numbers of women gaining positions of authority, or the legalization of same-sex marriage.

The spread of Individual-choice norms can bring important societal-level changes. As Figure 5.6 demonstrates, legislation concerning homosexuality is closely linked with the degree to which Individual-choice norms have emerged among given publics. The scale used here

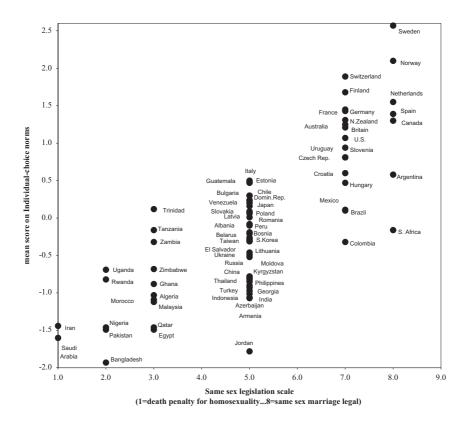


Figure 5.6 National legislation concerning homosexuality in 2012, by public acceptance of gender equality, divorce, abortion and homosexuality (r = .79). Based on country's mean score on 6-item Individual-choice norms index. Legislation concerning homosexuals in 2012 downloaded from LGBT Portal (original scale's polarity reversed to make high scores reflect tolerant legislation).

Scale: I = death penalty for homosexuality, 2 = heavy penalty, 3 = minimal penalty, 4 = homosexuality illegal but not enforced, 5 = same sex unions not recognized, 6 = some form of same sex partnership but not marriage, 7 = same sex unions recognized but not performed, 8 = same sex marriages performed. No cases available with codes 4 or 6.

ranges from a score of "r" in countries where homosexuality is punishable by the death penalty, to a score of "8" in countries where same-sex marriage is legal. Countries that rank high on Individual-choice norms are much likelier to have adopted legislation favorable to gays and lesbians (r = .79).

It seems unlikely that this strong correlation between masslevel values and societal legislation exists because the legislation shaped the values. Same-sex marriage first became legal in 2000, but the relevant values had been spreading for decades. In 2001 The Netherlands experienced a sudden surge in same-sex marriages. The proximate cause was the fact that the Dutch parliament had just legalized samesex marriages. But the root cause was the fact that a gradual shift had taken place in the Dutch public's attitudes toward homosexuality. In the 1981 Values Surveys, almost half of the Dutch expressed disapproval of homosexuality (the old being much less tolerant than the young) but the Dutch were more tolerant than any other public surveyed. In most countries, 75-99 percent of the public disapproved of homosexuality. These attitudes gradually become more tolerant through an intergenerational value shift. By 1999, disapproval among the Dutch public had fallen to less than half its 1981 level. A year later, the Dutch parliament legalized same-sex marriage, soon followed by a growing number of other countries – all of which had relatively tolerant publics.²⁹

As Figure 5.7 demonstrates, countries that rank high on Individual-choice norms also tend to rank high on the UN Gender Empowerment Measure (reflecting the extent to which women hold high positions in political, economic and academic life). The correlation between the six-item Individual-choice index and the UN Gender Empowerment measure is .87. Legislative changes (such as the adoption of gender quotas) probably help legitimate Individual-choice norms, but here again, the underlying norms have been changing for 50 years, while the legislative changes are relatively recent. The cultural changes clearly preceded the institutional changes, and seem to have contributed to them.

The claim that institutions determine culture does not hold up in the light of historical evidence, which suggests that culture and institutions influence each other, with cultural change sometimes preceding institutional change.

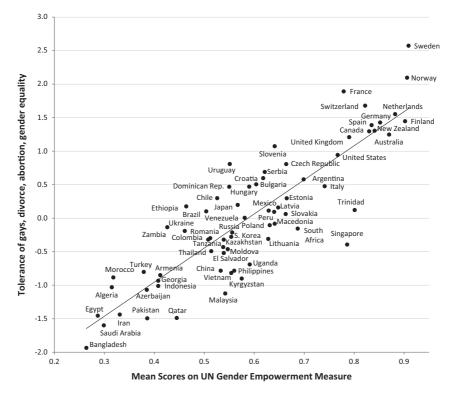


Figure 5.7 Societal levels of Gender Empowerment, by mass support for Individual-choice norms (r = .87).

Conclusion

We hypothesized that high levels of existential security are contributing to an intergenerational shift from Pro-fertility norms to Individual-choice norms, and evidence from the past three decades indicates that these changes have indeed occurred. A handful of variables linked with Existential Security explain most of the cross-national variation in support for Individual-choice norms – and they also explain most of the *change* in support for Individual-choice norms levels from 1981 to 2014. Though in high-income countries, the more educated and secure strata are likeliest to hold the new norms, education itself is not driving these changes: these norms are not linked with education in low-income countries.

Although the rise of Postmaterialist values and the declining importance of religion in high-income countries have moved at the pace of intergenerational population replacement, Individual-choice norms are now spreading much more rapidly. This seems to reflect a reversal of the social conformity effects linked with Pro-fertility norms among the publics of high-income societies.

During the past century, sharply falling infant mortality and rising life expectancy rates produced conditions where women no longer needed to devote their lives to producing and rearing large numbers of children in order to replace the population. The repression and self-denial linked with traditional Pro-fertility norms was no longer needed for societal survival – and the shift toward Individual-choice norms was conducive to higher levels of subjective well-being, as Chapter 8 will demonstrate. After long time-lags linked with intergenerational population replacement, the spread of Individual-choice norms seems to have reached a tipping point where conformist pressures reversed polarity – greatly accelerating the rate of change.

Future research on intergenerational value change should take into account the remarkably long time-lags between the onset of conditions conducive to individual-level changes and the point at which they produce societal-level changes. It should also probe into the conditions under which value change does not move at the pace of generational replacement. The evidence examined here suggests, but does not prove, that value change can reach a tipping-point at which conformist pressures reverse polarity, accelerating changes they once retarded. As Chapter 9 demonstrates, xenophobia shows the opposite pattern: although younger birth cohorts in high-income countries are less xenophobic than older ones, xenophobia has not been declining in many high-income countries – apparently because of a large-scale influx of immigrants and refugees, and widespread fear – stoked by massive media coverage of terrorist activities – that foreigners may be terrorists.

The rapid shift from Pro-fertility norms to Individual-choice norms has stimulated strong negative reactions among social conservatives in many countries. In the 2016 election Donald Trump mobilized xenophobic and sexist sentiments to win the US Presidency. But the social base for the sexist component of such appeals seems to be dwindling. The evidence examined here suggests that, after centuries

of stability, traditional norms concerning gender equality and sexual orientation are rapidly eroding in high-income societies, in a cultural shift that has already begun to transform legislation concerning homosexuality and the extent to which women hold positions of authority. Though she didn't win the Presidency, Hillary Clinton was the first woman to win the Presidential popular vote – by a margin of almost three million votes. If the USA operated on the principle of one person, one vote, Clinton would be President.