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REINVENTING THE KANTEAN PEACE: THE EMERGING MASS BASIS OF GLOBAL SECURITY

This article demonstrates that inter-state peace is underpinned by an increasingly solid mass basis: representative survey data from around the world evidence a massive decline in people's willingness to sacrifice their lives in war. To explain this finding, we test and confirm Welzel's Evolutionary Emancipation Theory (EET). When improving existential conditions in a society turn most people's lives from a source of threats to suffer into a source of opportunities to thrive, people adopt 'emancipative values': to allow themselves and others to take advantage of life's widened opportunities, people increasingly support and tolerate universal freedoms. This emancipatory trend is most significant in a field in which the fixation of traditional survival norms on high fertility erected the strongest resistance against emancipation: reproductive freedoms. As a direct consequence of the emancipatory trend, people's willingness to sacrifice their own and other people's lives in war has dramatically declined. Hence, the emancipatory trend is a pacifist force that makes it increasingly difficult for government—especially in democracies—to find public support for waging wars.

Keywords: Evolutionary Emancipation Theory, World Values Survey, war and peace

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"Make love, not war!"

- John Lennon

INTRODUCTION

An influential tradition of thought going back to Immanuel Kant holds that democracies are unlikely to fight each other. In his famous essay on the "Perpetual Peace," Kant (1983 [1795]) wrote that constitutional republics were a necessary condition for enduring peace in the world. The philosopher reasoned that a majority of the people would usually not vote to go to war because it is them and their children who suffer from the costs and casualties. Therefore, if all nations were republics it would end war.

Indeed, since they emerged in the early 19th century, liberal democracies have rarely fought wars against each other (Doyle 1986; Maoz & Russett 1993; Brown, Lynn-Jones & Miller 1996). Hence, the 'dyadic' peace thesis—the proposition that democracies rarely fight each other—is one of the best established regularities in political science (Levy 1989; Russett & Oneal 2001). More recently, evidence is accruing that even a 'monadic' peace is rising: democracies fight *any* state less frequently, regardless of regime type (Gelpi & Griesdorf 2001; Forsberg 2006; Stockemer 2007).

Two things seem undisputable. First, since the end of the two world wars and the Cold War, peace in inter-state relationships has become more prevalent (Human Security Project 2010; Pinker 2011). Second, since the mid 1970s, democracy has been spreading on a global scale (Huntington 1991; Doorenspleet 2000; Markoff & White 2009). The 'democratic peace thesis' suggests a link between these two trends: because democracies are less likely to wage wars, their diffusion explains growing inter-state peace. This assumption is consistent with the view that the reasons why democracies go less frequently to war reside in inner characteristics of democracy itself: since the economic, psychological and human costs of wars are disproportionately imposed on the masses, a system that allows the masses to vote their preferences into power (which is what democracy is about) is less likely to wage wars (Maoz 1997; Bueno de Mesquita & Morrow 1999; Palmer, London & Regan 2004). Also, the publics that have been democratic in the past perceive each other as belonging to a 'family of nations'

with shared values, which is well reflected in the strong international alliances and dense trade relations that 'Western' democracies forge among each other (Henderson 1998; Owen 1994).

Others, going back to Elias (1987), argue that the 'civilizing process' writ large embodies a tendency to pacify inter-human relations: the enforcement of law and order and an effective monopoly of violence operate to this end (Nazaretyan 2009). With accelerating globalization and the growth of 'international regimes,' the pacifying tendencies spill over from the intra-state level to the international level, promoting inter-state peace (Hasenclever, Mayer & Rittberger 1997). As interdependencies increase, the costs of war begin to outweigh its benefits (Weede 1996; Gartzke & Hewitt 2010; Mousseau 2010). An understanding of interdependencies emerges accordingly and feeds the proliferation of norms, agencies and instruments to prevent war (Gat 2012).

Another argument attributes the pacification trend to a different tendency of modernity: a shift in the source of power from coercion to creativity. With the rise of knowledge economies in the post-industrial age, the key engine of progress is technology, innovation, creativity, and other fluid assets of an intellectual nature rather than 'fixed assets' of a physical nature, such as arable land and natural resources (Bell 1973; Toffler 1990; Drucker 1993; Florida 2002). Under this condition, waging war becomes irrational: intellectual assets cannot be confiscated and conquered; they need to be cultivated through peaceful exchange (Nye 2004; Gat 2006).

This article does not question these ideas. Instead, it suggests a *new* factor that operates in concert with the previously mentioned tendencies. Following Welzel's (2013) Evolutionary Emancipation Theory (EET), we argue that massively improving existential conditions, from longer life expectancies to better education and information to improved technological equipment, are transforming the lives of a growing proportion of people in the world from a source of threats to suffer into a source of opportunities to thrive. Where this happens, societies climb the 'utility ladder of freedoms': practicing and tolerating universal freedoms becomes increasingly instrumental to taking advantage of what a more promising life offers. Using data from more than ninety societies around the globe, we demonstrate that the ascending utility of freedoms is visible in rising emancipative values, which emphasize universal freedoms. The emancipatory trend is most significant where the fixation of traditional survival norms on

childbearing, fertility, marriage and other features of the patriarchal family model shows its strongest resistance against emancipation: reproductive autonomy, including the freedom to abort an unconsented pregnancy, to divorce an unloved partner and to follow a homosexual orientation. In tandem with the ascending utility of freedoms, the utility of force descends, which erodes a central pillar of traditional survival norms: people's willingness to fight wars.

This is a genuinely new insight with an important implication: the emancipatory transformation of contemporary cultures around the globe is a pacifistic force that fosters an increasingly solid mass basis for inter-state peace. To establish this insight, the article proceeds in five sections. Section one is theoretical-conceptual: it discusses Evolutionary Emancipation Theory in relation to recent scholarship on inter-state peace. Section two derives three empirical hypotheses from this discussion. Section three describes the evidence base, measurements and methods to test these hypotheses. Section four presents the findings. The fifth and final section discusses the key implications of our insights.

THEORY

Recently, various scholars have stressed a long-term decline in the use of violence. Pinker (2011) demonstrates that European societies have seen a continuous and massive decline in their homicide rates since late medieval times. In the 17th and 18th centuries, they began to abolish slavery, witch burning, dueling, judicial torture, corporal punishment, and other cruelties. Since the end of World War II, developed countries have stopped waging war on one another. And since the end of the Cold War in 1989, organized conflicts of various kinds—including civil wars, genocides and state repression—have declined throughout the world (Nazaretyan 2009; Human Security Report 2012). Furthermore, mass insurrections against tyranny have turned increasingly nonviolent over recent decades, and became more successful in ending oppression where this happened (Chenoweth & Cunningham 2013; Schock 2013).

Pinker (2011) suggests a number of reasons for the decline of violence, including the growth of states' capacities to enforce law, order and a monopoly on the means of coercion; the spread of market transactions that are undertaken peacefully and for mutual benefit; the spread of

literacy, mobility and mass media that allow people to empathize with distant and different others; an intensifying application of knowledge and rationality to human affairs and a related increase in fluid intelligence known as the 'Flynn effect'; and the feminization of norms, which undermines the glorification of violence. As a result of these changes, societies climb up the 'escalator of reason' and 'enlightenment values' begin to dominate people's worldviews. In fundamental ways, this interpretation reinvigorates Elias's (1987) characterization of the 'civilization process' as an inherently 'feminizing' and 'pacifying' development.

In an impressive volume, Gat (2006) shows that war, raid and genocide have been the natural state of affairs throughout most of history. The evidence demolishes the romantic view that original societies were peaceful communities that avoided violence. And the evidence provided by Gat (2006) and Pinker (2011) suggests that existential threat is what turns humans into a violent species—confirming numerous findings gathered in decades of research on 'group threat theory.' As this research shows consistently, group identities always play a role in social behavior but turn more easily into inter-group hostilities under existential threats (Coser 1956; Blumer 1958; Blalock 1967; Olzak 1992; Bobo 1999; Wilson 2005; Coenders, Lubbers & Scheepers 2008).

Recent research in other disciplines--including anthropology and biology--also suggests that threatening conditions make people inclined to coercion, force and violence and intolerant of universal freedoms. Gelfand et al. (2011) distinguish between 'tight' and 'loose' cultures: while tight cultures erect taboos at the expense of universal freedoms, loose cultures provide entitlements to guarantee universal freedoms. The authors show that tightness-vs.-looseness is shaped by existential threats, with less-threatened societies showing greater tolerance of freedoms. Similarly, Fincher et al. (2008) as well as Fincher and Thornhill (2008, 2010) show that historically low vulnerability to disease is linked with high inter-group exchange, tolerance of freedoms and the emergence of democracy, while high vulnerability is linked with in-group closure, intolerance of freedoms and the persistence of authoritarianism. Together, these studies suggest that fading existential threats and increasingly permissive living conditions breed tolerance of freedoms and diminish inter-group hostilities.

For several decades, growing parts of the world experience improving existential conditions that change life from a source of threats to one of opportunities. By 2010, the world as a whole had attained the highest level of prosperity it has ever experienced (Ridley 2010; Morris 2011). During the past two decades, Western societies have had relatively slow growth rates and experienced economic setbacks; nevertheless, material wellbeing is on a historic high for the bulk of the population, life expectancies are unprecedentedly high and continue to increase, as do levels of education and access to information (Human Development Report 2012). The rest of the world has been catching up (Estes 2000; 2005; 2009). China and India – with 40 percent of the world's population—have been showing spectacular rates of economic growth, and Brazil, Russia and other developing societies have been making almost equally impressive gains. In general, the ex-communist world is recovering from its post-transition shock, while sub-Saharan Africa still lags but catches up in terms of life expectancies, formal education, technological equipment and, in recent years, even in per capita incomes (Africa Progress Panel 2012). Summing up, rising material wellbeing has been complemented by rising security against disease, crime, and war as well as dramatic increases in formal education, access to information and life expectancies in growing parts of the world.

These improvements have been paralleled by an increasing prominence of human rights norms and the spread of democracy in various waves of democratization (Huntington 1991; Markoff & White 2009; Pegram 2010). Despite the resilience and revival of authoritarianism, human rights and democracy have made unprecedented progress since the late 1980s.

In addition, growing shares of the world population are moving into the post-industrial age, which is characterized by rising knowledge economies (Bell 1973; Toffler 1990; Drucker 1993; Florida 2002). Knowledge economies cannot flourish through conquering other societies' land and enslaving their people. Instead, knowledge economies flourish through enriching, mobilizing and cross-fertilizing their own people's intellectual creativity (Becker 1964; Warsh 2006; Baker 2007; Galor 2012). With the rise of knowledge economies, the very nature of power changes from the predominance of 'hard power' to the predominance of 'soft power,' that is, from the power of coercion to the power of ideas (Nye 2004).

Where these improvements in existential conditions occur, most people's lives change from a source of threats to suffer into a source of opportunities to thrive. Welzel (2013) formulates the implications of this historic game change in his Evolutionary Emancipation Theory (EET). According to EET, multiplying life opportunities elevate societies on the 'utility ladder of freedoms': practicing and tolerating universal freedoms becomes increasingly instrumental to taking advantage of the options that a more promising life offers. In recognizing this utility shift, people embrace emancipative values, which emphasize universal freedoms. Thus, people's subjective valuation of freedoms grows in adjustment to these freedoms' growing objective utility. This utility-value link has evolved to fit subjective human aspirations to objective life needs, which is vital to keep our existence in touch with reality.

As Welzel (2014) shows with massive evidence, emancipative values emerge most powerfully where the fixation of traditional survival norms on childbearing, fertility, marriage and other features of the patriarchal family model shows its strongest resistance against emancipation: reproductive autonomy, like the freedom to terminate an unconsented pregnancy, to divorce an unloved partner and to follow a homosexual orientation.

In tandem with the ascending utility of freedoms, the utility of force descends. Thus, a central pillar of traditional survival norms should erode under rising emancipative values: willingness to fight in war. Quite logically, when emancipative values reorient people towards *living* a life enriched with options, the willingness to sacrifice life in war must decline. If this turns out to be true, the emancipatory transformation of modern societies provides a major pacifistic force that fosters an increasingly solid mass basis for inter-state peace. So far, the latter implication has not been demonstrated empirically. This article does it for the first time.

HYPOTHESES

The above outlined propositions of EET suggest three hypotheses with respect to people's values and their willingness to fight in wars:

(1) In a *cross-section*, people's willingness to fight in war is lower in countries with stronger emancipative values.

(2) *Longitudinally*, countries in which emancipative values grew more, experienced a larger decline in people's willingness to fight in war.

(3) In a *multi-level perspective,* individuals are less willing to fight in war when emancipative values are widely shared in their society; whether the individuals emphasize these values more than others in their society is less relevant.

The latter hypothesis is informed by EET's depiction of emancipation as a reciprocal good. Thus, the emphasis on universal freedoms inherent in emancipative values is a *cross-fertilization product* that flourishes under mutual recognition: it is easier to appreciate the freedoms of others when they reciprocate this favor. Hence, the effects of an emancipatory worldview--such as the refusal to sacrifice lives in war--reside in the emancipative values that are most common in a society rather than in the emancipative values that are unique to individual people.

METHODS, SAMPLE, MEASUREMENT

To test our hypotheses, we use the World Values Surveys (WVS) and European Values Studies (EVS), which have been conducted in five rounds (a sixth currently under completion[4]), covering random national samples of an average size of 1,200 respondents in almost a hundred societies around the globe. These societies include the countries with the largest populations and biggest economies from each world region, representing almost ninety percent of the world population. Figure 1 lists these societies. Information about the questionnaires, fieldwork, and data files is available from the WVS website at 'www.worldvaluessurvey.org.'

[4] For descriptive statistics, we include evidence from the incomplete sixth round of the WVS. Analytical results, however, are only based on completed rounds because only these provide sufficient statistical leverage for multivariate analyses.

[Figure 1 about here]

All attitudinal data in this study are taken from the WVS/EVS (World Values Survey Association 2010). Data on the societies' structural characteristics are taken from the Quality of Governance Dataset (Quality of Governance Institute 2010). The Online Appendix at www.___.org includes all measurement details not outlined in this section.

We analyze the data in three steps from three different angles, in the order of our hypotheses. In the first step, we apply a cross-sectional country-level perspective: we examine the fraction of people willing to fight in war per society, using the latest available survey from each society. We explain these fractions in multivariate regressions, testing the supposed impact of a society's mean emphasis on emancipative values against explanations looming prominent in the peace and conflict literature. The control variables include enduring democracy, technological advancement, international cooperation and a measure of encompassing peace. In the second step, we take a longitudinal view, evidencing changes over time in people's willingness to fight in war. We use dynamic regressions, explaining change in people's willingness to fight in war by change in relevant other variables over the same period—selecting those variables that proved important in the cross-sectional analysis. Third, we use multi-level models to demonstrate our expectation that a person's willingness to fight in war is less strongly determined by this person's unique emancipative values than by the emancipative values most common in this person's surrounding society.

Our key dependent variable is willingness to fight in war, which the WVS asks in the following way (variable V75 in the round five version of the master questionnaire):

> "Of course, we all hope that there will not be another war, but if it were to come to that, would you be willing to fight for your country?"

The response options are "yes" and "no." Respondents who did not answer this question (i.e., 29.7 % of all respondents[5] who have been asked) are treated as "missing."[6] At the country-level,

[5] Interestingly, non-response among women is only two percentage points higher than among men.

[6] One might assume that social desirability in most societies operates in favor of the "pro-fight" answer and respondents who do not want to fight feel ashamed to admit it but also do not want to lie, which leads them to refuse a response. This would

we analyze the fraction of respondents per society who answer that they are willing to fight. At the individual level, we analyze each person's binary response, coding willingness to fight 1.0 and unwillingness 0.

As explanatory variables at the country level, we use various indicators of opportunity-offering, permissive societal conditions--including enduring democracy, technological advancement, international cooperation and encompassing peace.

In the cross-sectional analyses, the structural explanatory variables are measured at the time indicating conditions at the beginning of the period over which willingness to fight in war is measured. Taking the latest available measure of willingness to fight in war from each society, the observation period in the cross-sectional analyses spans the years 1995 to 2005. Thus, the structural explanatory variables are measured in about 1995.

A key permissive condition is democracy, and especially enduring democracy, because enduring democracy grants people lasting entitlements. To measure the endurance of democracy, we use Gerring et al.'s (2005) 'democracy stock' index. The index measures a society's historically accumulated experience with democracy.[7]

For the longitudinal analysis it does not make sense to use this indicator because the dramatic improvements that some post-authoritarian societies experienced in their levels of democracy do not show up in a measure of long-term historic experience with democracy. For this reason, in the longitudinal section we measure change in levels of democracy from the earliest to latest point in time, using Welzel's (2013: 249-277) 'citizen rights index.' The index combines Freedom House's political rights and civil liberties ratings while downgrading these ratings for uncovered rights violations tapped by data from the Cingranelli/Richards Human Rights Data Project (Freedom House 2012; Cingranelli & Richards 2012).

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justify to treat all missing responses as a "no fight" answer. Even though there is no way to know for sure that this is a correct treatment, we re-ran all analyses under this assumption. Another alternative is to use multiple imputations to replace missing values with multiple estimated values, which we also did. Because neither of these alternatives produces different results, we report the findings obtained under the simple assumption that non-response is adequately treated as a missing value.

[7] The index adds up the scores on the Polity autocracy-democracy index from a given reference year all the way back to the time of the national independence or the first year when the time series starts. As the reference year we use the year of the survey, as we do with all explanatory variables.

We suppose international cooperation to operate as a condition that facilitates information flows and thus makes it easier for the people of a society to develop a sense of an interconnected world in which other countries have a legitimate place and are not necessarily threatening. Logically, this should come with a reduced willingness to fight other countries in war. To measure international cooperation, we use Dreher, Gaston and Martens (2008) index of 'political globalization' from the year of the survey. This multi-point index summarizes the number of international treaties a country has signed, the number of peacekeeping operations it has joined and the number of international organizations of which it is a member.

Technological advancement widens people's opportunities in life in manifold ways--proliferating technologies that make people's lives easier and more entertaining, providing incomes that grant consumer power as well as raising education, access to information and life expectancies. To measure technological advancement, we use the World Bank's (2005) 'Knowledge Index (KI),' which uses indicators of a population's mean level of education, access to information technology and per capita scientific output. These indicators are standardized and summarized into a multi-point index of knowledge development, yielding a multi-point scale with minimum 0 and maximum 10. This is an appropriate indicator of the rise of modern knowledge economies.

The technological advancement index is not available in sufficient time series to use it for the longitudinal analyses. For this reason, we use an alternative multi-component indicator of development, including per capita GDP, the mean number of schooling years, tertiary enrollment ratios, life expectancies, the inverse of the fertility rate and the inverse Gini index. As Welzel (2014) shows, these measures are very strongly correlated, reflecting a single dimension of cross-country variation, which is socioeconomic development. The reliability of the summary index of these six measures is high: showing a Cronbach's alpha of .83. Thus, we average these six measures into an encompassing index of socioeconomic modernization, after having standardized each measure into the same scale range from minimum 0 to maximum 1.0.[8]

[8] We calculate a weighted average, so that each measure flows in with a weight reflecting its representativeness of the common dimension: first, we multiply each measure by its factor loading on the common underlying dimension (.91 for schooling years, .87 for life expectancy, .79 for the inversed fertility rate, .78 for the tertiary enrolment ratio, .73 for the per capita

An alternative argument attributes the pacifying effects of socioeconomic development to its tendency to increase trade-openness. The interdependencies created by trade openness are supposed to increase the costs of war above its benefits. To test this hypothesis, we use Dreher, Gaston and Marten's (2008) index of economic exchange instead of the index of socioeconomic development. Yet, it turns out that socioeconomic development is the stronger predictor of people's willingness to fight in war. Since the two measures are collinear, the article only reports results with socioeconomic development instead of economic exchange.

Yet another indication of secure and permissive societal conditions is encompassing peace. We take the inverse of the 'global peace index' from the Vision of Humanity (2008), which uses a list of more than twenty indicators to indicate the incidence of both internal and external violence and conflict in a society.

We will see that two groups of countries stick clearly out from the general pattern, though in opposite ways. The Nordic countries (Denmark, Finland, Iceland, Norway, Sweden) show much higher levels of willingness to fight than our independent variables suggest. By contrast, the losers of the World War II (East and West Germany, Italy, Japan) show much lower willingness to fight than our independent variables suggest. These deviations from the general pattern reflect historic experiences that are so specific to particular country groups that they cannot be tapped by a general variable. To capture these group-specific experiences, we use dummy variables for these two sets of countries.

The independent variable of main interest is emancipative values. Welzel (2013) who invented the concept of emancipative values measures these as a broad 12-item concept, involving four distinct sub-components: emphasis on (1) personal autonomy, (2) gender equality, (3) people's voice, and (4) reproductive autonomy. Of these four manifestations of emancipative values, we am particularly interested in the emphasis on reproductive autonomy. As Welzel (2014) shows, the emancipatory trend has turned most vigorous in this particular domain of freedoms over recent decades. This is also the domain where traditional survival norms show the strongest resistance against emancipation. Indeed, a key purpose of survival norms is to preserve

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GDP, .61 for inversed Gini index), then we add up these weighted scores and finally divide the sum by the sum of factor weights (4.69).

the patriarchal family model with its emphasis on childbearing, fertility, traditional marriage, and kinship bonds: from the viewpoint of a survival mentality, the size (i.e., 'manpower') of one's in-group is the key advantage in the competition with rivaling out-groups. Thus, sex norms are shaped in such a way that they assure high fertility within a female-fidelity centered, heterosexual marriage framework. This leads to taboos against abortion, homosexuality and divorce. The emancipatory trend erodes these taboos by strengthening emphasis on reproductive autonomy.

Following Welzel (2014), we measure emancipative values in the domain of reproductive autonomy using an item battery that asks whether 'homosexuality,' 'abortion' and 'divorce' are justifiable on a scale from 1 ('never justifiable') to 10 ('always justifiable'). A factor analysis shows that these three indicators are one-dimensional on the aggregate level as well as on the individual level in each national sample. The Cronbach's alpha of the three items is .87 at the individual level and above .90 at the aggregate level. We average the respondent scores over the three items and standardize the resulting 30-point index of emancipative values into a range from minimum 0 to maximum 1.0, as we do with all other variables. At the aggregate level, we use the population mean in emancipative values to capture a society's overall emancipatory climate.

We hypothesize that emancipative values in the domain of reproductive autonomy are the primarily responsible orientation for the unwillingness to fight in war. The reason is that emancipation and warfare represent opposite utilities. Emancipation emerges from an ascending utility of freedoms, which goes in tandem with a descending utility of violence. Thus, promiscuity is an antipode of belligerence.

Yet, other scholars suggest different attitudes as determinants of the willingness to fight in war. The most encompassing study of these attitudes is provided by Diez-Nicolas and Puranen (2008; 2013) who use national pride as an individual- and country-level predictor of willingness to fight in war, showing that stronger national pride correlates at both levels with a stronger willingness to fight. National pride is measured by the question "How proud are you to be [Interviewer: name nationality]? Very proud, quite proud, not very proud, not at all proud?" We recode the response scheme into 0 for "not at all proud," .33 for "not very proud," .66 for "quite

proud" and 1.0 for "very proud." At the country level, we measure the fraction of people indicating to be very proud of their nationality.

At the individual level, Diez-Nicolas and Puranen also use other components of emancipative values, namely emphasis on people's voice, and democratic preferences as predictors of the willingness to fight in war. They expect both of these attitudes to decrease the willingness to fight. Moreover, they use confidence in the army, which they expect to increase willingness to fight. In the multi-level, we replicate their analyses and also include emphasis on people's voice, democratic preferences and confidence in the army as individual-level predictors of willingness to fight.

Like Welzel (2014), we measure emphasis on people's voice by the combined priority for "protecting freedom of speech," "giving people more say in important government decision,' and "giving people more say in how things are done in their jobs and their communities." These priorities are summarized into a six-point index. Democratic preferences indicate on a seven-point scale the prevalence of democratic over authoritarian regime preferences, as measured by Klingemann (1999).

As routine demographic controls at the individual level, we include a dummy variable for gender (female coded 1, and male 0), an indexed version of birth year and a nine-point index for the level of education.

Mostly, our measures are multi-point indices and we have rescaled all of them into a range from minimum 0 to maximum 1.0, with fractions for intermediate positions. This makes unstandardized regression coefficients between different variables directly comparable and easily interpretable, showing how much a shift in the theoretical range of an independent variable contributes to the shift in the theoretical range of the dependent variable.

FINDINGS

Cross-sectional Evidence

Technological progress changes ordinary people's lives fundamentally, transforming it from a source of threats to suffer into a source of opportunities to thrive. This should make advanced societies more emancipatory in their orientation towards reproductive freedoms. Figure 1 shows this pattern: in societies around the world, emancipative values in the domain of reproductive freedoms rise steeply and with increasing marginal returns as we move from low-tech economies to high-tech economies, like Rwanda, to high-tech economies, such as Sweden. This tendency accounts for 73 percent of the cross-national differences in emancipative values among ninety societies around the world. Analyzing the dynamic association between emancipative values and technological advancement in these data, Welzel (2013) demonstrates that technological advancement causes emancipative values rather than the other way round.

[Figure 1 about here]

Before we examine how emancipative values relate to people's willingness to fight in war, let us look at the variation in this willingness across countries. As Figure 2 illustrates, this variation is big, ranging from more than 90 percent of the population willing to fight in war in Rwanda, Viet Nam, Bangladesh and Qatar, to less than 30 percent in Italy, Japan and Germany.

[Figure 2 about here]

Figure 3 shows the cross-country relationship between emancipative values in the domain of reproductive freedoms and willingness to fight in war. Figure 3A (the upper panel) shows the relationship without controls; Figure 3B shows the relationship when we control for whether a society is a Nordic country and whether it is one of the defeated powers in World War II (two mutually exclusive categories).

[Figure 3 about here]

As Figure 3A demonstrates, the overall correlation between emancipative values and willingness to fight is reasonably strong and points in the predicted direction: it is a clearly

negative relationship. Obviously, emancipative values are more prevalent among societies with more permissive conditions: almost all of the societies located toward the lower-right on Figures 3A and 3B are technologically advanced democracies. Conversely, most societies in the upper-left portion are less advanced and less democratic, if democratic at all. The exceptions are Israel and Taiwan—two advanced democracies whose existence is threatened by powerful neighbors, the Arab states and Iran in the case of Israel and China in the case of Taiwan. Accordingly, we find them on lower levels of emancipative values and higher levels of willingness to fight in war than similarly advanced democracies. Apart from Israel and Taiwan, the only other advanced societies in which more than two-thirds of the public say they would be willing to fight in war are Cyprus, Slovenia and South Korea. These countries are divided with hostile frontiers, have inimical neighbors or, as in the case of Slovenia, are a fragment of recently divided Yugoslavia.

Iraq is an extreme outlier. Although the Iraqis rank among the least emancipatory people in the world, their willingness to fight in war for their country is exceptionally low. We suggest that this reflects the severe conflict between Sunnis, Shiites and Kurds, who are unwilling to fight for *Iraq*--though they are hostile to each other (Inglehart, Moaddel & Tessler 2008). If so, the question about willingness to fight for one's country has a categorically different meaning from what it has in other contexts. For this reason, we exclude Iraq from subsequent analysis.

Another peculiar society, Andorra, is a critical 'leverage case' that strongly confirms the first hypotheses: it shows extremely high levels of emancipative values and, hence, one of the weakest willingness to fight in war. Today, a majority of Andorra's population consists of prosperous immigrants, mainly from Spain and France, who maintain residence there in order to enjoy low taxes. It has one of the highest per capita incomes in the world, virtually no perceived military threat, and accordingly, its public shows very high levels of emancipative values and, thus, little willingness to fight in war.

Apart from these unique cases, there are two coherent outlier groups. The first group consists of the publics of the former Axis Powers that were defeated in World War II--the

Germans,[9] the Italians and the Japanese—all of whom show an even lower willingness to fight than their high level of emancipative values predicts. Most likely, this reflects an historic learning experience with their devastating defeat in World War II. Compatible with this interpretation, these societies also show some of the world's lowest levels of national pride (Díez-Nicolás 2009).

A more unexpected group of outliers are the Nordic countries: Norway, Sweden, Denmark, Finland and Iceland. Although the publics of these societies exhibit some of the world's highest levels of emancipative values, their willingness to fight in war is by far not as low one would expect. Presumably, this reflects the pacifist transformation of the role of the military in these societies: step by step, the military forces have become reoriented toward serving peacekeeping missions. In 2000, the Swedish parliament passed a resolution stating: "Defending a nation has historically been equivalent to protecting its borders. Today, defending a nation can take place far away, through creating peace, stability and prosperity in turbulent parts of the world. In this manner, defending a nation has come to include defending its values, and protecting democracy or human rights" (cited in Puranen 2010: 43). As a consequence, the Swedish military is today mainly involved in international peace operations. Similar changes are underway in other Nordic countries where military service has also been reoriented toward international development and peace-keeping. In the world as a whole, however, willingness to fight for one's country is still motivated by primordial survival orientations, more than by the goal of advocating emancipatory achievements.

The two outlier groups—the defeated Axis powers and the Nordic countries--have many things in common: they are all technologically advanced, have mature democracies and exhibit strong emancipatory orientations—all of which tends to weaken willingness to fight in war. But because of their distinctive historic experiences, these two groups of societies deviate from this tendency. And the fact that they deviate in opposite directions obscures the otherwise strongly negative relationship between emancipative values and willingness to fight. Thus, if we use

[9] The earliest Values Survey, in 1981, included West Germany but it was not yet possible to survey East Germany. Although the two countries have been reunited since 1990, the Values Surveys continue to collect separate samples from both parts of Germany, in order to preserve the longest possible time series for West Germany, and to analyze the extent to which their political cultures have merged since reunification.

dummy variables to control for these two groups' exceptionalism, the impact of emancipative values on willingness to fight surfaces stronger. As Figure 3B demonstrates, when we take into account whether a society was one of the Axis Powers in WWII or is a Nordic society, emancipative values explain fully fifty-three percent of the cross-national variance in willingness to fight.

[Table 2 about here]

The multivariate regressions in Table 2 test the impact of emancipative values on a society's mean willingness to fight while controlling for national pride, technological progress, enduring democracy, international cooperation, encompassing peace, as well as the Nordic country and Axis Power dummies.

The first regression model introduces national pride, technological advancement and enduring democracy as predictors of the willingness to fight. Only national pride shows a significant effect, and it operates in the expected direction: in societies with more widespread national pride, willingness to fight is more widespread too. But, as we already know, the exceptionalism of the Nordic countries and the former Axis Powers obscures the pacifying effect of permissive existential conditions. Accordingly, as model 2 shows, when these two country dummies are included in the regression, the pacifying effects of technological advancement and enduring democracy become significant. Although they contain groups of only four countries and five countries respectively, the two dummies are remarkably powerful predictors of the willingness to fight. Including them increases the explained variance from twenty-two to forty-seven percent.

Moreover, as model 3 demonstrates, the pacifying effect of permissive existential conditions is fully absorbed by emancipative values when we include them in the model—confirming the expectation that permissive conditions operate mostly through their tendency to produce an emancipatory culture. Other permissive conditions include peace and cooperation. When we introduce them instead of technological advancement and enduring democracy (model 4), neither cooperation nor peace turns out to have a highly significant and strong effect on willingness to fight in war. Nor does either of them diminish the effect of emancipative values.

In fact, emancipative values now turn out to show a stronger effect than before. Thus, the most efficient model with the largest explanatory power relative to the number of included variables is model 5. With only the two country groups and emancipative values, it explains sixty-six percent of the cross-national variance in willingness to fight across the seventy-seven societies for which data are available. As the partial regression plot in Figure 3B has shown, fifty-three percent of the variance is accounted for by emancipative values alone.

Longitudinal Evidence

The evidence so far indicates that more widespread emancipative values are linked with less widespread willingness to fight in war. This holds true under control of plausible alternative causes of willingness to fight. However, this evidence is purely cross-sectional. For this reason, it cannot be interpreted as causal. To come closer to a causal interpretation, we must establish that a dynamic relationship between emancipative values and willingness to fight exists and that this dynamic association withstands controls of alternative dynamics.

During the past thirty years, the world as a whole has become substantially more prosperous, educated, connected and people's lives have become longer. At the same time, as Welzel (2014) demonstrates, there has been a pervasive rise in emancipative values, especially in the domain of reproductive freedoms. Given the emancipation-belligerence polarity, over the same period there should be a sizeable shrinkage of people's willingness to fight in war, corresponding with the ascension of emancipative values. As Figure 4 demonstrates, this is indeed the case.

[Figure 4 about here]

To enhance comparability with Welzel's evidence for rising emancipative values, Figure 4 includes all forty-eight societies for which data covering a time span of at least ten years is available. Fortunately, this smaller sample does not embody a selection bias. It still includes the societies with the biggest populations and largest economies from each world region. And there

is no selection on the dependent or independent variables: the full spectrum of variation among the key variables is covered.

Among this sample, the public's willingness to fight decreased in 43 societies, showed no change in 2 societies, and increased in only 3 societies. Thus, fourteen times as many publics show a decreasing willingness to fight, as show a growing willingness. The average change is a 12-point decline in the percentage saying they would be willing to fight for their country.

[Figure 4 about here]

Can we explain the decrease in people's willingness to fight in war by the concurrent rise of emancipative values? To answer this question, the analyses in Table 3 regress willingness to fight in war at the time of the latest survey for each society (T_2) on (a) the willingness at the time of the earliest survey (T_1) and (b) on change from T_1 to T_2 in the supposed predictor variables.

[Table 3 about here]

Obviously, this is a lagged-dependent variable model, which is one reason why this model is dynamic: under control of the lagged dependent variable, other predictors in the model explain willingness to fight at the later point in time *insofar* as it remains unexplained by willingness to fight at the earlier point in time. This is equivalent to explaining change in willingness to fight. The other reason why the model is dynamic is that the presumed predictors themselves measure change. Hence, the regressions show to what extent change from T_1 to T_2 in a given predictor helps to shift willingness to fight at T_2 below its level at T_1.[10]

Including the lagged dependent variable among the predictors has two desirable properties. For one, we reduce the problem of endogeneity: should other predictors in the model be endogenous to willingness to fight in the sense that their change is triggered by lagged willingness to fight, this is taken care of. Next, we reduce omitted variable bias: lagged willingness to fight in war embodies virtually every prior influence on willingness to fight, including influences not specifically addressed by an additional variable.

[10] Note that time in this analysis is represented by different variables, not repeated country entries. Thus, there is no serial correlation among adjacent observations, so we need neither a Durbin-Watson test, nor do we need to run regressions with panel-corrected standard errors.

Under these premises, the two models in Table 3 show that willingness to fight has a strong component of temporal self-perpetuation. This is evident from the large coefficients for the lagged dependent variable. In the first model, for instance, we see that a level of willingness to fight one unit above the constant term at time T_1 means a half a unit level above the constant term at time T_2. Other than that, the models in Table 4 are designed in a parsimonious way by including not more than four variables at a time. The reason is that the sample of forty-some societies quickly shrinks to thirty and even below when several variables are paired. Because they are a powerful constant factor, the dummies for the two country groups are introduced in each model, providing a reference base against which the impact of change in the shifting variables is estimated. But as said, we introduce change in the four shifting variables of interest each at a time. What are the results?

Surprisingly from the viewpoint of the democratic peace thesis, change in democracy from time T_1 to time T_2 (which turns out to be mostly increases for the covered societies and observation period) does not significantly shift willingness to fight at time T_2 below its level at time T_1. Neither does further technological advancement have such an effect. An increase in international cooperation, for tis part, has only a slightly significant effect to this end. The strongest effect to this end, and the only one that is highly significant, is due to an increase in emancipative values: a one unit increase in emancipative values from time T_1 to time T_2 shifts willingness to fight in war at time T_2 a little more than half a unit below its level at time T_1. This is not an artifact of the sample now shrinking to twenty-four societies: if we reran the regressions with the other three shift variables over this smaller sample, they remain insignificant.

[Figure 5 about here]

Of course, with data available for only twenty-four societies, these results have to be taken with a strong note of caution. Yet, the fact that the available longitudinal evidence unequivocally supports our hypothesis is noteworthy. Figure 5 visualizes the partial effect of rising emancipative values on shrinking willingness to fight in war, as shown in Model 4 of Table 3. The graph also shows the composition of the sample of the twenty-four societies. It is obvious that this is still a diverse global sample, containing some of the most typical societies from each world region, such as China, India, Japan, Russia, Mexico, the US, Sweden, Poland,

Italy, South Africa or Turkey. There is no apparent selection bias in this sample by either regional origin or the dependent and independent variables.

Multi-level Evidence

Do emancipative values diminish one's willingness to fight mainly as a *personality* trait? Or do they diminish willingness to fight through a *culture* of emancipation? In other words, am I less willing to fight in war mainly because our own emancipative values are stronger than those of most people in our society? Or am I less willing to fight in war mainly because the overall emancipatory climate in our society is more pronounced? Hypothesis 3 states that the latter is the case because the inherent universalism of emancipative values characterizes them as a reciprocal orientation whose effects surface through their social commonness rather than their unique presence in individuals.

To answer this question one must introduce emancipative values into a multi-level model simultaneously as a country- and as an individual-level variable. Emancipative values measure two different things at these two levels: at the country level, they measures how prevalent emancipative values are in the individual's society—which is an indication of an emancipatory *culture*; at the individual level, they measure how much more (or less) emancipatory an individual is than others in the same society—which is an indication of an emancipatory *personality*. To fully separate the two measures, we center each individual's emancipative values on the country mean. Doing so removes any overlap between the country- and individual-level measures of emancipative values. Similarly, we do this with the other variables used in the multi-level model, such as national pride, confidence in the army and the democratic preference. As standard demographic controls we introduce female sex, an indexed version of birth year and formal education.

[Table 4 about here]

Table 4 shows the results of the multi-level analysis using a linear probability model to explain the individuals' willingness to fight in war.[11] Let's focus on the most interesting findings. We have already seen in the country-level regressions in Table 1 that national pride has no significant effect on willingness to fight when we control for other important variables. The country-level component of the multi-level model confirms this finding. However, at the individual level, national pride shows by far the strongest effect on willingness to fight—confirming previous research by Puranen (2008a; 2008b) and Diez-Nicolas (2009). Hence, it is the personality component much more than the culture component of national pride that enhances one's willingness to fight.

With emancipative values, by contrast, we find a strong country-level effect but no significant individual-level effect on willingness to fight (even though the sign of the individual-level effect points in the expected direction). Accordingly, it is the *culture* component of emancipative values rather than the *personality* component that diminishes one's willingness to fight.

We suggest this pattern indicates that emancipative values are a more *reciprocal good* than is national pride. An individual can have a strong sense of national pride regardless of whether other people feel the same way. But emphasizing universal freedoms is different: it is difficult to respect the freedoms of others when others do not reciprocate the same respect. Because of their inherent reciprocity, the effects of emancipative values operate more through a shared emancipatory culture than through unique emancipatory personalities.

How do the personality component of national pride and the culture component of emancipative values interact? As the table shows, there is a positive cross-product term. This means that, when a culture of emancipation flourishes, the generally positive effect of a person's

[11] The dependent variable is a dummy, indicating whether an individual is willing to fight in war (coded 1) or unwilling to do so (coded 0). For decades, the standard choice of functional form for such models has been logistic probability models. Since Mood's (2010) study, this has changed because she shows that odds ratios and log odds are incomparable across groups and samples—which is a blowing criticism in the context of a multi-level framework with many different national samples. At the same time, Mood's study proves that the standard criticisms held against linear probability models (i.e., linear regressions with binary dependent variables) are unjustified in most cases of application.

national pride on willingness to fight is further enhanced. This is logical: an emancipatory culture reduces the mean level of willingness to fight in war, making more people *un*willing to fight. Under this condition, national pride is needed more to sustain a person's willingness to fight.

The Nordic country dummy interacts with national pride in the opposite direction, which also is logical: living in a Nordic country means living in an environment with a widespread willingness to fight. Under this condition, national pride is needed less to sustain a person's willingness to fight. Consequently, we find a negative interaction between the Nordic country dummy and an individual's level of national pride.

CONCLUSION

Cross-sectional, longitudinal and multi-level evidence from around the world provides strong support of the Evolutionary Emancipation Theory (EET): improving existential conditions turn the lives of most people in a society from a source of threats to suffer into a source of opportunities to thrive, thus elevating societies on the 'utility ladder of freedoms.' In recognition of this utility shift, people adopt emancipative values that emphasize universal freedoms. In tandem with freedoms' ascending utility, the utility of coercion, force and violence descends. Consequently, rising emancipative values—especially in the domain of reproductive autonomy--erode primordial survival norms in one of their strongest bastion's: willingness to fight other people in war. Increasingly, the reason why democracy is linked with peace is that it flourishes in a culture of emancipation. Thus, the emancipatory transformation of contemporary cultures might turn out to operate as a pacifist force that underpins inter-state peace with an increasingly solid mass basis.

In the longitudinal dimension, the evidence on which our findings rest is still limited. This raises a note of caution and strongly underlines the need to prolong the time series of our observations. To do this, researchers must continue monitoring questions on people's emancipative values and their willingness to fight in war. Of particular interest in this context

will be if the Nordic pattern becomes a role model for other societies. By now, this pattern is strictly limited to the Nordic countries.

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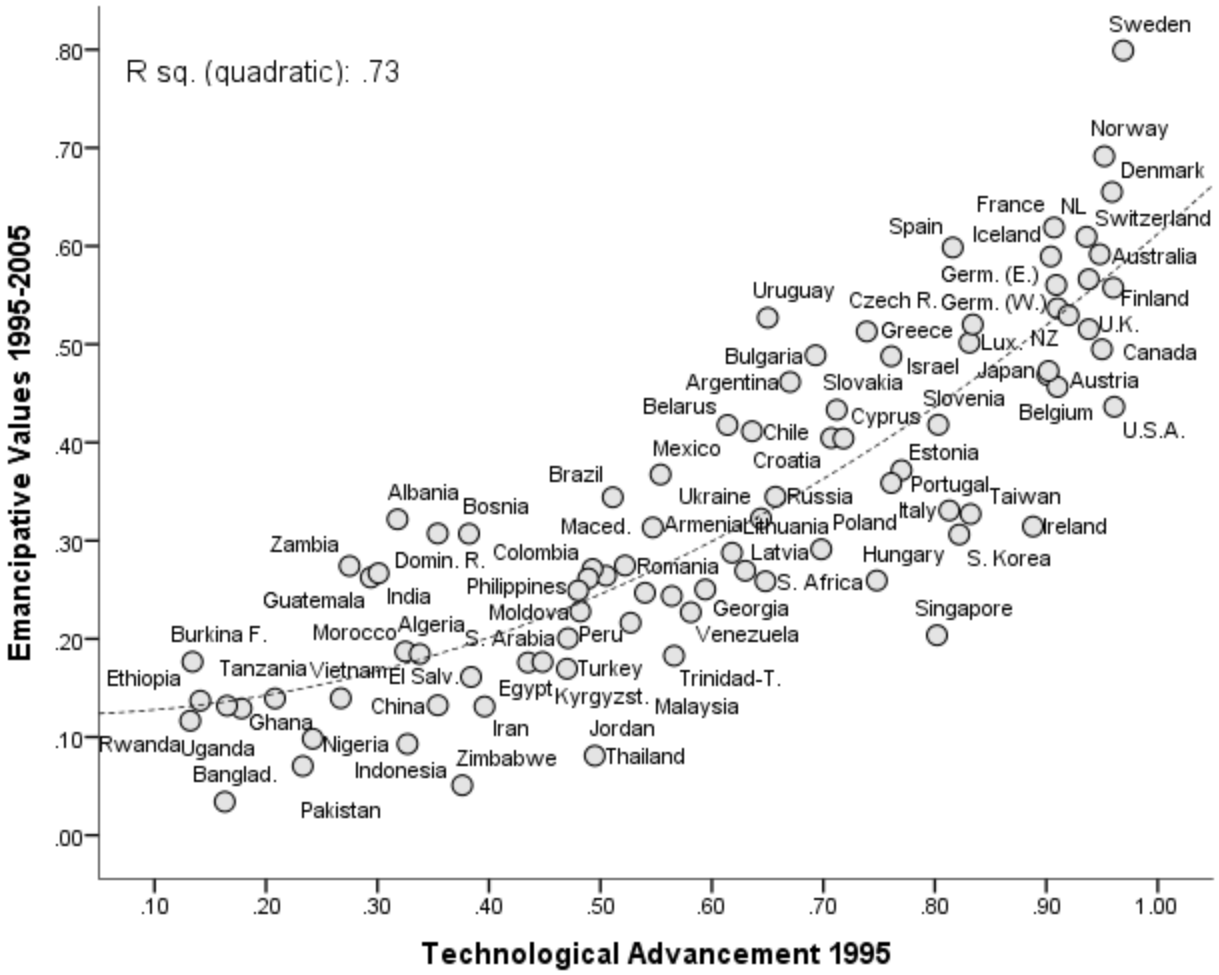
Figure 1. The Relationship between Technological Advancement and Emancipative Values



Source: World Values Survey and European Values Study (latest survey from each society) and World Bank (Knowledge Index). See OA 1 at www.___.org.

Figure 2. Percent of National Publics Willing to Fight in War (latest available survey)

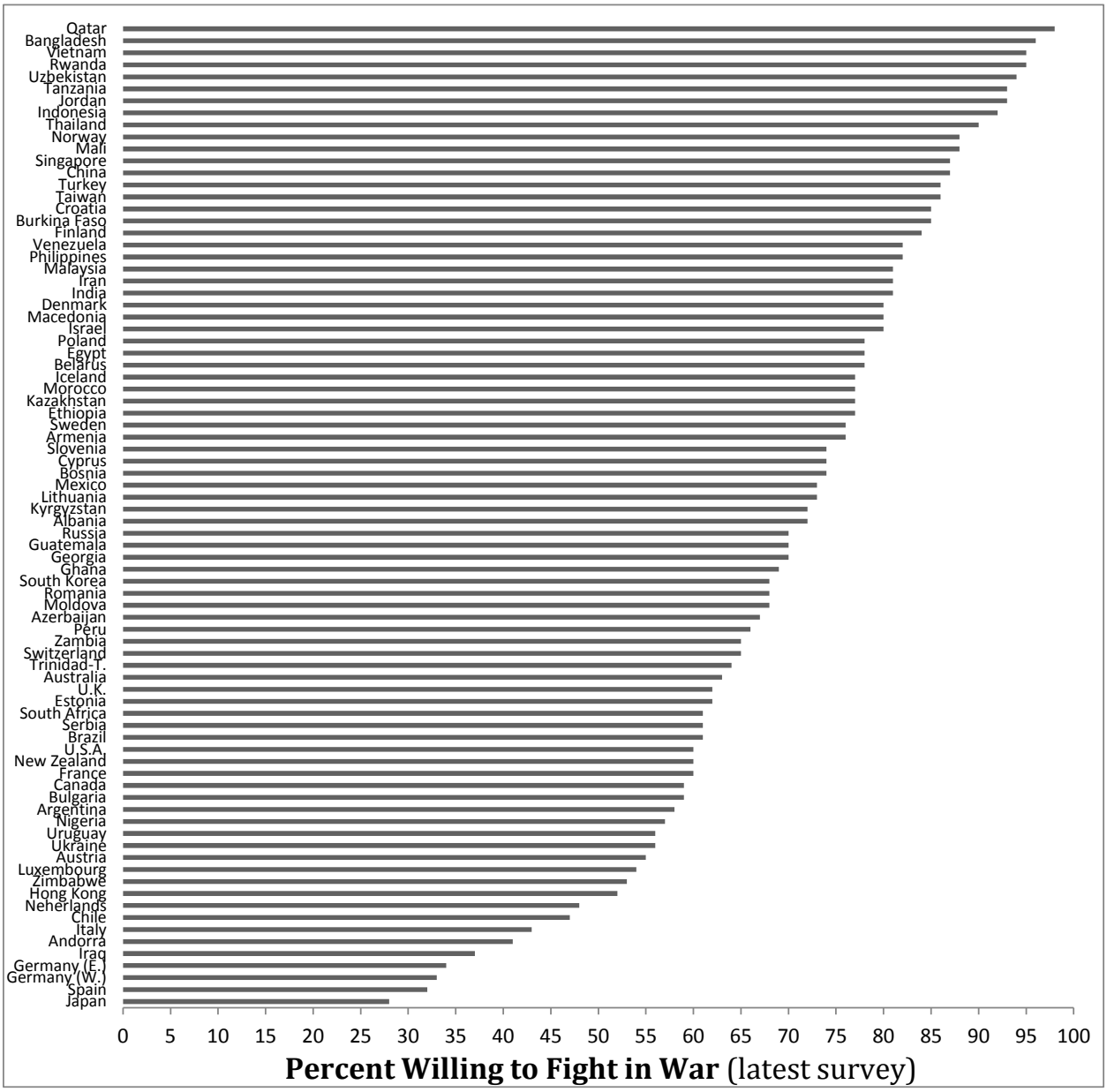
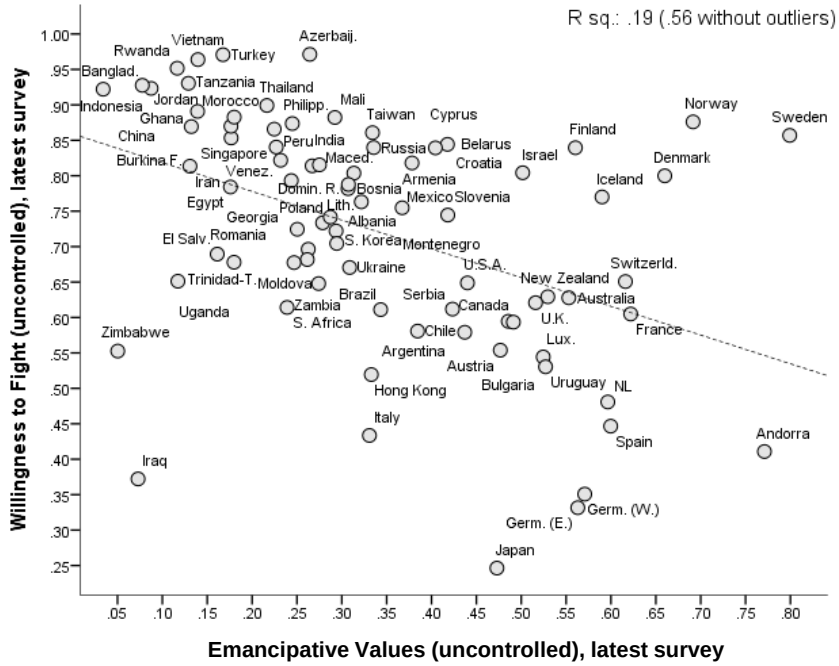
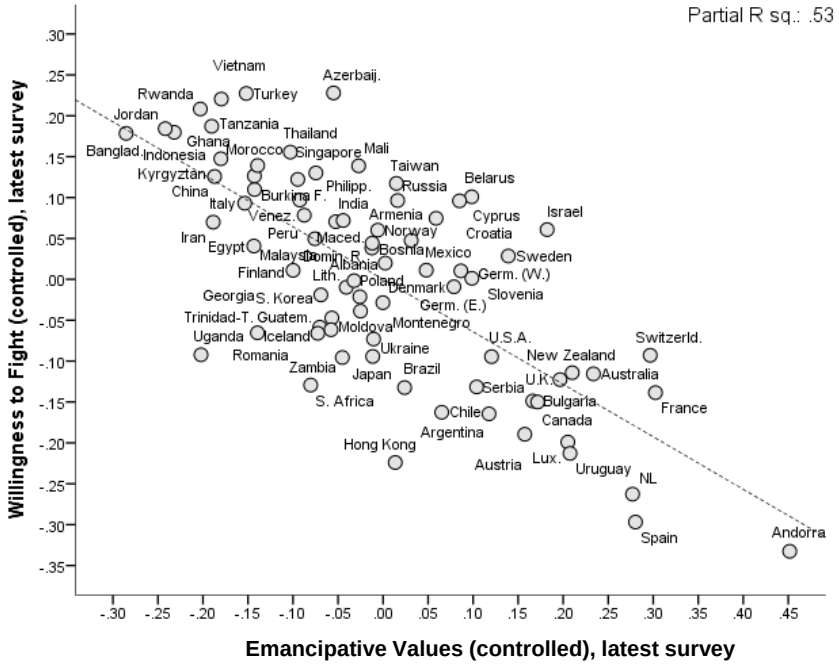


Figure 3. The Relationship between Willingness to Fight in War and Emancipative Values across Countries (before and after controlling for the historic exceptionalisms of the Nordic countries and former axis powers)

Before Controls



After Controls

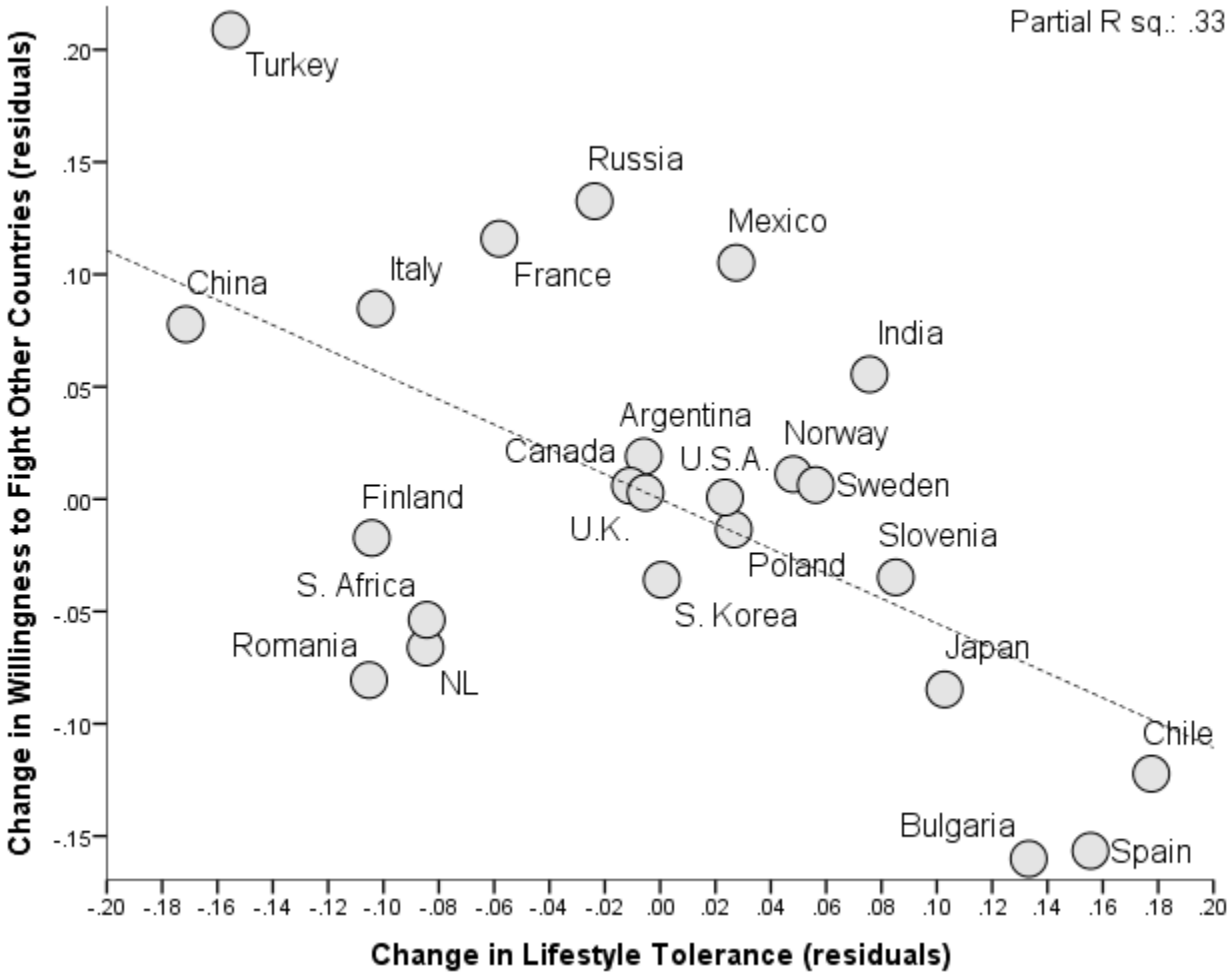


Note: The left-hand diagram shows the simple bivariate relationship between the fractions of national publics willing to fight in war and the same publics' mean emphasis on emancipative values. The right-hand diagram shows the same relationship controlled for two dummy variables, each representing a country group: the Nordic countries and the former axis powers.

Figure 4. Change in Percent Respondents Willing to Fight in War (from earliest to latest survey, usually from 1990 to 2008)

Source: Data from all 48 countries from which a time series of at least 10 years is available from the World Values Surveys and European Values Study, 1981-2008.

Figure 5. The Dynamic Relationship between Emancipative Values and Willingness to Fight in War (partial effect of change in emancipative values on change in willingness to fight)



Change in Emancipative Values (residuals)

Note: Relationship is shown under inclusion of the controls of Model 4 in Table 2.

Table 3. Multi-level Regression to Explain Willingness to Fight for One's Country (linear probability model)

	DEPENDENT VARIABLE: Willingness to Fight for One's Country (latest survey)	
PREDICTORS:		
Individual-level Effects (IL):		
Female Sex	- .11	(-13.30) ***
Birth Year (indexed)	.09	(3 .63) ***
Formal Education	.00	(0 .08)
Confidence in Army	.18	(10 .87) ***
National Pride	.30	(19 .38) ***
Democratic Preference	- .03	(-2 .54) **
Emphasis on People's Voice	- .01	(-1 .17)
Emancipative Values	- .02	(-1 .26)
Societal-level Effects (SL):		
National Pride	.03	(0 .26)
Enduring Democracy	- .09	(-1 .07) *
WWII Axis Power Dummy	- .28	(-7 .46) ***

Nordic Country Dummy	.33	(7 ***	.14)
Emancipative Values	- .48	(-4 ***	.28)
Cross-level Interactions (IL * SL):			
Birth Year (IL) * Enduring Democracy (SL)	- .43	(-3 ***	.21)
Birth Year (IL) * Emancipative Values (SL)	.18	(0	.90)
National Pride (IL) * Nordic Country (SL)	- .21	(-2 **	.49)
National Pride (IL) * Emanc. Values (SL)	.27	(2 **	.50)
Constant	.80	(80 ***	.78)
Number of Observations (*N*)	69,338 individuals in 69 countries		
Error Reduction:			
Within-country Variation of DV	05.2% (04.5% of total)		
Between-country Variation of DV	48.1% (06.9% of total)		

Notes: Entries are unstandardized regression coefficients with their T-values in parentheses. Models calculated with HLM 6.02 based on robust standard errors. Country samples are weighted to equal size without changing the overall *N*. Individual-level variables are country-mean centered; country-level variables are global-mean centered. Percent error reduction calculated from random variance in empty model. 14.3% of the variance in the DV is between, 86.7% is within countries.

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