Democratic Peace and the Norms of the Public:

A Multilevel Analysis of the Relationship between Regime Type and Citizens' Bellicosity, 1981–2008

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Abstract

The democratic peace literature has convincingly shown that democracies do not fight other democracies. Theoretical explanations of this empirical phenomenon often claim that the citizenry in democracies prefers peaceful resolution of interstate conflicts. Still, there is a dearth of studies exploring the public's preferences and values directly. We seek to rectify this by investigating, in a novel way, the relationship between regime type and citizens' bellicosity. A comprehensive multilevel research design is employed, with data spanning 72 countries over the period 1981–2008. This enables us to test one of the theoretical mainstays of the democratic peace thesis, viz., that regime type helps shape individuals' attitudes toward war-fighting. Our results lend special support to normative democratic peace theory: Citizens of democracies are significantly more pacifistic than citizens of non-democracies. This result upholds when we rigorously control for other relevant factors, including specific characteristics of individuals and rival theoretical explanations.

Keywords: democratic peace; Kantian peace; interstate war; international relations; public norms; multilevel analysis

Introduction

The empirical literature on the democratic peace confidently contends that democracies rarely, if ever, go to war against or find themselves embroiled in militarised disputes with other democracies.[1] There is less agreement, however, on the question of *why* democracies maintain peaceful relations among each other.

There are two dominant strands of theoretical explanations of the alleged democratic peace: institutional (structural) and normative theories. Institutional or structural theory argues that institutional traits in democracies – such as free elections and a separation of powers – work to constrain the political leaders' scope of action, thereby acting as a check on any adventurous foreign-policy endeavours by the leadership.[2] Normative theory, for its part, claims that citizens in well-established

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[1] Steve Chan, 'Mirror, Mirror on the Wall ... Are the Freer Countries More Pacific?', *Journal of Conflict Resolution*, 28:4 (1984), pp. 617–48; William J. Dixon, 'Democracy and the Peaceful Settlement of International Conflict', *American Political Science Review*, 88:1 (1994), pp. 14–32; Zeev Maoz and Nasrin Abdolali, 'Regime Types and International Conflict', *Journal of Conflict Resolution*, 33:1 (1989), pp. 3–35; James Lee Ray, 'Friends as Foes: International Conflict and Wars between Formal Allies', in Charles S. Gochman and Alan Ned Sabrosky (eds.), *Prisoners of War*? (Lexington, MA: Lexington Book, 1990), pp. 73–91; Bruce Russett, *Controlling the Sword: The Democratic Governance of National Security* (Cambridge, MA: Harvard University Press, 1990); Bruce Russett, 'The Democratic Peace: "And Yet It Moves"', *International Security*, 19:4 (1995), pp. 164–75.

[2] Bruce Bueno de Mesquita, James D. Morrow, Randolph M. Siverson and Alastair Smith, 'An Institutional Explanation of the Democratic Peace', *American Political Science Review*, 93:4 (1999), pp. 791–807; Zeev Maoz and Bruce Russett, 'Normative and Structural Causes of Democratic Peace, 1946–1986', *American Political Science Review*, 87:3 (1993), pp. 624–38; Clifton T. Morgan and Sally H. Campbell, 'Domestic Structures, Decisional Constraints, and War: So Why Kant Democracies fight?', *Journal of Conflict Resolution*, 35:2 (1991), pp. 187–211; Dan Reiter and Allan C. Stam, *Democracies at War* (Princeton, NJ: Princeton University Press, 2002); Bruce Russett, *Grasping the Democratic*

(liberal) democracies harbour 'democratic-pacifistic' values and norms. These norms, in turn, are externalised to foreign affairs, reducing the likelihood that state goals will be pursued by violent means.[3] Both these purported mechanisms are particularly held to be valid in relations among democracies. A dyadic democratic peace arises not least because the mutual trust between democracies ameliorates the security dilemma and the escalation potential in interstate conflicts and crises.

Given the presumed direct or indirect influence of the citizenry on foreign policy, it is somewhat unfortunate that there is a dearth of studies exploring the public's preferences and values directly. Although valuable exceptions do exist, primarily in the form of experimental studies,[4] the bulk of empirical research investigates the

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Peace: Principles for a Post-Cold War World (Princeton, NJ: Princeton University Press, 1993); Randolph Siverson, 'Democracies and War Participation: In Defence of the Institutional Constraints Argument', *European Journal of International Relations*, 1:4 (1995), pp. 481–9.

[3] Dixon (1994); Michael W. Doyle, 'Liberalism and World Politics', *American Political Science Review*, 80:4 (1986), pp. 1151–69; Maoz and Russett, 'Normative and Structural Causes of Democratic Peace'; Gregory A. Raymond, 'Democracies, Disputes, and Third-Party Intermediaries', *Journal of Conflict Resolution*, 38:1, pp. 24–42 (1994); Thomas Risse-Kappen, 'Democratic Peace – Warlike Democracies?: A Social Constructivist Interpretation of the Liberal Argument', *European Journal of International Relations*, 1:4 (1995), pp. 491–517; Russett, 'Grasping the Democratic Peace'; Spencer R. Weart, *Never at War: Why Democracies Will Not fight One Another* (New Haven, CT: Yale University Press, 1998).

[4] Adam S. Chilton, 'The Laws of War and Public Opinion: An Experimental Study', *Journal of Institutional and Theoretical Economics*, 171:1 (2015), pp. 181–201; Nehemia Geva and D. Christopher Hanson, 'Cultural Similarity, Foreign Policy Actions, and Regime Perception: An Experimental Study', *Political Psychology*, 20:4 (1999), pp. 803–27; Robert Johns and Graeme A. M. Davies, 'Democratic Peace or Clash of Civilizations? Target States and Support for War in Britain and the United States', *Journal of Politics*, 74:4 (2012), pp. 1038–52; Alex Mintz and Nehemia Geva, 'Why Don't Democracies Fight Each

relationship between regime type and states' participation in war or militarised disputes at a high level of aggregation. The present paper also uses regime type as its main independent variable. Our dependent variable, though, which is extracted from the World Values Survey, measures citizens' preferences and attitudes towards participation in war. We employ a comprehensive multilevel research design and statistical analysis, using data at the individual as well as the country-year and country level for the period 1981–2008. This enables us to test – more directly and in a novel way – one of the theoretical mainstays of the democratic peace thesis, viz., that regime type *per se* helps shape individuals' attitudes towards war-fighting.

Our results indicate that it does: Citizens of democracies are significantly more pacifistic than citizens of non-democracies. This result upholds when we rigorously control for other relevant factors, including specific characteristics of individuals and variables linked to rival theoretical explanations, notably realism and economic or commercial peace theory. Democracies, *qua* democracies, *are* really more peaceful than non-democracies, and this democratic peace seems to be rooted first and foremost in the norms and values of the democratic citizen.

Our paper is structured as follows. The next section reviews the main empirical findings and theoretical arguments of the democratic peace literature, and it examines criticisms of the thesis. The subsequent section presents methods and data. Thereafter we exhibit and analyse the empirical evidence, while we in the last section discuss the results and conclude.

Other?: An Experimental Study', *Journal of Conflict Resolution*, 37:3 (1993), pp. 484–503; Michael Tomz and Jessica L. Weeks, 'Public Opinion and the Democratic Peace', *American Journal of Political Science*, 107:4 (2013), pp. 849–65.

Democratic peace: The literature

Immanuel Kant's 1795 essay *Perpetual Peace* is still rightfully regarded as the fundamental text of the democratic peace literature.[5] His ideas about the democratic or liberal peace[6] were explicitly resurrected some three decades ago, particularly by Michael Doyle.[7] The latter's theoretical studies followed Dean Babst,[8] who (without citing Kant) emphatically highlighted the peacefulness of democratic regimes. Subsequent literature on the democratic peace has truly been voluminous.[9] This is especially so in terms of empirical studies, which are relatively conclusive that a *dyadic*

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[5] Immanuel Kant, *Principles of Politics and Perpetual Peace*, trans. W. Hastie (Boston, MA: Digireads, 2010).

[6] Democratic peace is usually viewed as a key constituent element of liberal peace or Kantian peace, which highlights Kant's emphasis of the peace-bolstering role played by 'republics' (democracies) as well as by interstate trade and international organisation. For a comprehensive elaboration of the Kantian peace triangle, see Bruce Russett and John Oneal, *Triangulating Peace: Democracy, Interdependence, and International Organizations* (New York: W. W. Norton & Co., 2001).

[7] Michael W. Doyle, 'Kant, Liberal Legacies, and Foreign Affairs', *Philosophy & Public Affairs*, 12:3 (1983), pp. 205–35; Doyle, 'Liberalism and World Politics'.

[8] Dean V. Babst, 'Elective Governments – a Force for Peace', *Wisconsin Sociologist*, 3:1, pp. 9–14.

[9] For recent reviews of the literature, see Anna Geis and Wolfgang Wagner, 'How Far Is It from Königsberg to Kandahar? Democratic Peace and Democratic Violence in International Relations', *Review of International Studies*, 37:4 (2011), pp. 1555–77; Jarrod Hayes, 'The Democratic Peace and the New Evolution of an Old Idea', *European Journal of International Relations*, 18:4 (2012), pp. 767–91; Håvard Hegre, 'Democracy and Armed Conflict', *Journal of Peace Research*, 51:2 (2014), pp. 159–72.

democratic peace exists.[10] The *monadic* version of the democratic peace thesis, though, has received much less empirical support.[11]

Democratic peace: Normative theory

Normative explanations of the democratic peace typically centre on two interlinked arguments:[12] (1) Democratic states are culturally saturated by liberal or democratic norms and values, which helps create a domestic sphere in which political and social

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[10] David Kinsella, 'No Rest for the Democratic Peace', *American Political Science Review*, 99:3 (2005), p. 453.

[11] Charles R. Boehmer, 'A Reassessment of Democratic Pacifism at the Monadic Level of Analysis', *Conflict Management and Peace Science*, 25:1 (2008), pp. 81–94; Stephen L. Quackenbush and Michael Rudy, 'Evaluating the Monadic Democratic Peace', *Conflict Management and Peace Science*, 26:3 (2009), pp. 268–85; Melvin Small and J. David Singer, 'The War-Proneness of Democratic Regimes', *Jerusalem Journal of International Relations*, 1:4 (1976), pp. 50–69. For a recent review of the monadic democratic peace literature, see Sandra Dieterich, Hartwig Hummel and Stefan Marschall, 'Bringing Democracy Back In: The Democratic Peace, Parliamentary War Powers and European Participation in the 2003 Iraq War', *Cooperation and Conflict*, 50:1 (2015), pp. 89–91. For empirical studies citing support for monadic democratic peace, see, e.g., Stuart A. Bremer, 'Dangerous Dyads: Conditions Affecting the Likelihood of Interstate War, 1816–1965', *Journal of Conflict Resolution*, 36:2 (1992), pp. 309–41; Karl R. DeRouen Jr. and Shaun Goldfinch, 'Putting the Numbers to Work: Implications for Violence Prevention', *Journal of Peace Research*, 42:1 (2005), pp. 27–45; Paul K. Huth and Todd L. Allee, *The Democratic Peace and Territorial Conflict in the Twentieth Century* (New York: Cambridge University Press, 2002); Rudolph J. Rummell, 'Democracies ARE Less Warlike than Other Regimes', *European Journal of International Relations*, 1:4 (1995), pp. 457–79.

[12] Dixon, 'Democracy and the Peaceful Settlement of International Conflict'; Doyle, 'Liberalism and World Politics'; Michael W. Doyle, 'Three Pillars of the Liberal Peace', *American Political Science Review*, 99:3 (2005), pp. 463–6; Maoz and Russett, 'Normative and Structural Causes of Democratic Peace'; Russett, 'Grasping the Democratic Peace'; Weart, 'Never at War'.

conflicts of interest are resolved peacefully, and where individual freedoms are thoroughly respected. (2) These norms of behaviour are normally externalised to the realm of foreign affairs. This imbues relationships between and among democracies with a level of reciprocal trust and respect – and a mutual belief that the use or threat of force is not on the agenda for either party even in times of crisis – that is not present in any other ideal-type dyad. A dyadic democratic peace thereby arises.

There is some divergence within the literature concerning what liberal or democratic norms really entail. Some hold that such norms both reflect and help cause the socialisation of the democratic public and the democratic elites into appreciating that all domestic conflicts should and must be resolved peacefully.[13] Democratic citizens and leaders alike inhabit a state whose domestic culture is based on regularised and peaceful sociopolitical competition. Negotiations, compromise and a fundamental respect for opposing political viewpoints substitute for intransigence, force and coercion as legitimate tools of conflict resolution. This should especially be the case in mature democracies.[14]

Others emphasise more the essential role played by *liberal* norms.[15] These typically include 'individual freedom, political participation, private property, and equality of opportunity'.[16] At its root, liberalist thought highlights the fundamentality of the individual itself. A belief in the moral freedom of individuals logically extends into

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[13] Dixon, 'Democracy and the Peaceful Settlement of International Conflict'; Maoz and Russett, 'Normative and Structural Causes of Democratic Peace'; Russett, 'Grasping the Democratic Peace'.

[14] Maoz and Russett, 'Normative and Structural Causes of Democratic Peace'; Russett, 'Grasping the Democratic Peace'.

[15] Doyle, 'Liberalism and World Politics'; Doyle, 'Three Pillars of the Liberal Peace'; John M. Owen, 'How Liberalism Produces Democratic Peace', *International Security*, 19:2 (1994), pp. 87–125.

[16] Doyle, 'Liberalism and World Politics', p. 1152.

the argument that all humans enjoy the right to be treated – and have an obligation to treat others – as ends and not as mere means. The use of violence and coercion against others negates their fundamental rights, and these are therefore to be considered *illiberal* tools.

The second leg of the normative school extends the argument about the conflict-mitigating role of democratic norms and claims its validity at the foreign-policy arena as well. Yet, there is purportedly a dual logic at play here. Outcomes of peace, militarisation and war critically hinge on whether a dyad in question is like (that is, containing two democracies) or unlike (that is, containing one democracy and one non-democracy).[17] This dual logic, moreover, may satisfactorily account for why the dyadic democratic peace thesis enjoys more empirical credence than the monadic one.[18]

In like (democratic) dyads, the same normatively-founded practices of peaceful conflict resolution that are present domestically ostensibly also operate in foreign affairs. This creates a basis for mutual trust and respect that is built on the *common knowledge* that both states' foreign policies renounce the use of violence to settle disputes.[19] What emerges, then, is a reciprocal belief that the age-old wisdom about war being the ultimate arbiter does not apply in democratic dyads. Inasmuch as this is true, one of the most commonly-cited basic causes of interstate war and militarised

[17] In terms of outcomes, the third possible option – a like dyad consisting of two non-democracies – basically yields the same expectations as an unlike dyad.

[18] Maoz and Russett, 'Normative and Structural Causes of Democratic Peace', p. 625; Risse-Kappen, 'Democratic Peace – Warlike Democracies?'

[19] Carol R. Ember, Melvin Ember and Bruce Russett, 'Peace between Participatory Polities: A Cross-Cultural Test of the "Democracies Rarely Fight Each Other" Hypothesis', *World Politics*, 44:4 (1992), pp. 573–99.

conflict – the security dilemma and its related spiral effects – is simply removed as a relevant factor in such dyads.

On the other hand, a similar mutual trust does not apply to unlike dyads, and therefore the security dilemma and spiral dynamics persist in relations between democracies and non-democracies. It is exactly the democracy's expectation – or, in any case, fear – that the non-democracy will consider the use or threat of military force as a bargaining tool which spurs the democracy to make the same considerations. In this view, the escalatory potential in a conflict between a democracy and a non-democracy has no obvious stopping point short of war; hence, a literal externalisation of democratic-pacifistic norms by the democracy might be self-defeating and potentially catastrophic.

Democratic peace: Institutional theory

Institutional or structural arguments make up the second main strand of democratic peace theory. Two primary claims are made.[20] Firstly, the separation of powers that characterises democracies circumscribes the scope of action of political leaders, effectively acting as a check on any decision to move the country along the path to war. Secondly, the democratic public is loath to carry the human and material costs of war; it will therefore punish belligerent leaders at the ballot box or through other democratic mechanisms.

[20] Bueno de Mesquita et al., 'An Institutional Explanation of the Democratic Peace'; Maoz and Russett, 'Normative and Structural Causes of Democratic Peace'; Morgan and Campbell, 'So Why Kant Democracies Fight?'; Reiter and Stam, *Democracies at War*; Russett, 'Grasping the Democratic Peace'; Siverson, 'Democracies and War Participation'.

It is noteworthy that these arguments are associated with both a monadic and a dyadic logic. At the dyadic level, the reasoning closely resembles that of normative theory (but for the difference in assumptions about root causes): The security dilemma – and with it, the likelihood of escalation and war – in democratic dyads is significantly mitigated considering that both parties understand and trust that the decision-making process of the other is also subject to institutional constraints.

As for the monadic level, the checks and balances operating in democracies should work to block decisions to go to war irrespective of the nature of the adversary's regime.[21] This is so not least considering that the underlying logic of the institutional arguments centres critically on the *costs* of war. Following Kant[22] – who emphasised the public's unwillingness to 'fight in their own persons', to 'supply the costs of war', to 'repair [its] devastation' and to take on the resulting 'burden of debt' – there is only a fine line separating parts of the institutional logic from the reasoning underpinning economic or commercial peace theory,[23] which is intimately related to a broader Kantian peace.

The monadic democratic peace thesis receives scant empirical support, however.[24] Attempts to unravel this conundrum have taken three basic forms. Firstly, as explicated above, the dyadic logic may trump the monadic one bearing in mind the unforgiving nature of the security dilemma (in non-democratic dyads) and the

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[21] Miriam F. Elman, 'The Need for a Qualitative Test of the Democratic Peace Theory', in Miriam F. Elman (ed.), *Paths to Peace: Is Democracy the Answer?* (Cambridge, MA: MIT Press, 1997), p. 13.

[22] Kant, *Perpetual Peace*, p. 57.

[23] Doyle, 'Three Pillars of the Liberal Peace', pp. 464–5.

[24] Boehmer, 'A Reassessment of Democratic Pacifism'; Quackenbush and Rudy, 'Evaluating the Monadic Democratic Peace'.

perpetuity of the basic state goals of security and survival. Secondly, empirical research indicates that democracies tend to 'select' the wars they do fight, opting in particular to shun costly battles against other 'powerful pacifist' democracies.[25] Thirdly, a number of studies indicate that the attitudes of public opinion in the United States towards the use of armed force by the U.S. are shaped in large part by considerations of the *purpose* of the war.[26] Presumably, the democratic public is more inclined, *ceteris paribus*, to regard wars against autocracies as more purposeful and virtuous than wars against other democracies. A handful of experimental studies indeed suggest as much; recent empirical findings by, among others, Tomz and Weeks and Johns and Davies

[25] David A. Lake, 'Powerful Pacifists: Democratic States and War', *American Political Science Review*, 86:1 (1992), pp. 24–37; see also Bruce Bueno de Mesquita and Randolph M. Siverson, 'Nasty or Nice? Political Systems, Endogenous Norms, and the Treatment of Adversaries', *Journal of Conflict Resolution*, 41:1 (1997), pp. 175–99; Bueno de Mesquita et al., 'An Institutional Explanation of the Democratic Peace'; Cristopher F. Gelpi and Michael Griesdorf, 'Winners or Losers? Democracies in International Crisis, 1918–94', *American Political Science Review*, 95:3 (2001), pp. 633–47; Reiter and Stam, *Democracies at War*; Siverson, 'Democracies and War Participation'.

[26] Richard C. Eichenberg, 'Victory Has Many Friends: U.S. Public Opinion and the Use of Military Force, 1981–2005', *International Security*, 30:1 (2005), pp. 140–77; Richard C. Eichenberg, 'Citizen Opinion on Foreign Policy and World Politics', in Russell J. Dalton and Hans-Dieter Klingemann (eds.), *The Oxford Handbook of Political Behavior* (Oxford: Oxford University Press, 2007), pp. 383–400; Peter D. Feaver and Christopher Gelpi, *Choosing Your Battles: American Civil-Military Relations and the Use of Force* (Princeton, NJ: Princeton University Press, 2004); Christopher Gelpi, Peter D. Feaver and Jason Reifler, 'Success Matters: Casualty Sensitivity and the War in Iraq', *International Security*, 30:3 (2005–2006), pp. 7–46.

show that a lack of commonalities between cultures and regimes heightens citizens' perceived levels of threat, ultimately bolstering justifications for war.[27]

Critique of the democratic peace

The democratic peace thesis has received a fair amount of criticism. Empirically, question marks have been raised with regard to the quantitative research designs and coding practices typically employed by scholars.[28] Others – that is, adherents of *economic* or *commercial peace* theory – believe that democratic peace is really a spurious artifact of, or at least significantly conditioned by, economic variables.[29] This

[27] Johns and Davies, 'Democratic Peace or Clash of Civilizations?'; Tomz and Weeks, 'Public Opinion and the Democratic Peace'; see also Chilton, 'The Laws of War and Public Opinion'; Geva and Hanson, 'Cultural Similarity, Foreign Policy Action, and Regime Perceptions'; Mintz and Geva, 'Why Don't Democracies Fight Each Other?'.

[28] Henry S. Farber and Joanne Gowa, 'Polities and Peace', *International Security*, 20:2 (1995), pp. 123–46; Scott Gates, Torbjørn L. Knutsen and Jonathon W. Moses, 'Democracy and Peace: A More Skeptical View', *Journal of Peace Research*, 33:1 (1996), pp. 1–10; Christopher Layne, 'Kant or Cant: The Myth of the Democratic Peace', *International Security*, 19:2 (1994), p. 40; Sebastian Rosato, 'The Flawed Logic of the Democratic Peace Theory', *American Political Science Review*, 97:4 (2003), pp. 585–602; David Spiro, 'The Insignificance of the Liberal Peace', *International Security*, 19:2 (1994), pp. 50–86; Kenneth N. Waltz, 'Structural Realism after the Cold War', *International Security*, 25:1 (2000), pp. 5–41. For well-argued rebuttals of this criticism, see Doyle, 'Three Pillars of the Liberal Peace'; Kinsella, 'No Rest for the Democratic Peace'.

[29] Erik Gartzke, 'The Capitalist Peace', *American Journal of Political Science*, 51:1 (2007), pp. 166–191; Michael Mousseau, 'The Democratic Peace Unraveled: It's the Economy', *International Studies Quarterly*, 57:1 (2013), pp. 186–97; Michael Mousseau, Håvard Hegre and John R. Oneal, 'How the Wealth of Nations Conditions the Liberal Peace', *European Journal of International Relations*, 9:2 (2003), pp. 277–314.

is so, they say, considering that democracies typically also tend to be wealthy capitalist countries that are deeply integrated into the world economy through sophisticated trade and investment ties.

Furthermore, International Relations realists typically emphasise the consequential impact of relative power with regards to questions of war and peace. Christopher Layne's[30] oft-cited study is usefully representative. His analysis of four famous cases of severe democratic-dyadic crises that never escalated into war proper ends in the conclusion that democracy *per se* had little or no bearing on any of the outcomes; according to Layne, perceptions of relative power – and the associated estimations of the likelihood of victory – ultimately determined that peace in the end prevailed.

A second, related line of reasoning accentuates the importance of the relative distribution of capabilities *globally*. Specifically, U.S. hegemony or near-hegemony since the Second World War has witnessed one superpower, and a starkly liberal-democratic one to boot, dominating the security affairs in several vital regions, notably the Americas and Western Europe. Reflecting ideas associated with hegemonic stability theory – in particular its security-centred version[31] – the argument is that it is in the self-interest of the liberal hegemon to ensure that key regions are peaceful, stable and devoid of any serious security competition.[32]

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[30] Layne, 'The Myth of the Democratic Peace'.

[31] Robert Gilpin, *War and Change in World Politics* (Cambridge: Cambridge University Press, 1981); William C. Wohlforth, 'The Stability of a Unipolar World', *International Security*, 24:1 (1999), pp. 5–41.

[32] Paul D. Miller, 'American Grand Strategy and the Democratic Peace', Survival, 54:2 (2012), pp. 49–76; Stephen R. Rock 'Anglo–US Relations, 1845–1930: Did Shared Liberal Values and Democratic Institutions Keep the Peace?', in Miriam F. Elman (ed.), *Paths to Peace: Is Democracy the*

Methods and data

Multilevel analysis

In the next main section, we present and analyse results from a multilevel logistic regression analysis spanning 72 countries for the period 1981–2008.[33] For such modelling, transformations from logit to probability follow the same rules as in ordinary logit regression. The multilevel technique entails that the statistical models are constructed in a hierarchical fashion where some of the units constitute a subgroup of other units.[34] The objective of multilevel analyses – which are sometimes called hierarchical linear models, random effects models or random coefficient models – is to account for variance in a dependent variable measured at the lowest level, by investigating information from all levels of analysis.[35] This yields some substantial advantages especially given this paper's main theoretical argument, which presumes that regime type *per se* helps shape individuals' attitudes toward war-fighting. In such instances, multilevel models are particularly helpful, as they take into account the

Answer (Cambridge, MA: MIT Press, 1997), pp. 101-49; Rosato, 'The Flawed Logic of the Democratic Peace Theory', pp. 599–600. For a counter-argument to Rosato's 'imperialist peace' claim, see Kinsella, 'No Rest for the Democratic Peace'.

[33] Data and Do-file can be obtained by request from the corresponding author.

[34] Anthony S. Bryk and Stephen W. Raudenbusch, *Hierarchical Linear Models: Applications and Data Analysis Methods* (Newbury Park, CA: Sage); Joop Hox, *Multilevel Analysis: Techniques and Applications* (New York: Routledge, 2010).

[35] Marci R. Steenbergen and Bradford S. Jones, 'Modeling Multilevel Data Structures', *American Journal of Political Science*, 46:1 (2002), pp. 551–69.

varying (country- and regional-level) contexts of the individuals under study, which other statistical approaches normally cannot do.[36]

The analysis merges data from three different levels: individual, country-year and country.[37] The first level (Level 1) consists of individual characteristics that we expect condition considerable parts of each respondent's willingness to fight for his or her country. All individual-level data – including the dependent variable – are extracted from the World Values Survey (WVS), a global research project that assembles and maps out the values and attitudes of representative samples of (adult) citizens from a broad range of countries, using rigorous sampling procedures that do not vary between countries or over time.[38] The WVS data are based on face-to-face interviews of citizens from, if we consider all survey waves, close to 100 countries, which together account for nearly 90 per cent of the world's population. The inclusion of countries is primarily based on the availability of funding. This, of course, leads to a less-than-perfect country sample. Still, the World Values Survey constitutes by far the most comprehensive global survey sample in existence. Notably, recent WVS waves include particularly

[36] As our main concern is with the coefficient estimates, and since we are running large and complex models, we use the Laplacian approximation to calculate our models. Laplace approximation is equivalent to modelling curvature adaptive Gaussian quadrature with one integration point.

[37] The regressions were run in *Stata* (version 13), employing a random intercept model.

[38] For a further elaboration of the WVS methodology and sampling procedures, see World Values Survey's home page, at: {http://www.worldvaluessurvey.org/}. The datasets are made available through the Norwegian Social Science Data Services (NSD). Neither Ronald Inglehart, WVS or NSD are responsible for the analysis or interpretations made in this article.

heterogeneous samples of countries with respect to, *inter alia*, regime type, level of development, conflict-proneness and region.[39]

The WVS data come in five waves:[40] (1) 1981–1984; (2) 1989–1993; (3) 1994–1999; (4) 1999–2004; (5) 2005–2008. The number of units at Level 1 ranges between 116,254–131,797 (depending on the model). The second level (Level 2) consists of country-year data (*N* ranges here between 144–166).[41] The third level (Level 3) controls the effect of theoretically relevant country-level factors that are temporally static. Here, *N* ranges between 70–72.[42] All variables at Level 2 are lagged one year.

In the next main section we present 16 models. A fairly high number of specifications is required for three reasons. Firstly, democratic peace theory contains several nuances that warrant testing. Secondly, 'rival' theories need to be accounted for. Thirdly, the multilevel research design places constraints on the number of Level 2 (and Level 3) variables that can be included in each model. On the other hand, a low

[39] Ronald F. Inglehart, Bi Puranen and Christian Welzel, 'Declining Willingness to Fight for One's Country: The Individual-level Basis of the Long Peace', *Journal of Peace Research*, 52:4 (2015), pp. 418–34.

[40] A sixth WVS wave was released at the time of writing.

[41] Despite that there are five WVS waves, the number of units at Level 2 is only slightly double that of Level 3. This is primarily due to variations in the number of countries surveyed in each wave. In addition, some of the survey questions that form the basis of our individual-level data are not included for certain country-years.

[42] On the basis of a so-called empty model, we estimated the share of variance attributable to each of the three levels. Level 1 accounts for 86.8%; Level 2 = 3.5%; and Level 3 = 9.7%. The relatively low share attributable to Level 2 likely obtains because country-specific characteristics usually change only slowly over time; Level 3 presumably captures a substantial portion of this variance.

N at Levels 2 and 3 substantially increases our confidence in the robustness of any significant statistical results at these levels.

A case can be made for limiting the number of country-level or country-year-level variables in statistical analyses in general. Some argue that the problem of 'omitted-variable bias' is often greatly exaggerated and that the problem of confounding or confusing results – especially if spuriousness is a concern – can best be alleviated by constructing statistical models in an incremental fashion and paying particular heed to the importance of theory for the identification of control variables.[43] Others are less inclined to place limits on the number of independents in single models so long as sound theory guides the choice of variables.[44] While we do not take any strong stand in this debate, the nature of our data induces us to follow, in large part, the 'incremental' approach with regards to Level 2 variables. We thus proceed to construct an appropriate base model. In the reported models, we thereafter systematically test if the relationship between regime type and citizens' bellicosity changes with the orderly inclusion (and removal) of one or a few other potential causal factors at a time (for descriptive statistics, see *Appendix A*).[45] In other, unreported

[43] Christopher H. Achen, 'Let's Put Garbage-Can Regressions and Garbage-Can Probits Where They Belong', *Conflict Management and Peace Science*, 22:4 (2005), pp. 327–39; Kevin A. Clarke, 'The Phantom Menace: Omitted Variable Bias in Econometric Research', *Conflict Management and Peace Science*, 22:4 (2005), pp. 341–52; James Lee Ray, 'Constructing Multivariate Analyses (of Dangerous Dyads)', *Conflict Management and Peace Science*, 22:4 (2005), pp. 277–92.

[44] John R. Oneal and Bruce Russett, 'Rule of Three, Let It Be? When More Really Is Better', *Conflict Management and Peace Science*, 22:4 (2005), pp. 293–310.

[45] Of course, this strategy also lessens any concerns about multicollinearity, which tolerance tests, in any case, show is not an issue (with the partial exception for those models which include interaction variables, where tolerance values range between 0.16 and 0.28; that is, at levels that are generally

models, we expand the selection of variables (at the country-year level) in each individual model; these results are described in the sensitivity-analysis section.

Dependent variable

The dichotomous dependent variable – *Bellicosity* – is based on the following WVS survey question: *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?* (*yes*=1; *no*=0). Presuming that country-specific factors – in particular regime type – help shape willingness to fight, our hypothesis is that pacifistic norms and values are more prevalent in democratic polities than in non-democratic ones.

Bellicosity is, as far as we know, the most suitable – and indeed *only* – existing measure that allows for such a comprehensive, multilevel investigation of normative democratic peace. Still, the breadth and scope of the question posed to respondents present some challenges. Firstly, criticism has been raised with regard to the prelude to the question ('Of course, we all hope...');[46] the normative tint to these words may direct respondents into answering in the negative. However, the wording of the question does not differ between countries (all questions are translated to the local language of relevance), so we do not have reason to believe that such a bias affects scores more in some countries than in others. Besides, any general bias does not

considered just acceptable). For example, correlations between the six individual-level variables are generally fairly low; the highest – 0.23 – is between *Trust in military* and *National pride*. Tolerance level for all non-interaction variables are above 0.70.

[46] Stephen Gibson and Nathalie Noret, 'Historical Experiences, Collective Memory, and Willingness to Fight for One's Country: Comments on Paez et al.', *Journal of Cross-Cultural Psychology*, 41:3 (2010), pp. 445–50.

seem to be that great; the overall sample mean is high (0.72).[47] In addition, even if the extent to which an individual is predisposed to answering 'no', such a predisposition likely rests on other individual characteristics, which we duly control for in the empirical analysis.

Secondly, the question does not specify whether this is about defensive or offensive war. Of course, it is reasonable to assume that even those individuals who harbour 'pacifistic' values could be just as willing to fight for their country as less pacifistic individuals would be, if self-defense can help ensure state survival. These concerns about validity should nonetheless be substantially mitigated given that we also control for 'national pride' (please see variable description below). As it is, social psychologists distinguish between 'nationalism' and 'patriotism'.[48] The former concept depicts 'love for the home country', the latter 'hostility toward others'.[49] The variable *National pride*, considering how the survey question is formulated,[50] therefore presumably reflects the less aggressive notion of 'nationalism'; thus it usefully controls

[47] Indeed, snapshots of scores on the dependent variable do suggest that there are mechanisms present that cannot be explained by any systematic bias in the data. For example, national scores on *Bellicosity* for three of the liberal-democratic Nordic countries – Norway, Sweden and Finland – are quite high (always above 0.83). This is likely due to their proximity to Russia/USSR or, relatedly, to the existence of military conscription. We account for such mechanisms in the empirical analysis.

[48] Richard K. Herrmann, Pierangelo Isernia and Paolo Segatti, 'Attachment to the Nation and International Relations: Dimensions of Identity and Their Relationship to War and Peace', *Political Psychology*, 30:5 (2009), pp. 721–54; Rick Kosterman and Seymour Feshbach, 'Toward a Measure of Patriotic and Nationalistic Attitudes', *Political Psychology*, 10:2 (1989), pp. 257–74.

[49] Herrmann, Isernia and Segatti, 'Attachment to the Nation and International Relations', p. 723.

[50] The question posed to respondents is: *How proud are you to be an [name of country]? 1) Very proud; 2) Quite proud; 3) Not very proud; 4) Not at all proud.* We recoded the variable prior to the statistical analysis so that high values reflect high national pride.

for much of the dimension of *Bellicosity* that concerns the willingness to fight for one's country *in self-defense*. We are therefore reasonably confident that any eventual correlation between regime type and *Bellicosity* by and large reflects individuals' attitudes towards other types of war scenarios, which would strengthen our belief that our dependent variable is truly a measure of pacifism.

A third possible concern is that *Bellicosity* might in part proxy the state's or regime's legitimacy among the populace. Hence, results for some of the non-democratic regimes on *Bellicosity* might turn out lower than those which can be deemed 'real' values in an exclusive normative perspective, since we have reason to assume that democratic regimes enjoy a higher level of legitimacy among its people than do autocratic ones. On the other hand, our study should remain relatively unaffected by this considering that we expect that non-democratic regimes will exhibit higher scores than democratic ones on *Bellicosity*.

Independent variables, Level 2: Normative democratic peace

Following the majority of quantitative studies on democratic peace, our main independent variable is a measure of democracy extracted from the Polity IV Project (*Democracy Polity*).[51] The Polity Index stretches from -10 (fully institutionalised autocracy) to +10 (fully institutionalised democracy). Drawing on Epstein et al.,[52] we also constructed three regime categories: *Full democracy* (+8 to +10), *Semi-*

[51] Monty G. Marshall, Ted Robert Gurr and Keith Jaggers, 'Polity IV Project: Political Regime Characteristics and Transitions, 1800–2009. Dataset Users' Manual' (Vienna, VA: Center for Systemic Peace, 2010). See also {http://www.systemicpeace.org/polity/polity4.htm}.

[52] David L. Epstein, Robert Bates, Jack Goldstone, Ida Kristensen and Sharyn O'Halloran, 'Democratic Transitions', *American Journal of Political Science*, 50:3 (2006), pp. 551–69.

democracy (+1 to +7) and *Autocracy* (-10 to 0). This categorisation allows us more easily to perform a number of additional tests that require the inclusion of relevant interaction variables and whose results can more readily be interpreted when dummy variables for regime type are used. However, the continuous version of the Polity Index (*Democracy Polity*) forms the backbone of the empirical study. For purposes of robustness, one of the models includes instead Freedom House's combined Index of Political and Civil Liberties (*Democracy Freedom House*).[53]

Empirical studies have found that the majority of wars and militarised crises involve disputes over territory between neighbouring countries.[54] Therefore, and in order to investigate the dyadic democratic peace thesis more closely, we constructed variables that test if *Bellicosity* depends on the regime type of neighbouring states. Two interaction variables form the root of such a test, namely *Full demo*Neighb. semi-demo* and *Full demo*Neighb. auto*. The second element of these two variables is based on the construction of three dummy variables: *Neighbour autocracy* (coded 1 if a country borders one or more autocracies); *Neighbour semi-democracy* (coded 1 if at least one of the neighbouring countries is a semi-democracy and none is an autocracy); and *Neighbour full democracy* (reference category, coded 1 if all

[53] See {http://www.freedomhouse.org/}.

[54] Douglas M. Gibler, 'Bordering on Peace: Democracy, Territorial Issues, and Conflict', *International Studies Quarterly*, 51:3 (2007), pp. 509–32; Patrick James, Johann Park and Seung-Whan Choi, 'Democracy and conflict Management: Territorial Claims in the Western Hemisphere Revisited', *International Studies Quarterly*, 50:4 (2006), pp. 803–17; John A. Vasquez, 'Why Do Neighbors fight? Proximity, Interaction, or Territoriality', *Journal of Peace Research*, 32:3 (1995), pp. 277–293.

neighbours are full democracies). Neighbouring countries are defined and coded according to the Correlates of War Direct Contiguity Data, contiguity levels 1–5.[55]

Furthermore, following Maoz and Russett's[56] contention that the prevalence of democratic norms hinges on the longevity of the democratic regime, we created three interaction variables: *Full demo*Regime stability*, *Semi-demo*Regime stability* and *Autocracy*Regime stability* (reference category). These are based on the three regime dummies and a variable from the Polity IV project that measures the number of years since the last regime change (*Regime stability*).[57] Lastly, to ensure that any eventual relationship between regime type and *Bellicosity* is not a spurious effect of differences in the general quality of life between regime categories, we include in one of the models the Human Development Index (*Human Development Index*). Data are from the United Nations Development Programme.[58]

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[55] See Douglas M. Stinnett, Jaroslav Tir, Paul F. Diehl, Philip Schafer and Charles Gochman, 'The Correlates of War (COW) Project Direct Contiguity Data, Version 3.0', *Conflict Management and Peace Science*, 19:2 (2002), pp. 59–67. This definition means that two countries are considered neighbours if they share a land or river border, or if they are separated by no more than 400 miles of water. See also {http://www.correlatesofwar.org/cow2%20data/directcontiguity/dcv3desc.htm}.

[56] Maoz and Russett, 'Normative and Structural Causes of Democratic Peace'.

[57] Regime change is defined as a change in the Polity Index of three points or more over a period of no more than three years.

[58] See {http://hdr.undp.org/en/data}. The Human Development Index (HDI) does not cover every year of the period of interest. We used linear interpolation to fill in numbers for missing years, under the assumption that the key components of HDI – health, education and standard of living – tend to change only slowly.

Independent variables, Level 2: Institutional democratic peace, economic peace and realism

We must account for economic or commercial peace theory, which in important respects reflects dimensions inherent in institutional democratic peace theory as well. We therefore control five economic variables at Level 2. The first four of these we expect to be negatively correlated with the dependent variable. *GDP per capita* (based on constant 2000 US$ and logarithmically transformed) proxies level of development. Data are from the World Bank's *World Development Indicators* (WDI).[59] To test the peace-through-interdependence thesis, we also control level of trade integration (*Trade*, which is the sum of exports and imports relative to GDP) and inward foreign direct investment as a share of GDP (*Foreign direct investment*). Data are from the WDI. The fourth variable is *Economic freedom*, which usefully accounts for the capitalist peace thesis. This index is based on several indicators measuring the level of domestic economic liberalisation.[60] The fifth variable – *Economic growth* – measures the yearly growth rate of the national economy (data are from the WDI).

Variables linked to key arguments of the realist paradigm must also be controlled. Firstly, we include a dummy variable that distinguishes between (regional) major and non-major powers. Realist scholars typically see international politics as a story 'written in terms of the great powers of an era'.[61] Following in particular John Mearsheimer's[62] argument about the centrality of *regional* balances of power, the

[59] See {http://data.worldbank.org/}.

[60] James Gwartney, Joshua C. Hall and Robert Lawson, *Economic Freedom of the World: 2010 Annual Report* (Vancouver, BC: The Fraser Institute, 2010); see also {http://www.freetheworld.com/}.

[61] Kenneth N. Waltz, *Theory of International Politics* (New York: McGraw-Hill, 1979), p. 72.

[62] John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: Norton, 2001).

dummy variable *Regional major power* recalculates from the global to the regional level the Composite Index of National Capability (CINC), the standard measure of relative aggregate power.[63] Country-years accounting for at least 5 per cent of total material capabilities in their own region obtain the value 1 on *Regional major power*.[64]

The second set of measures of the balance of power reflects the argument that neighbouring countries represent more prominent threats than distant ones, *ceteris paribus*. More or less following the operationalisation of Stuart Bremer[65] – thus suspecting that relative power might be related to *Bellicosity* in a non-linear way – we chose to construct three dummy variables that classify nations according to their relative power vis-à-vis their most powerful neighbour. These are based on data from the Correlates of War project (Direct Contiguity Data and CINC). A power ratio of less than or equal to 3 is regarded as a small power difference (such countries receive the score of 1 on *Power difference small*); a power ratio between 3 and 10 yields the score of 1 on *Power difference medium* (reference category); while a ratio of over 10 is judged to be large (*Power difference large*).

Alliances, security guarantees, extended deterrence and the overseas deployment of troops could certainly also impact citizens' willingness to fight, and they might also account for a substantial portion of the purported relationship between

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[63] David J. Singer, Stuart Bremer and John Stuckey, 'Capability Distribution, Uncertainty, and Major Power War', in Bruce Russett (ed.), *Peace, War and Numbers* (Beverly Hills, CA: Sage, 1972), pp. 19–48; see also the Correlates of War Project, at {http://www.correlatesofwar.org/}.

[64] The recalculation of CINC scores is based on a prior division of the world into five geopolitically relevant regions: Europe (including Russia and the CIS countries); the Americas; Asia and Oceania (excluding the Middle East); Sub-Saharan Africa; and the Middle East (including North Africa).

[65] Bremer, 'Dangerous Dyads', p. 322.

regime type and war.[66] In particular, U.S. troops deployment could – through free-riding, buck-passing or trip-wire mechanisms – reduce the incentives of host-country citizens to fight for their own country.[67] In the base model we therefore include a dummy variable that is coded 1 for country-years that host at least 1,000 U.S. troops (*US troops*). Data are from the Heritage Foundation.[68] We also include, in one of the models, a dummy variable that takes on the value 1 if a country is a member of the North Atlantic Treaty Organization (*NATO*). Finally, we include a variable that should effectively control for the degree to which a country is 'militarised'. *Troops per capita* measures the relative size of the army, with data from the WDI. This variable should also be a potent control for any possible effects of national conscription on *Bellicosity*.

Independent variables – Levels 3 and 1

At Level 3 – the country level – we control for temporally static factors. We constructed five regional dummy variables: *America*, *Asia*, *Africa*, *Middle East* and the reference category *Europe* (please see footnote 64 above for definitions of the regions). The assumption here is that the average values on *Bellicosity* might be significantly shaped by the regional security environment,[69] which in turn should be shaped by the (regional) distribution of power.[70]

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[66] Rock, 'Anglo–US Relations, 1845–1930'; Rosato, 'The Flawed Logic of the Democratic Peace Theory', pp. 599–600.

[67] Bruce Russett and Donald R. Deluca, 'Theater Nuclear Forces: Public Opinion in Western Europe', *Political Science Quarterly*, 98:2 (1983), pp. 179–96.

[68] See {http://www.heritage.org/research/reports/2006/05/global-us-troop-deployment-1950-2005}.

[69] Benjamin E. Goldsmith, 'A Universal Proposition?: Region, Conflict, War, and the Robustness of the Liberal Peace', *European Journal of International Relations*, 12:4 (2006), pp. 533–563.

[70] Mearsheimer, *The Tragedy of Great Power Politics*.

Lastly, we also control for six individual-level variables – extracted from WVS – that the specialised literature on political behaviour informs us are theoretically advisable to include.[71] *Age* is a continuous variable believed to be negatively associated with *Bellicosity*. Also included is a dummy variable controlling for gender (*Male*); a four-category variable measuring the extent to which the individual has faith in the country's military (*Trust in military*); a variable measuring respondents' tolerance of societal diversity (*Tolerance*); and a control for personal income (*Income*), which is measured on a 10-point scale.

Lastly, we control for *National pride*, a four-category variable that measures the emotional ties between citizens and their country. Others have shown this to be strongly related to our dependent variable.[72] As we have argued above, *National pride* will vitally function as a control for the dimension of *Bellicosity* which concerns willingness to fight for one's country *in self-defense*. In addition, and in order to check if democratic citizens are less susceptible to embrace belligerent hyper-nationalism, instead opting to express national pride in other, more peaceful ways, we also include two interaction variables in one of our models (*Full demo*National pride* and *Semi-demo*National pride*, with *Auto*National pride* being the reference category).

Empirical analysis

[71] See Ben Clements, 'Public Opinion in Britain Towards Military Action in Libya: A Micro-Level Analysis', *Politics*, 32:2 (2012), pp. 109–19; Juan Diez-Nicolas, 'Cultural Differences on Values about Conflict, War and Peace', *World Values Research*, 3:1 (2010), pp. 1–19; Benno Torgler, 'Why Do People Go to War?', *Defence and Peace Economics*, 14:4 (2003), pp. 261–80.

[72] Diez-Nicolas, 'Values about Conflict, War and Peace'.

Tables 1–4 present 16 multilevel logistic regression models that are divided into four main categories each of which corresponds to one table. *Tables 1* and *2* focus specifically on variables connected to democratic peace theory, especially in its normative version. *Tables 3* and *4* control for variables connected to economic peace theory and realism, respectively. The sets of variables at Levels 1 and 3 are the same in all 16 models.

Democratic peace: Base models

Table 1, model 1a, presents a first cut at exploring the normative democratic peace. Only the regime variable is included at Level 2. Results are as expected: *Democracy Polity* is highly negatively and significantly related to *Bellicosity*. Differences between regimes with respect to the dependent variable are noticeable: The predicted average value on *Bellicosity* for people living in our sample's most autocratic country (scoring -9 on *Democracy Polity*) is 84.7 per cent; for those at the sample average (+6) it is 74.3 per cent; for fully institutionalised democracies (+10) it is 70.4 per cent. Preliminary results, thus, indicate that citizens of democracies really harbour pacifistic values.

We do not place much emphasis on the results for the control variables at Level 1, primarily because most of these are of little theoretical interest given the focus of our study. In terms of direction, most results are as expected. The one distinct exception is *Income*, whose coefficient is positive, contradicting the supposition that citizens are particularly sensitive to the (opportunity) costs of war.

Moving on to Level 3, the regional dummies show an interesting albeit more or less expected pattern. As the realism-affiliated hegemonic stability theory would suggest, *America* is negative and significant – and often highly so – in all of the 16 models. Also note that *Africa* generally obtains the strongest negative impact of all

regional dummies. This, we surmise, likely reflect persistent challenges with state-building in Sub-Saharan African countries, the bulk of which are highly ethnically fractionalised. Neither *Asia* nor *Middle East* differ significantly from the reference category *Europe*.

---------- TABLE 1 IN HERE ----------

Model 1b substitutes Freedom House's democracy index for *Democracy Policy*, without any alterations to the results. In model 1c the regime dummies are included. Results are as expected: *Full democracy* is strongly linked with *Bellicosity*. A somewhat weaker, but still significant (at the .05 level) result obtains for *Semi-democracy*, further suggesting a linear relationship between regime type and willingness to fight.

In model 1d we proceed to include *US troops* as a control. We keep this variable in all subsequent models. We do this in part because preliminary analyses showed a strong and consistent relationship between U.S. troops deployment and *Bellicosity*. This can be down to several reasons. U.S. military presence and attendant security guarantees should contribute to decreasing host-country citizens' incentives to fight for their country, *ceteris paribus*. In addition, Japan and Germany are both hosts to a large number of U.S. military bases, and these two countries' World War II experiences have most likely affected the general level of pacifism for generations.[73] Considering also that states with a substantial U.S. military presence have a high average level of democracy, the inclusion of *US troops* is vital as a check for spuriousness between regime type and *Bellicosity*. As model 1d shows, the coefficient of *US troops* is negative and highly significant. This substantiates the story told by the regional dummy *America*,

[73] Inglehart, Puranen and Welzel, 'The Individual-level Basis of the Long Peace', p. 432.

suggesting in particular that citizens of countries whose basic defense and security needs are 'outsourced' to the U.S. hegemon are imbued with a high level of pacifism, all else being equal. More importantly for the purposes of this paper, however, the inclusion of *US troops* does not change the impact of *Democracy Polity*. So far, then, the empirical analysis has lent support to key arguments of normative democratic peace theory: The more democratic the regime, the more pervasive are pacifistic attitudes and values among the citizenry.

Democratic peace: Additional tests and interactions

Table 2 exhibits additional tests of democratic peace theory, using the regime dummies in the first three models. Firstly, the longevity of the democratic regime might affect the degree to which democratic-pacifistic norms and values are internalised among citizens.[74] This contention does not receive support here, however. If we jointly consider the coefficients for *Regime stability* and the interaction variable *Full demo*Regime stability*, as we must, it is clear that *Bellicosity* is more or less unaffected by the maturity of democracy (whereas bellicosity increases with the longevity of *autocracies*). This does not automatically mean that we need to refute the claims made by Maoz and Russett, though. Perhaps this instead reflects the strictness of criteria associated with the label 'full democracy'. Once a country has reached the level where it is included in this category, it may very well already have gotten to a point where democratic-pacifistic values are so entrenched as to make them virtually unmovable – at least for as long as the democracy itself upholds.

Model 2b includes a test of possible interaction effects between regime type and *National pride*. The first interaction variable – *Full demo*National pride* – differs

[74] Maoz and Russett, 'Normative and Structural Causes of Democratic Peace'.

significantly (at the .05 level) from the reference category, whereas the second one – *Semi-demo*National pride* – does not. However, the very large *N* associated with *National pride* renders significant a difference (between democracies and autocracies) that in reality is close to negligible. Thus, these results show that the regression slope of democracies approximates that of non-democracies. This boosts our confidence that *National pride* – the way it is measured – does not encompass an 'aggressive' component of any note; if it had, we would have expected the regression slope of autocracies to be much steeper than that of democracies, reflecting a dearth of other, alternative outlets for any 'hyper-nationalism' among non-democratic citizens.

---------- TABLE 2 IN HERE ----------

Model 2c attempts to test the dyadic democratic peace thesis more concretely. It includes four additional Level 2 variables, namely two dummies capturing the nature of the least democratic neighbouring regime and two attendant interaction variables. Results do indicate that willingness to fight depends on the neighbourhood being fully democratic or not; having an autocratic neighbour does indeed increase overall willingness to fight for one's country. But this conclusion is only valid for semi-democracies and, in particular, for autocracies; for democracies there is no such effect. It is still debatable whether we should place too much emphasis on these results. There are three problems in this respect. Firstly, tolerance tests revealed that multicollinearity might render somewhat difficult the interpretation of those models which include interaction effects (for tolerance scores, please see footnote 45 above). Secondly, coding did not allow for considerations of relative power (it certainly makes a difference whether your neighbour is autocratic Brunei or autocratic Russia). Thirdly, these

variables may also suffer from a lack of variation considering that democracies – in particular those included in the WVS data – tend to cluster together in purported 'zones of peace'. In sum, as tests of the democratic peace, we are inclined to place far more faith in the basic regime variables.

Model 2d returns to such a more basic outlook. There, we include a measure of human development to check if quality of life can account for the positive relationship between democracy and the dependent variable. But although *Human Development Index* is negative and significant, as expected, the strength of regime type upholds. In sum, therefore, and although the significance level of *Full democracy* is suppressed in models 2a and 2c, presumably because that variable is also included in the interaction terms, *Table 2* ought to give us increased confidence in the empirical validity of normative democratic peace theory.

Democratic peace vs economic peace and realism

Previous models have shown that personal income is *positively* associated with *Bellicosity*. *Table 3* provides further tests of whether results on normative democratic peace uphold when economic factors are controlled. And they do. *Full democracy* is consistently and negatively related to the dependent variable, at a high level of significance, even when we include measures of national income and economic growth (model 3a); trade integration (3b); foreign direct investment (3c); and economic freedom (3d). There is nothing in our results to indicate, therefore, that the relationship between democracy and pacifism is a spurious artefact of economic variables. On the other hand, most economic variables do seem to have an independent effect on willingness to fight; in particular, *GDP per capita*, *Foreign direct investment* and *Economic freedom* are all highly significantly associated with Bellicosity, with the

expected signs. This indicates (albeit with *Income* representing an individual-level caveat in that its direction is unexpected) that economic prosperity and inter-state linkages also lower the propensity for violence. A democratic peace, in other words, does not rule out an attendant commercial peace, as the second leg of Kant's tripod would suggest.

The last set of models, depicted in *Table 4*, includes controls related to the realist paradigm. Yet again results suggest that the findings on normative democratic peace are robust. Firstly, as shown in model 4a, *Regional major power* is negatively related to the dependent measure (although only weakly so). Perhaps this result comes about because major powers hardly need to be concerned about survival, which is the fundamental goal of any state. Model 4b includes measures of relative power, but this does not alter the effect of *Democracy Polity*. It is noteworthy that power differences vis-à-vis one's strongest neighbour are linked to the dependent variable in a non-linear way; coefficients of both *Power difference small* and *Power difference large* are positive, with the latter being highly significant. Presumably, considering how these variables are coded, this reflects that the states in the middle category do not normally have to fear for their survival (their inferiority is evident yet still somewhat limited), and neither is the power gap so small as to spur any 'natural' regional rivalry. Model 4c follows the same logic as that which applies for *US troops*. That *NATO* is significant at a low level (.10), while *US troops* remains significant (at the .05 level), is not surprising given that the physical presence of the U.S. hegemon represents a particularly credible, trip wire-like signal to the host country that *its* security is tightly connected to Washington's. Lastly, model 4d includes a measure of 'militarisation'. *Troops per capita*, which should also capture eventual effects of conscription on *Bellicosity*, is not significant, however. Again, the strong result on *Democracy Polity* upholds.

---------- TABLE 3 IN HERE ----------

---------- TABLE 4 IN HERE ----------

Sensitivity analysis

To further ensure the robustness of our results, we performed a number of additional tests, not least including variables that could possibly account for some of the observed relationship between *Democracy Polity* and *Bellicosity*. Firstly, we ran all our models using robust standard errors instead of multilevel modelling, which did not change any of the results. Secondly, we checked whether the inclusion of some possible important variables at the individual level mattered for the main results. However, adding measures (extracted from the World Values Survey) of educational attainment, religiosity and self-placement on the left-right axis did not alter anything. Neither did the inclusion of a Level 3 measure of World War II experience[75] – which turned out to be insignificant – change results. The inclusion of alternative variables at the country-year level also rendered results unaltered. These variables include level of military spending as a percentage of GDP;[76] a dummy for the presence of military

[75] This variable, which is computed based on the Correlates of War Project's Interstate War Data, takes the value 1 if a country was on the losing side in the Second World War (and 0 otherwise); see Dario Paez, James H. Liu, Elza Techio, Patricia Slawuta, Anya Zlobina and Rosa Cabecinas, '"Remembering" World War II and Willingness to Fight: Sociocultural Factors in the Social Representation of Historical Warfare across 22 Societies', *Journal of Cross-Cultural Psychology*, 39:4 (2008), pp. 373–80.

[76] Data are from Stockholm Peace Research Institute, at {http://www.sipri.org/research/armaments/milex}.

conscription;[77] and two variables measuring, respectively, whether a country had recently experienced war or militarised interstate disputes.[78] Of all these, only the conscription variable was significant (with the expected positive sign).

Lastly, we expanded all our main models, exploring the effects of including several Level 2 variables simultaneously in a variety of different combinations, also adding a temporal control (which was insignificant). Interestingly, expanding the models did alter some of the results. In particular, nearly all effects of the economic peace variables disappeared. The 'realist' variables – notably *US troops* and the power-differences variables – were left unaltered. The same was true for the regime variables – both in their continuous and dummy versions – which have proven to be consistently and negatively linked to *Bellicosity*.

Conclusion

The empirical analysis, as a whole, lends considerable support to normative democratic peace arguments. The more democratic a regime, the more prevalent are

[77] We coded the variable ourselves based on information from Internet sources, including the CIA World Factbook, at {https://www.cia.gov/library/publications/the-world-factbook/}, ChartsBin, at {http://chartsbin.com/} and a number of country-specific sources.

[78] The war measure is based on a variable from University of Uppsala and the Peace Research Institute in Oslo, which uses a threshold of 25 battle-related deaths in a year. We created a dummy taking the value 1 if a country had experienced war in the year in question or in the two previous years. (See {http://www.pcr.uu.se/research/ucdp/datasets/ucdp_prio_armed_conflict_dataset/}.) Our measure of militarised interstate disputes (MIDs) uses the average number of MIDs for the year in question and the previous two years. Data are from the Correlates of War Project, at {http://www.correlatesofwar.org/data-sets/MIDs}.

pacifistic values and attitudes among the citizenry. This finding upholds through a series of different models where both supplementary and contending theoretical arguments are controlled.

Firstly, the analysis corroborates key arguments of the realist paradigm, while at the same time rendering results on the regime variables unaltered. Local balances of power (the dummies for power differences), regional balances of power (regional dummies) and security and defense guarantees by the U.S. hegemon (proxied by overseas deployment of U.S. troops and a NATO membership dummy) all significantly impact the willingness of citizens to fight for their country.

Secondly, economic variables seem to matter, but the overall evidence suggests that we cannot make any *definitive* conclusions about commercial peace theory. What we *can* say with some confidence, however, is that the effect of regime type on *Bellicosity* does not hinge on whether or not one controls for personal income, national income, trade and investment links or economic freedom; moreover, especially considering the sensitivity tests, none of these turn out to be highly convincing predictors of war willingness. This also has some implications for the institutional brand of democratic peace theory (though we cannot test all of its facets), which to some extent is saturated by an economic logic.

Thirdly, our results work to bolster *normative* democratic peace arguments: The empirical evidence suggests that individual attitudes towards the use of armed force are significantly shaped by the nature of the regime under which one lives. Of course, in the statistical models we cannot investigate if respondents' values on the dependent variable vary as a function of the regime type of any (hypothetical) adversary. This means, in turn, that our results cannot directly be deemed as supportive of the *dyadic* democratic peace thesis. Still, seen in light of the gist of existing empirical research,

which is quite confident in the empirical existence of a dyadic democratic peace, our study does lend *indirect* support of some substance to the normative dimension of the dyadic thesis: Citizens of democratic regimes are thoroughly more pacifistic than non-democratic citizens. To the extent that these norms and values are externalised into the realm of foreign policy, as the normative democratic peace literature in our view convincingly contends, a critical foundation for mutual trust exists in democratic dyads. This should markedly contribute to taming security dilemmas, spiral mechanisms and the escalation potential in interstate conflicts and crises. Hence, a norm-based dyadic democratic peace results.

But why is it that the existence of 'democratic-pacifistic' norms fails to produce a *monadic* democratic peace as well? The answer might lie in differences in the *types of wars* fought by democracies and non-democracies, respectively. The logic of the normative argument, as it is, only applies in a clear-cut way in certain areas. Most obviously, it pertains to serious interstate crises or conflicts where the security dilemma is modified due to both (or all) parties to the dispute being democracies. When a democracy is embroiled in a dispute with an autocracy, on the other hand, the former will likely act in a *dis*trustful manner. Failure to do so might imply a renunciation of the crisis-bargaining initiative vis-à-vis a purportedly less constrained adversary. This is something which a state can ill afford – as Kant himself surely acknowledged.[79]

The right of democracies to fight *defensive wars* – 'to protect themselves ... from external attacks' – was certainly also recognised by Kant.[80] There is one additional category of wars, though, that in some respects is harder to judge. In the post-imperialist world, at least, democracies only very rarely, if ever, consider conducting

[79] Kant, *Perpetual Peace*, p. 54.

[80] Kant, *Perpetual Peace*, p. 54.

‘pure’ *wars of conquest*. On the other hand, and although democracies ‘might intervene in a different pattern than militaristic authoritarian ones’,[81] the dividing line between conquest and *liberal-interventionist war* is not always clear-cut, at least not when the latter result in (temporary) occupation, such as was the case in Afghanistan and Iraq. These wars essentially also involve the ‘externalisation’ of liberal, democratic and indeed also ‘pacifistic’ values – even if in a somewhat peculiar way. The justification of such endeavours is clearly constructed on the basis of the logic of liberal theory in general, and sometimes democratic peace theory in particular: One prominent effect of helping other peoples rid themselves of autocrats is, ostensibly, the creation of a more peaceful world. Thus, the logic here indicates that the occurrence of such wars does not necessarily contradict the empirical results herein, as they – in the minds of the interventionists – are wars whose objectives are liberal and therefore benevolent. Studies of U.S. public opinion, for example, have found such wars to enjoy substantial support among the democratic public,[82] which also affects the proclivity of political leaders to undertake them.[83]

Wars come in different shapes and forms, which should help explain the empirical mismatch between the dyadic and the monadic versions of democratic peace

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[81] Martha Finnemore, *The Purpose of Intervention: Changing Beliefs about the Use of Force* (Ithaca, NY: Cornell University Press, 2003), p. 3.

[82] Eichenberg (2007); Bruce W. Jentleson, ‘The Pretty Prudent Public: Post Post-Vietnam American Opinion on the Use of Military Force’, *International Studies Quarterly*, 36:1 (1992), pp. 49–73; Bruce W. Jentleson and Rebecca L. Britton, ‘Still Pretty Post-Cold War American Public Opinion on the Use of Military Force’, *Journal of Conflict Resolution*, 42:4 (1998), pp. 395–417.

[83] Timothy Hildebrandt, Courtney Hillebrecht, Peter M. Holm and Jon Pevehouse, ‘The Domestic Politics of Humanitarian Intervention: Public Opinion, Partisanship, and Ideology’, *Foreign Policy Analysis*, 9:3 (2013), pp. 243–66.

theory. Future research, we believe, should attend more systematically to the attitudes of citizens and elites towards different types of militarised conflicts. This could usefully be done either through case studies, by broadening the scope of the highly promising experimental research designs or by utilising steadily growing amounts of survey data. Key here, in any case, is arguably to investigate more thoroughly the preferences and norms of individuals – both in democracies and in non-democracies – pertaining to issues of war and peace.

This study, for its part, has shown that there is a distinct connection between regime type and pacifism. Norms and values regarding the use of armed force are not only shaped by individual backgrounds and characteristics; country-specific traits, including not least level of democracy, also play a significant role. The democratic peace is perhaps not an ‘empirical law’, and it does not exist unconditionally. But democratic citizens do harbour pacifistic values and attitudes, just as normative democratic peace theory tells us.

Table 1. Democratic peace I: Multilevel regression analysis of the relationship between regime type and citizens' bellicosity, 1981–2008

	1a	1b	1c	1d
	Polity	Freedom House	Dummies	Base Model
Independent variables	BELLICOSITY	BELLICOSITY	BELLICOSITY	BELLICOSITY
Level 1				
AGE	-.011*** (.000)	-.011*** (.000)	-.011*** (.000)	-.011*** (.000)
MALE	.659*** (.012)	.655*** (.012)	.659*** (.125)	.659*** (.012)
INCOME	.021*** (.003)	.022*** (.003)	.021*** (.003)	.021*** (.003)
TRUST IN MILITARY	.404*** (.007)	.407*** (.007)	.404*** (.007)	.404*** (.007)
TOLERANCE	-.022*** (.002)	-.022*** (.002)	-.022*** (.002)	-.022*** (.002)
NATIONAL PRIDE	.539*** (.008)	.535*** (.008)	.539*** (.008)	.539*** (.008)
Level 2				
DEMOCRACY POLITY	-.057*** (.012)			-.048*** (.012)
DEMOCRACY FREEDOM HOUSE		-.105*** (.018)		
FULL DEMOCRACY			-.759*** (.182)	
SEMI-DEMOCRACY			-.390** (.189)	
US TROOPS				-.760*** (.219)
Level 3				
AMERICA	-.443* (.237)	-.443** (.219)	-.450* (.237)	-.622*** (.211)
ASIA	.320 (.253)	.338 (.234)	.366 (.252)	.252 (.223)
AFRICA	-.633** (.280)	-.596** (.258)	-.642** (.282)	-.758*** (.253)
MIDDLE EAST	.375 (.557)	.308 (.517)	.408 (.556)	.505 (.497)
Constant	-1.012*** (.14)	-.390* (.21)	-.822*** (.19)	-.907*** (.14)
Level 2 variance	.254 (.037)	.204 (.030)	.262 (.038)	.280 (.042)
Level 3 variance	.393 (.087)	.347 (.074)	.388 (.087)	.255 (.073)
Level 1 *N*	174,362	174,224	174,362	174,362
Level 2 *N*	177	178	177	177
Level 3 *N*	74	78	74	74
Log likelihood	-82,413.947	-82,995.538	-82,415.296	-82,408.742

Notes: standard errors in parentheses; * significant at 10 %; ** significant at 5%; *** significant at 1%; Level 2 variables are lagged one year; see text for complete variable description.

Table 2. Democratic peace II: Multilevel regression analysis of the relationship between regime type and citizens' bellicosity, 1981–2008

Independent variables	2a Regime Stab. BELLICOSITY	2b National Pride BELLICOSITY	2c Neighb. Reg. BELLICOSITY	2d Life Quality BELLICOSITY
Level 1				
AGE	-.011*** (.000)	-.011*** (.000)	-.011*** (.000)	-.011*** (.000)
MALE	.659*** (.012)	.659*** (.012)	.659*** (.012)	.648*** (.013)
INCOME	.021*** (.003)	.021*** (.003)	.021*** (.003)	.021*** (.003)
TRUST IN MILITARY	.404*** (.007)	.404*** (.007)	.404*** (.007)	.409*** (.008)
TOLERANCE	-.022*** (.002)	-.022*** (.002)	-.022*** (.002)	-.022*** (.002)
NATIONAL PRIDE	.539*** (.008)	.583*** (.022)	.539*** (.008)	.540*** (.009)
Level 2				
DEMOCRACY POLITY				-.036*** (.014)
FULL DEMOCRACY	-.255 (.210)	-.475** (.192)	-.078 (.363)	
SEMI-DEMOCRACY	-.006 (.216)	-.124 (.206)	-.173 (.187)	
US TROOPS	-.840*** (.203)	-.831*** (.210)	-.730*** (.223)	-.681*** (.220)
REGIME STABILITY	.020** (.008)			
FULL DEMO*REGIME STABILITY	-.024*** (.008)			
SEMI-DEMO*REGIME STABILITY	-.022** (.011)			
FULL DEMO*NATIONAL PRIDE		-.053** (.025)		
SEMI-DEMO*NATIONAL PRIDE		-.044 (.029)		
NEIGHBOUR SEMI-DEMOCRACY			.228 (.323)	
NEIGHBOUR AUTOCRACY			.712** (.350)	
FULL DEMO*NEIGHB.SEMI-DEMO			-.213 (.365)	
FULL DEMO*NEIGHB. AUTO			-.749** (.373)	
HUMAN DEVELOPMENT INDEX				-2.26*** (.751)
Level 3				
AMERICA	-.618*** (.202)	-.651*** (.209)	-.550** (.226)	-.658*** (.210)
ASIA	.163 (.221)	.279 (.219)	.198 (.235)	.161 (.231)
AFRICA	-.765*** (.246)	-.798*** (.252)	-.872*** (.263)	-1.26*** (.331)
MIDDLE EAST	.588 (.478)	.524 (.490)	.370 (.509)	.374 (.490)
Constant	-.964*** (.20)	-.878*** (.19)	-1.315*** (.36)	.63 (.54)
Level 2 variance	.272 (.040)	.285 (.042)	.256 (.040)	.200 (.032)
Level 3 variance	.220 (.065)	.241 (.070)	.280 (.079)	.291 (.074)
Level 1 *N*	174,362	174,362	174,362	165,225
Level 2 *N*	177	177	177	167
Level 3 *N*	74	74	74	73
Log likelihood	-82,403.468	-82,406.374	-82,405.722	-79,182.689

Notes: standard errors in parentheses; * significant at 10 %; ** significant at 5%; *** significant at 1%; Level 2 variables are lagged one year; see text for complete variable description.

Table 3. Democratic peace vs economic peace: Multilevel regression analysis of the relationship between regime type and citizens' bellicosity, 1981–2008

Independent variables	3a Prosperity BELLICOSITY	3b Interdepend. I BELLICOSITY	3c Interdepend. II BELLICOSITY	3d Capitalist Peace BELLICOSITY
Level 1				
AGE	-.011*** (.000)	-.011*** (.000)	-.011*** (.000)	-.010*** (.000)
MALE	.665*** (.013)	.664*** (.013)	.663*** (.013)	.646*** (.013)
INCOME	.021*** (.003)	.021*** (.003)	.021*** (.003)	.022*** (.003)
TRUST IN MILITARY	.404*** (.008)	.403*** (.007)	.403*** (.008)	.410*** (.008)
TOLERANCE	-.021*** (.002)	-.022*** (.002)	-.022*** (.002)	-.021*** (.002)
NATIONAL PRIDE	.543*** (.009)	.541*** (.009)	.541*** (.009)	.534*** (.009)
Level 2				
DEMOCRACY POLITY	-.046*** (.015)	-.050*** (.012)	-.056*** (.013)	-.050*** (.014)
US TROOPS	-.415* (.221)	-.759*** (.221)	-.657*** (.226)	-.457** (.218)
GDP PER CAPITA	-.236*** (.089)			
ECONOMIC GROWTH	-.018* (.011)			
TRADE		-.002 (.002)		
FOREIGN DIRECT INVESTMENT			-.038** (.017)	
ECONOMIC FREEDOM				-.168*** (.056)
Level 3				
AMERICA	-.508** (.212)	-.669*** (.227)	-.582*** (.222)	-.359* (.212)
ASIA	.200 (.234)	.188 (.235)	.176 (.242)	.504** (.228)
AFRICA	-1.13*** (.293)	-.800*** (.260)	-.760*** (.261)	-.618** (.251)
MIDDLE EAST	.487 (.489)	.446 (.506)	.394 (.512)	.497 (.478)
Constant	1.141 (.78)	-.779*** (.23)	-.779*** (.15)	-.065 (.35)
Level 2 variance	.200 (.032)	.276 (.042)	.233 (.037)	.174 (.028)
Level 3 variance	.291 (.074)	.263 (.076)	.313 (.084)	.284 (.071)
Level 1 *N*	165,225	172,586	169,375	155,281
Level 2 *N*	167	175	172	159
Level 3 *N*	73	73	73	70
Log likelihood	-79,182.689	-81,726.512	-80,394.829	-75,542.263

Notes: standard errors in parentheses; * significant at 10 %; ** significant at 5%; *** significant at 1%; Level 2 variables are lagged one year; see text for complete variable description.

Table 4. Democratic peace vs. realism: Multilevel regression analysis of the relationship between regime type and citizens' bellicosity, 1981–2008

Independent variables	4a Relative Power BELLICOSITY	4b Power Balance BELLICOSITY	4c Alliance BELLICOSITY	4d Militarisation BELLICOSITY
Level 1				
AGE	-.011*** (.000)	-.011*** (.000)	-.011*** (.000)	-.010*** (.000)
MALE	.659*** (.013)	.659*** (.012)	.659*** (.012)	.670*** (.013)
INCOME	.021*** (.003)	.021*** (.003)	.021*** (.003)	.015*** (.003)
TRUST IN MILITARY	.406*** (.008)	.404*** (.007)	.404*** (.007)	.397*** (.008)
TOLERANCE	-.022*** (.002)	-.022*** (.002)	-.022*** (.002)	-.021*** (.002)
NATIONAL PRIDE	.536*** (.009)	.539*** (.008)	.539*** (.008)	.548*** (.009)
Level 2				
DEMOCRACY POLITY	-.061*** (.012)	-.044*** (.012)	-.042*** (.013)	-.059*** (.013)
US TROOPS	-.464** (.220)	-.473** (.235)	-.578** (.239)	-.523** (.229)
REGIONAL MAJOR POWER	-.282* (.161)			
POWER DIFFERENCE SMALL		.155 (.169)		
POWER DIFFERENCE LARGE		.565*** (.175)		
NATO			-.366* (.191)	
TROOPS PER CAPITA				.018 (.015)
Level 3				
AMERICA	-.434** (.211)	-.464** (.219)	-.622*** (.218)	-.431** (.216)
ASIA	.321 (.218)	.339 (.223)	.179 (.232)	.306 (.239)
AFRICA	-.647*** (.246)	-.454* (.269)	-.794*** (.259)	-.576** (.274)
MIDDLE EAST	.677 (.494)	.575 (.495)	.601 (.510)	.429 (.481)
Constant	-.896*** (.14)	-1.351*** (.20)	-.879*** (.14)	-1.120*** (.21)
Level 2 variance	.207 (.032)	.252 (.038)	.258 (.040)	.200 (.036)
Level 3 variance	.274 (.071)	.264 (.073)	.290 (.080)	.275 (.079)
Level 1 *N*	168,976	174,362	174,362	153,286
Level 2 *N*	171	177	177	153
Level 3 *N*	74	74	74	73
Log likelihood	-80,591.282	-82,403.294	-82,406.886	-72,763.129

Notes: standard errors in parentheses; * significant at 10 %; ** significant at 5%; *** significant at 1%; Level 2 variables are lagged one year; see text for complete variable description.

Appendix A

Table A1. Descriptive statistics

Variables	Obs.	Average	Std. dev	Min.	Max.
Level 1					
Bellicosity	260,661	0.72	0.44	0	1
Age	345,366	41	16.37	14	101
Male	350,556	0.48	0.50	0	1
Income	307,643	4.65	2.44	1	10
Trust in military	325,824	2.71	0.93	1	4
Tolerance	316,079	3.25	3.07	1	10
National pride	337,398	3.41	0.78	1	4
(Religious)	322,463	0.70	0.46	0	1
(Left-right)	255,600	5.61	2.31	1	10
(Education)	342,890	8.31	2.94	1.1	13.9
Level 2					
Democracy Polity	202	6.00	5.56	-9	10
Democracy Freedom House	207	9.61	3.46	1	13
Autocracy*	231	0.19	0.39	0	1
Semi-democracy	231	0.24	0.43	0	1
Full democracy	231	0.57	0.50	0	1
Neighbour full democracy*	240	0.24	0.43	0	1
Neighbour semi-democracy	240	0.23	0.42	0	1
Neighbour autocracy	240	0.52	0.50	0	1
Regime stability	235	30.49	39.61	0	196
Human Development Index	199	0.72	0.12	0.33	0.94
GDP per capita	240	9.12	1.05	5.5	12.41
Trade	239	67.20	39.28	14.9	360.60
Foreign direct investment	235	3.19	7.69	-2.76	117.20
Economic freedom	218	6.38	1.05	3.44	8.52
Economic growth	338	2.27	5.80	-42.77	32.00
Regional major power	235	0.42	0.49	0	1
Power difference medium*	242	0.28	0.45	0	1
Power difference small	242	0.40	0.49	0	1
Power difference large	242	0.33	0.47	0	1
US troops	244	0.23	0.42	0	1
NATO	245	0.27	0.45	0	1
Troops per capita	209	7.23	5.44	0.44	37.30
(Military expenditures)	207	4.87	6.51	0.53	69.10
(War)	213	0.19	0.39	0	1
(Militarised interstate disputes)	200	0.87	1.29	0	6.33
(Military conscription)	213	0.68	0.47	0	1
Level 3					
Europe*	91	0.54	0.50	0	1
America	91	0.17	0.37	0	1
Asia	91	0.10	0.31	0	1

Africa	91	0.09	0.28	0	1
Middle East	91	0.10	0.31	0	1
(WWII defeat)	90	0.07	0.26	0	1

Notes: statistics are calculated for units where *Bellicosity* is not missing; * = Reference category; variables used only in sensitivity analysis are in parentheses.