

Democratic Peace: Myth or Reality?

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POLI 7941

May 9, 2005

Introduction

The anatomy of the state necessarily makes it war prone. The state is a territorial monopolist of the legal use of force and ultimate decision-making. As a monopolist, its natural tendency is to suppress (internal and external) competitors and extract ever more wealth from its subjects in order to increase its own power. Its tendency is to grow into Leviathan. Being a monopolist, it lacks the incentive to lower costs and improve the quality of its goods and services. As a monopolist, unlike private citizens and businesses, it has the power to externalize the costs of war onto its subjects. Having the ability to externalize costs increases its incentive to go to war.¹ It is useful to have an understanding of the anatomy of the state in order to understand war, but international relations scholars tend to ignore the anatomy of the state. It is argued that, in order to create peace and eliminate or at least minimize the danger of war, one should study and understand the effects of the distribution of power in the international system or of different types of government on the incidence of war. This too is a useful endeavor, if not as fundamental. In this paper, I test for the effects of the concentration of power in the major power subsystem and, primarily, of the proportion of democracies in the international system on the incidence of war. To my knowledge, no empirical study has yet been done on effects of the proportion of democracies in the international system on the incidence of war.²

¹ See Denson 2001; Higgs 1987, 1991, 1997, 2004; Hoppe 2002, 2003; Mises 1985; and Ostrowski 2005.

² Mitchell (2002) tests 'percentage of democracy' with regards to third-party dispute resolution, not the incidence of war.

The Theoretical Debate

It is easy to conceive how the distribution of power in the international system can affect the incidence of war. Neorealists (Waltz 1959, 1979) argue that the distribution of power is all that really matters in international politics. Measurement of power tends to rely upon military and economic capabilities. Traditionally, due to neorealist influence, the focus has been on the number of major powers in the international system (polarity). Three different types of systems are typically held to be possible, those characterized by “a single preponderant state (hegemonic or unipolar), two dominant states (bipolar), or more than two dominant states (multipolar)” (Mansfield 1994, 11).

There are two major theories related to polarity that deal with the effects of the distribution of power on the incidence of war: power preponderance and balance of power. Greater power relative to other states, other things being equal, means the cost of going to war is lower. This could give the stronger state an incentive to go to war, but on the other hand it might lead to less war as markedly weaker states give in to the stronger state’s demands. Such is the argument made by power preponderance theorists, who hold that a unipolar or hegemonic system will be the most peaceful while situations of power parity will be more war prone. Power preponderance theorists argue that major wars will occur when a challenger dissatisfied with the status quo rises up to displace the hegemon. Balance of power theory, in contrast, holds that relative power parity leads to peace although there is disagreement as to whether a multipolar or bipolar system is more peaceful. Multipolar enthusiasts argue that three or more major powers with relative parity allows for more blocking coalitions that can check the power of rising states. A larger number of major powers along with shifting alliances leads to uncertainty about who will win

a war and so provides a disincentive to initiate one. Bipolar enthusiasts argue that a system with only two relatively equal states creates a clearer and more stable alliance structure. Despite their contradictory claims, some empirical support has been found for both power preponderance theory and balance of power theory. (Mansfield, Ch. 1: 10-21 and Ch.3)

Aside from the confusion about what effect the distribution of power has on the incidence of war, both between and within the different theories, there are grave problems with the use of polarity to measure the distribution of power in the international system. Chief among them is the arbitrariness in designating who are the major powers. The list of major powers was decided upon by scholarly consensus, but no objective measures were actually used. Because of this, “marked differences exist among scholars of international relations in their evaluations of whether various periods during the nineteenth and twentieth centuries were characterized by hegemony, bipolarity, multipolarity, or some combination of these structural conditions” (Mansfield, 11).

Mansfield also points out that the use of polarity is incompatible with the microeconomic roots of neorealist theory. Polarity only captures one aspect of the distribution of power: the number of major powers. Another important aspect is the power inequalities between states. Two major powers could differ greatly in the amount of power they possess. Moreover, polarity dichotomizes the international system into major and minor powers. Minor powers are presumed to be unimportant for the purposes of determining the distribution of power in the international system, but although there are theoretical reasons for thinking that major powers are more important than minor powers, it does not follow from this that minor powers are *unimportant*. Thus, Mansfield

argues in favor of using a measure of the concentration of power in the international system instead of or in addition to polarity.

Mansfield argues that concentration has several advantages over polarity. It “reflects both the number of major powers and the relative inequality of power among them.” Mansfield defines concentration as “the coefficient of variation of the proportion of the aggregate major-power capabilities possessed by each major power” (Mansfield, 13). Rather than a discrete, qualitative variable concentration is a continuous variable with values ranging from zero to one. Concentration of power ranges from maximally and equally dispersed at a value of zero to monopolized by a single state at a value of one. In between the extremes lies low, moderate, and high imbalances of power among the major powers. Employing the concentration measure, Mansfield argues that the effect of the distribution of power on the incidence of war is not monotonic but quadratic, having an inverted U-shape. In other words, Mansfield finds that war is less common when there is great dispersion and equality of power as well as when there is great inequality and monopolization of power. It is in between, when there are moderate to high imbalances of power, due to a reduction in possible blocking coalitions, that war is more common. Thus, Mansfield is able to reconcile the seemingly contradictory theoretical positions of, and empirical evidence for and against, balance of power theory and power preponderance theory.

Despite the advantages of concentration over polarity, it too suffers from at least one important defect. While concentration offers a more objective measure of polarity and additionally measures the inequality of power between the major powers, it too is inconsistent with neorealism’s microeconomic roots. Mansfield repeatedly emphasizes

the similarity between his concentration measure and the Hirschman-Herfindahl index that measures the concentration of market share among firms in an industry. He overstates the similarity, however, for where the Hirschman-Herfindahl index measures the concentration of market share among all the firms in an industry, Mansfield's concentration measure only measures the concentration of power of the major power subsystem. Mansfield's concentration measure is not a measure of the concentration of power in the international system but only in the major power subsystem. It takes into account only the number of major powers and the inequality of power among them. It does not take into account the total number of states in the international system, the proportion of major powers within that system, or the overall distribution of power. Thus, Mansfield's concentration measure does not necessarily account for any difference between a system with 5 major powers and 10 minor powers and a system with 5 major powers and 25 minor powers, but there might be important differences here that his concentration measure cannot capture. Mansfield's concentration measure also still suffers from the arbitrariness in the designation of major powers. Despite this deficiency I do not have the expertise or the time necessary to expand Mansfield's concentration measure to account for the concentration of power in the entire international system by including the capabilities of every sovereign state in the equation rather than just the major powers. Therefore, in this paper I make use of Mansfield's concentration measure as the best available.

Mansfield's concentration measure inspired me to wonder whether the concentration, or the proportion rather, of democracies in the international system has a negative, if any, effect on the incidence of war. The democratic peace literature suggests

that democracies tend not to go to war with one another. Presumably, then, the democratic peace thesis would hold that as the proportion of democratic states in the international system increases then war should become less common and less destructive. I have not seen any attempt to measure the effect of the percentage of democracy, or a change in said percentage, on the incidence and destructiveness of war. Therefore, I attempt to remedy that neglect by including in this study a simple measure of the proportion of democracies in the international system derived from the most recent Polity dataset. Mitchell (2002) has already employed such a measure; however, she did not use it to test its effect on the incidence of war but rather on the incidence of third-party dispute resolution.

Including such a system level measure of democracy should be interesting and useful because it is not clear what effect the proportion of democratic states in the international system will have on the incidence of war. Although the consensus among democratic peace scholars has, at least until recently, been that democracies rarely go to war with one another, there is also a consensus that democracies are just as war prone as other types of states. Democracies just tend to go to war with non-democracies. Thus, as the proportion of democracies rises over time, this increase could be caused by an increase in the number of wars between democracies and non-democracies that results in the democratization of the losing non-democratic states. Some recent empirical studies (Gowa 1999, Sobek and Clark 2005) have shed some doubt on the democratic peace thesis, however. These studies reveal the democratic peace to be an artifact of the Cold War, meaning that the democratic peace resulted from the common security interests of the Western capitalist democracies against the perceived threat of the Soviet-led

communist bloc and *not* from some inherent pacific feature(s) of democracy.

Proponents of the democratic peace thesis typically offer one or both of the following explanations in its support: structural and normative (cultural). *Normative or cultural explanations* emphasize “the role of shared democratic principles, perceptions, and expectations of behavior. Democratic peoples, who solve their domestic disputes without resorting to organized violence against their opponents, should be inclined to resolve problems arising in their relations with other democratic peoples in the same way” (Russett and Oneal 2001,). *Structural explanations*, on the other hand, stress the importance of democratic decision makers being constrained by democratic institutions. In the United States at least, a presidential democracy as opposed to a parliamentary democracy, a separation of powers requires the executive to secure legislative approval and funding for war. In all modern democracies it is thought that democratic institutions make democratic leaders accountable for bad decisions, thus making democratic leaders reluctant to go to war for fear of losing office in the next election. “The two explanations are really complementary: norms and culture influence the creation and evolution of political institutions, and institutions shape norms and culture” (). Critics of the democratic peace thesis do exist, however.

There are, actually, strong theoretical and historical reasons to suspect that democracy is not an inherently peaceful form of government.³ It has only been in the past one hundred years or so that democracy has taken on a positive connotation. For over two millennia democracy has had a very negative connotation. Both Plato and Aristotle, and other Greek and Roman political thinkers, had a negative opinion of democracy.

³ See Denson 2001; Hoppe 2002, 2003; Gowa 1999; Ostrowski 2005; Radnitzky 2003; Reiter and Stam 2002; Thornton and Ekelund 2004.

Democracy was seen as being majority tyranny and totalitarianism *in potentia*, inherently unstable, and containing the seeds of its own self-destruction.⁴ Democracies were recognized as being vulnerable to demagogues who could stir up the passions of the mob and direct the full might of the polity against perceived internal and external enemies. Thus, we see Pericles inciting Athens into a ruinous war against Sparta. Democracies are not immune to the in-group/out-group phenomenon discovered by social psychology, nor to the lures of power and easy wealth.

It might be argued that this is certainly true of direct democracies, but it is not necessarily true of indirect democracies or republics because, as Publius argued, elected representatives will act as filters of public opinion. This notion, however, central to both Kant's (1790) theory of perpetual peace and the modern democratic peace thesis, rests upon the faulty assumption of informed voters. If the rational choice literature has taught us anything, it is that the average voter is rationally ignorant. The complexities of domestic and foreign politics and international events, combined with the hustle and bustle of their everyday lives, gives voters reason not to devote great amounts of time to educating ourselves in depth about political issues. People tend to vote according to highly simplified criteria: party line, specific issues, popular candidates, attractive and/or charming candidates, etc. This makes it far easier for politicians to deceive voters about the reasons for going to war and get away with clandestine operations with less chance of domestic electoral repercussions (Radnitzky 2003, Reiter and Stam 2002). Among the bag of tricks employed by democratic politicians throughout history have been: (1) provoking the desired target into launching the first strike; (2) if #1 fails, creating

⁴ The Greek origin of the word democracy is instructive in itself. As an alternative to oligarchy, one might have expected "demoarchy." "Kratos," from which "-cracy" is derived, means "enforcement power." "-archy," in contrast, means simply "to rule." "Demos" means "the People." So "democracy" alludes to and emphasizes the latent coercive traits of that social order.

clandestinely a *de facto* state of war; (3) controlling the media to promote pro-war propaganda; (4) employing #3, creating the impression that the intended target fired the first shot.

Ultimately, democracies are ruled by men, just as any other form of government. A passage from “Federalist #6,” written by Alexander Hamilton, is instructive, in that it directly contradicts Kant's theory of perpetual peace almost in its entirety:

Has it not, on the contrary, invariably been found, that momentary passions and immediate interests have a more active and imperious control over human conduct than general or remote considerations of policy, utility, and justice? Have republics in practice been less addicted to war than monarchies? Are not the former administered by *men* as well as the latter? Are there not aversions, predilections, rivalships, and desires of unjust acquisitions that affect nations as well as kings? Are not popular assemblies frequently subject to the impulses of rage, resentment, jealousy, avarice, and of other irregular and violent propensities? Is it not well-known that their determinations are often governed by a few individuals, in whom they place confidence, and are of course liable to be tainted by the passions and views of those individuals? Has commerce hitherto done anything more than change the objects of war? Is not the love of wealth as domineering and enterprising a passion as that of power or glory? Have there not been as many wars founded upon commercial motives, since that has become the prevailing system of nations, as were before occasioned by the cupidity of territory or domination? Has not the spirit of commerce in many instances administered new incentives to the appetite of both for the one and for the other? Let experience the least fallible guide of human opinions be appealed to for an answer to these inquiries.

If Kant's theory is applicable and true of republics, it can only be of republics insofar as they are *constitutional* republics; that is, insofar as power is distributed and limited by a constitution, and, of course, only insofar as that constitution is actually followed by the rulers and people. Modern, so-called liberal or social democracies are a far cry from constitutional republics.

Democracy has also been recognized by some as a secular or political religion

(Radnitzky 2003).⁵ With the decline of transcendental religions over the past few hundred years, secular religions have stepped in to fill the void for many people. Examples of secular religions include: Marxism, socialism, communism, fascism, Nazism/national socialism, nationalism, and even democracy. Secular religions, like transcendental religions, help define peoples' identity: they distinguish right from wrong and good from evil, and offer a sense of purpose and belonging. The sacred mantras of democracy have become “one man, one vote” and “Will of the People.” These are the supreme values of the democratic ideal and are not to be questioned seriously. Whatever the people decide through the electoral process via the legislation of their representatives is good. John Dewey said in 1920: “Once we commit to pursuing democracy, it will take on religious value” (Quoted in Radnitzky, 188). Democracy as a political religion provides a key to understanding the violent messianic impulse of Wilson's “war to end all wars” in order to “make the world safe for democracy”; FDR's echo of Wilson's abortive attempt, Bush, Sr.'s “New World Order”; Clinton's echo of Bush, Sr.; and the current Bush Administration's wars in Afghanistan, Iraq, and the “War on Terror”; to name some of the most prominent examples.⁶

Moreover, democracy is recognized by some as being an inherently redistributive system, a centralizer of power, and a source of interest group warfare. Hoppe (2002) makes a distinction between private ownership of government and public ownership of government. The characteristic historical example of the former is monarchy, of the latter, democracy. A privately-owned government is one in which the government is considered to be the personal property of an individual(s). In contrast,

⁵ See also the work of Eric Voegelin on the issue of political religions.

⁶ For an instructive historical analysis of US foreign policy, see Walter McDougall, *Promised Land, Crusader State: The American Encounter with the World Since 1776*, (Mariner Books, 1998).

[d]emocratic rule—in which the government apparatus is considered “public” property administered by regularly elected officials who do *not* personally own and are not viewed as owning the government but as its temporary *caretakers* or *trustees*—typically only follows personal rule and private government ownership (17, emphasis in original).

These two forms of government have systematically different effects on social time preference.

The Austrian theory of time preference holds that, *ceteris paribus*, people tend to prefer satisfaction of wants sooner rather than later. An individual with a higher degree of time preference will be more present-oriented, while a person with a low degree of time preference will be more future-oriented or far-sighted. Under a privately-owned government, the ruler and the people will tend to have relatively lower degrees of time preference than they would under publicly-owned or democratic government.

Hoppe offers two interrelated structural/institutional factors that drive the tendency towards higher time preference in democracies: “public” ownership of the government and free entry into it.

A democratic ruler can use the government apparatus to his personal advantage, but he does not own it. He cannot sell government resources and privately pocket the receipts from such sales, nor can he pass government possessions on to his personal heir. He owns the *current use* of government resources, but not their capital value. In distinct contrast to a king, a president will want to maximize not total government wealth (capital values and current income) but current income (regardless and at the expense of capital values). Indeed, even if he wished to act differently, he *could not*, for as public property, government resources are unsaleable, and without market prices economic calculation is *impossible*. Accordingly, it must be regarded as unavoidable that public-government ownership results in continual capital consumption. Instead of maintaining or even enhancing the value of the government estate, as a king would do, a president (as distinct from a king) has no interest in not ruining his country. For why would he *not* want to increase his confiscations if the advantage of a policy of moderation—the resulting higher capital value of the government estate—*cannot* be reaped privately, while the advantage of the opposite policy of higher taxes—*can* be so reaped? For a president, unlike for a king, moderation offers only disadvantages. (24, emphasis in original)

This, of course, applies not only to presidents or prime ministers in a democracy but also to members of congress or parliament as well as to bureaucrats. Obviously not all politicians act in the manner described above, or at least do not intentionally pursue policies with such effects, but public-government ownership has the effect of encouraging such tendencies.

Moreover, in a modern democracy, entry into government is in principle open to everyone. In contrast, entry into government in a monarchy is restricted to the ruler and his family and friends. This has the effect of stimulating “the development of a clear “class consciousness” on the part of the governed public and promotes opposition and resistance to any expansion of the government’s power to tax” (21). Also, “government attempts at territorial expansion tend to be viewed by the public as the ruler’s private business, to be financed and carried out with his own personal funds. The added territory is the king’s, and so he, not the public, should pay for it. Consequently, of the two possible methods of enlarging his realm, war and military conquest or contractual acquisition [e.g., marriage], a private ruler tends to prefer the latter” (23).

Free entry into government blurs the distinction between the rulers and the ruled. Anyone, in theory, can become part of the ruling class. The “class-consciousness” of the ruled is blurred. Pressure groups will inevitably attempt to influence politicians and get representatives elected in order to use the coercive power of the government apparatus to satisfy their short-run interests at the expense of others. Consequently, “public resistance against government power is systematically weakened” (25-26). The politically connected, which tend to be wealthy leaders of big business and other powerful special interest groups, will inevitably have the greatest amount of influence with politicians. The

masses, “rationally ignorant” and suffering from collective action problems, will have far less influence on foreign policy.

The combined effect of these two factors—“public” ownership of government and free entry into it—is conducive to a state of affairs, commonly used to refer to environmental issues, that can best be characterized as a “tragedy of the commons.”^{7,8} Of course, the tendency of a higher social time preference under publicly-owned governments relative to privately-owned governments should be understood in conjunction with the more fundamental tendency of government growth.

Jacobin-style, statist democracy has obviously won out over Jeffersonian-style democracy in the twentieth century (Gottfried 2001). The transition from monarchy to democracy in the West has been characterized by rising public debt, high levels of taxation and inflation, and the advent of total war. Increased intervention at home can be expected to lead to increased intervention abroad, provided the state in question has the power to impose its will on other states. A “positive” correlation between democracy and increased militarization and war can be seen in Howard (1976) and Fuller (1969, 1992). This correlation is linked to the natural tendencies of government growth and centralization, and expansionism.

Finally, the question over the validity of the democratic peace thesis has been vitiated over the issue of defining the concept. Critics have accused proponents of the democratic peace thesis – scholars, journalists, and politicians alike – of redefining democracy whenever counterexamples are presented. One or more of the countries in the critic's counterexample is always “not democratic enough.” Incidentally, the very

⁷ See, for example, *Managing the Commons*, Garret Hardin and John Baden, eds., (San Francisco: W.H. Freeman, 1977).

⁸ It should be noted that neither Hoppe nor the present author advocate a return to monarchy or deny that monarchy suffers from serious flaws as well.

contestability of the definition of democracy, combined with the in-group/out-group phenomenon, should give one pause before claiming that democracies never (or rarely) go to war with one another: the intended enemy can always be deemed “not democratic enough.”

In order to give the democratic peace thesis a fair hearing, and to head off at the pass the potential objection that my operational definition of democracy is “not democratic enough,” I employ in this paper several measures of democracy of varying degrees of strictness. I expect to find that the proportion of democracies in the international system has no statistically significant effect on the incidence of war. Alternatively, it could have a positive effect, although I think this is less likely, given that the full range of my dataset (1816-1997) encompasses most of the modern democratic era. Even non-democratic states in this era are compelled to cater in some way to the democratic spirit, and all are essentially publicly-owned rather than privately-owned organizations, unlike the bygone ages of feudalism and limited, hereditary monarchies.

Methodological Issues

In order to empirically test, or illustrate rather, the effects of the concentration of power and the proportion of democracy on the incidence of war, I utilize a statistical model that employs data collected primarily from the Correlates of War (COW) project. The full dataset employed in this paper contains observations ranging from 1816 to 1997. I also employ a truncated dataset, with observations ranging from 1870 to 1992, for some models due to the lack of trade data before and after these years in the source that I use.⁹

My primary dependent variable is the number of interstate wars that occur in a

⁹ Datasets available upon request; contact the author at gplauc1@lsu.edu.

given year. For each year in the dataset I simply code the number of interstate wars that occurred. Although my primary interest is in the effect of the proportion of democracies in the interstate system on the incidence of interstate war, I also statistically model two other dependent variables: intra-state war (wars within states) and extra-state war (wars between a state and a non-state actor). These two variables are coded in the same manner as the interstate war variable. My chief reason for including all three types of war is that the proportion of democracies in the international system could theoretically influence the incidence not only of interstate war but also of populist and democratic (and otherwise) civil wars, secessions, insurgencies, and terrorist conflicts. The data for these three dependent variables is drawn from the respective COW datasets. Because my dependent variables are ordinal in nature, in which higher numbers represent a relevant increase in the incidence of war, I employ a negative binomial regression technique in all of the models.

The primary independent variable is the proportion of democracies in the international system. I actually employ three different proportion of democracy variables in order to test the democratic peace thesis with three different and increasingly stringent measures of democracy. All three democracy variables are derived from the most recent Polity IV dataset. Democracy, according to the Polity project, is conceived as...

three essential, interdependent elements. One is the presence of institutions and procedures through which citizens can express effective preferences about alternative policies and leaders. Second is the existence of institutionalized constraints on the exercise of power by the executive. Third is the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation. Other aspects of plural democracy, such as the rule of law, systems of checks and balances, freedom of the press, and so on are means to, or specific manifestations of, these general principles. We do not include coded data on civil liberties.

In mature form, autocracies sharply restrict or suppress competitive political participation. Their chief executives are chosen in a regularized process of selection within the political elite, and once in office they exercise power with few institutional constraints. Most modern autocracies also exercise a high degree of directiveness over social and economic activity, but we regard this as a function of political ideology and choice, not a defining property of autocracy. Social democracies also exercise relatively high degrees of directiveness. (Marshall and Jaggers 2002, 13-15)

The first democracy variable is based on the one employed by Mitchell (2002); all states that rate a 6 or higher on Polity's democracy measure are counted as democracies. For a given year, the number of democracies that meet this requirement is divided by the total number of states in the international system to derive a measure of the proportion of democracies in the international system. I call this, the least strict of the democracy variables, simply DEMOCRACY.¹⁰ Data on the number of states in the international system for any given year was generated using EUGene.

The second democracy variable is more strict than the first. For the second variable I count as democracies only those states that rate as a 6 or higher on Polity's polity measure. Polity's polity measure is more stringent than its democracy measure, because the democracy measure only takes into account the level of certain democratic institutions in a state. It is possible for a state to possess both democratic and autocratic institutions, however. The polity measure captures this by subtracting a state's autocracy score from its democracy score, both of which range from 0 to 10, producing a composite measure ranging from -10 to 10. The second democracy variable, STRONG DEMOCRACY, is created by dividing the number of states that rate a 6 or higher on

¹⁰ In truth, I personally consider even countries to rate lower than 6 on Polity's democracy measure to be democracies, but I go with Mitchell's variable here to avoid likely objections and to give the democratic peace thesis a stronger test. Note that many of the defining characteristics of democracies for Polity are not actually necessary features of democracy as such, but rather are features of modern liberal democracies which are only somewhat related to the original concept of a constitutional republic.

Polity's polity measure by the total number of states in the international system in a given year.

The third democracy variable, which I call PERFECT 10 DEMOCRACY, is also derived from Polity's polity measure. In this case, I count as a democracy only states that rate a perfect 10 in a given year. Like the other democracy variables, this third variable is derived by dividing the number of states that rate as a democracy using this criteria by the total number of states in the international system in a given year. This variable will give the democratic peace thesis the strongest test possible by employing the strictest operational definition available. A state that rates a perfect 10 on Polity's polity measure has earned a 10 rating on Polity's democracy measure and a 0 rating on Polity's autocracy measure.

My secondary independent variables measure the concentration of power in the major power subsystem. Following Mansfield, I employ two variables intended to capture this concentration of power: MSYSCON and MSYSCON², the latter uses a quadratic term; using the two variables together allows one to capture the inverted U-shaped relationship between concentration of power and war that Mansfield identified. MSYSMOVE “measures changes in proportion that each major power controls of the capabilities possessed by all major powers” from year to year (Mansfield1994, 86). All three of these variables are ultimately derived from the COW Composite Index of National Capability (CINC). I generated these variables by compiling system level data from the country-year data contained in EUGene.

In addition to concentration of power, I employ two control variables: COLD

WAR and GTTRADE. Since recent empirical research has shown that the democratic peace was an artifact of the Cold War, I thought it would be safer to control for any possible effect the Cold War might have had on the incidence of war during that period. COLD WAR is a dichotomous variable; I code all years from 1947 to 1991 as a 1. GTTRADE, or global total trade, is a measure of the total amount of imports plus exports for every country in the international system in a given year. It was compiled from country-year data generated by EUGene.

Descriptive Statistics

Before examining the results of my statistical analyses, it is useful to briefly look at some of the descriptive statistics pertaining to the main variables I employ. The descriptive statistics are summarized in Table 1 below. The values of the dependent variables – interstate war, intra-state war, and extra-state war – ranged from 0-4, 0-6, and 0-4, respectively. During the period 1816-1997 there were 78 interstate wars, 210 intra-state wars, and 106 extra-state wars.

The democracy variables prove interesting. Raw counts for DEMOCRACY, STRONG DEMOCRACY, and PERFECT 10 DEMOCRACY range from 1-82, 1-78, and 0-31, respectively during the period 1816-1997. The majority of these are states that have democratized since World War II, with the most recent wave of democratization in the past couple of decades bringing the largest chunk of new democracies. The number of states in the international system has blossomed in the decades since World War II as well. Although DEMOCRACY and STRONG DEMOCRACY appear to track each other

Table 1
Descriptive Statistics

Variable	N	Min	Max	Sum	Mean	Std. Deviation
Interstate War	182	0	4	78	.43	.68
Intra-state War	182	0	6	210	1.15	1.23
Extra-State War	182	0	4	106	.58	.84
DEMOCRACY: Raw Count	182	1	82	-	19.9	17.96
STRONG DEMOCRACY: Raw Count	182	1	78	-	17.2	17.40
PERFECT 10 DEMOCRACY: Raw Count	182	0	31	-	9.7	9.02
Number of States	182	23	187	-	67.4	46.6
DEMOCRACY: Proportion	182	.0345	.4490	-	.2597	.1180
STRONG DEMOCRACY: Proportion	182	.0263	.4171	-	.2124	.1123
PERFECT 10 DEMOCRACY: Proportion	182	0	.2597	-	.1184	.0791
MSYSCON	182	.22	.42	-	.3223	.0400
MSYSCON ²	182	.05	.18	-	.1054	.0250
MSYSMOVE	182	0	.17	-	.0279	.0228
GTTRADE*	123	9373.84	7811690	-	727462.8	1621090

Note: *Calculated in millions of 1998 US dollars.

closely, DEMOCRACY fluctuates far more than STRONG DEMOCRACY, as might be expected. Only during three periods are there the same number of states in the international system using either the DEMOCRACY or STRONG DEMOCRACY measure: 1816-1827 and 1835-1836 when the United States was the only democracy, and 1904-1907 when there are 12 democracies. Using PERFECT 10 DEMOCRACY, there is

no democracy in the international system until 1844 and the United States is not a democracy for a significant period during the 1800s. When the democracy variables are transformed into proportion variables, as they are used in the regressions below, it can be seen that there is significant variation from the lowest proportion to the highest proportion and that they differ significantly from one another as well.

Results and Discussion

The three tables below summarize the results of the negative binomial regressions. There are three models for each dependent variable, one for each of the democracy variables, making 9 models in all. There are two versions of each model: version (a) presents a test of the full range of the dataset without the trade variable, version (b) presents the truncated dataset ranging from 1870-1992 with the trade variable included.

Table 2 below presents the regression models with interstate war as the dependent variable. The most significant result is that in none of the models are the democracy variables significant, although they are all in the direction hypothesized by the democratic peace thesis. However, they are not merely not significant; with significance levels worse than .5, they are nowhere near significant. Concentration of power is significant in all of the (a) versions and MSYSMOVE is highly significant and positive in both versions of all three models. The signs of the two concentration variables are opposite as is to be expected for a nonmonotonic, inverted U-shaped relationship. The results lend a good deal of support to Mansfield's findings. COLD WAR is not significant in any of the models and GTTRADE is negative and only significant in Models 2b and

3b. That GTTRADE is negative supports Kant's part of theory of perpetual peace as well as the classical liberal/libertarian economic theory that increased trade reduces conflict.

Table 2: Regression Models
Dependent Variable: Interstate War

Variable	Model 1a	Model 1b	Model 2a	Model 2b	Model 3a	Model 3b
Constant	-12.5356** (5.9721)	16.7229 (12.6397)	-12.1469** (6.0289)	17.3354 (12.5948)	-12.7784** (5.9856)	17.3657 (12.7047)
DEMOCRACY	-.5781 (1.2426)	-1.2498 (2.8380)	-	-	-	-
STRONG DEMOCRACY	-	-	-.8295 (1.3209)	-.9299 (2.5748)	-	-
PERFECT 10 DEMOCRACY	-	-	-	-	-.6056 (1.8687)	-1.4231 (3.051)
MSYSCON	79.1925** (38.2357)	-89.9322 (75.0784)	77.1227** (38.2651)	-94.2306 (74.3996)	79.8319** (38.4914)	-94.4465 (75.0739)
MSYSCON ²	-137.4415** (61.7633)	106.9830 (110.8902)	-134.6847** (61.5548)	112.8054 (110.3091)	-137.8375** (62.2482)	112.8654 (111.4902)
MSYSMOVE	20.9220*** (4.9050)	20.2503*** (6.2158)	21.1727*** (61.5548)	20.2596*** (6.2857)	20.6892*** (4.9741)	20.5030*** (6.4081)
COLD WAR	.4328 (.3015)	.2529 (.3540)	.4567 (.3077)	.2814 (.3545)	.4575 (.3255)	.3151 (.3709)
GTTRADE	-	-4.68e-07 (2.20e-07)	-	-4.78e-07** (2.17e-07)	-	-4.95e-07** (2.15e-07)
Log Likelihood =	-146.23	-104.40	-146.14	-104.43	-146.29	-104.39
N =	182	123	182	123	182	123
LR chi ² (5) =	19.27	15.59	19.45	15.53	19.16	15.62
Prob > chi ² =	0.0017	0.0161	0.0016	0.0083	0.0018	0.0160
Pseudo R ² =	0.0618	0.0695	0.0624	0.0692	0.0615	0.0696

Note: Models 1a, 2a, and 3a include observations from 1816-1997. Models 1b, 2b, and 3b include observations from 1870-1992. ** signifies significance at the .05 level or below. *** signifies significance at the .01 level or below.

Table 3: Regression Models
Dependent Variable: Intra-State War

Variable	Model 4a	Model 4b	Model 5a	Model 5b	Model 6a	Model 6b
Constant	-245.7733 (2.9088)	16.9220** (8.1732)	4.7931 (2.9525)	15.6544* (8.0330)	4.5548 (2.8944)	14.3555* (7.7034)
DEMOCRACY	-.4180 (.7981)	4.7439** (1.9858)	-	-	-	-
STRONG DEMOCRACY	-	-	-.2931 (.8801)	5.2784*** (1.9635)	-	-
PERFECT 10 DEMOCRACY	-	-	-	-	-.2946 (1.1959)	3.9932* (2.0625)
MSYSCON	-23.4549 (19.3843)	-104.1843** (49.5958)	-24.4584 (38.2651)	-96.2249** (48.4977)	-23.3956 (19.4091)	-83.7138* (46.0515)
MSYSCON ²	26.1003 (32.4285)	142.9690* (74.4395)	19.3575 (32.1489)	132.3063* (72.9879)	26.7344 (32.4373)	113.2760* (68.9352)
MSYSMOVE	5.3525 (3.8427)	-1.1347 (5.3422)	5.0416 (3.8172)	-2.2217 (5.4305)	4.9493 (3.8620)	-.4979 (5.2949)
COLD WAR	.4705*** (.1652)	.56633*** (.2047)	.4755*** (.1663)	.4427** (.2016)	.4851*** (.1793)	.3291 (.2148)
GTTRADE	-	-2.19e-07* (1.30e-07)	-	-2.16e-07* (1.28e-07)	-	-1.25e-07 (1.18e-07)
Log Likelihood =	-245.77	-160.94	-245.85	-160.09	-245.88	-161.97
N =	182	123	182	123	123	123
LR chi ² (5) =	34.25	38.98	34.09	40.68	34.04	36.91
Prob > chi ² =	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Pseudo R ² =	0.0651	0.1080	0.0648	0.1127	0.0647	0.1023

Note: Models 4a, 5a, and 6a include observations from 1816-1997. Models 4b, 5b, and 6b include observations from 1870-1992. * signifies significance at the .1 level or below. ** signifies significance at the .05 level or below. *** signifies significance at the .01 level or below.

Table 3 above presents the regression models with intra-state war as the dependent variable. Again, the most notable results involve the democracy variables. In the (a) versions of all of the models, they are in the direction expected by the democratic peace thesis but are even farther from being statistically significant than in Models 1-3. Even more interesting is that in the (b) versions of the models, the democracy variables

are not only positively correlated with the incidence of intra-state war but also significant. Models 4b, 5b, and 6b provide some evidence that democracy is positively correlated with the incidence of intra-state war; the democracy variables are significant at .017, .007, and .053, respectively. Concentration of power is less (or not) significant in these models, and MSYSMOVE is far from significant. GTTRADE is again negative and significant at the .1 level in Models 4b and 5b. Surprisingly, COLD WAR is positive and highly significant in all but Model 6b.

Table 4 below presents the regression models with extra-state war as the dependent variable. Again, the notable results involve the democracy variables. The democracy variables are positive in Models 7a, 7b, and 8a. In Model 7a, the democracy variable is relatively close to being significant at the .1 level (.172). The democracy variables are negative in Models 8b, 9a, and 9b. Only in Model 9b is the democracy variable significant; PERFECT 10 DEMOCRACY is here negatively correlated with the incidence of extra-state war and highly significant. However, it is the only variable significant in Model 9b. Model 9b also has an interesting anomaly: it is the only model in which the two concentration variables have the same sign. Model 9b would seem to provide some small support for the democratic peace thesis; however, given that it is the only model in which the democracy variable is both in the right direction for the democratic peace thesis *and* statistically significant, and given the odd result for the concentration variables, and given that the dependent variable is only extra-state war and not intra-state war or interstate war, this support would seem to be marginal at best.

On the suspicion that my trade variable is less than perfect, I experimented with removing it from the (b) version regressions. In Models 1-3, this has no significant effect.

In Models 4-9, MSYSCON and/or MSYSMOVE sometimes become significant or cease to be significant. Only in Model 4b is the democracy variable weakened somewhat to just above the .05 level of significance at .052, but it remains significant and positively correlated with the incidence of intra-state war. Removing COLD WAR from the models does not have a significant effect for the most part.

Table 4: Regression Models
Dependent Variable: Extra-State War

Variable	Model 7a	Model 7b	Model 8a	Model 8b	Model 9a	Model 9b
Constant	-22.5743*** (8.7200)	-3.686 (15.7883)	-23.2003*** (8.8522)	-4.8627 (15.2905)	-22.9668** (9.0004)	-.3975 (15.2144)
DEMOCRACY	1.4632 (1.0708)	2.8616 (3.2427)	-	-	-	-
STRONG DEMOCRACY	-	-	.9438 (1.1962)	-.9797 (2.6678)	-	-
PERFECT 10 DEMOCRACY	-	-	-	-	-.6786 (1.6893)	-7.2411** (2.8895)
MSYSCON	123.7101** (38.2357)	-5.8666 (93.7146)	129.7573** (53.1744)	26.6073 (89.4641)	131.8437** (54.4147)	2.6284 (88.2453)
MSYSCON ²	-173.3309** (79.3389)	10.7457 (135.8421)	-184.5308** (80.2931)	-35.7299 (129.7864)	-191.5192** (82.5150)	1.3364 (127.9389)
MSYSMOVE	-1.4902 (5.2571)	-3.4079 (6.5820)	-.0587 (5.2508)	-1.0778 (6.6337)	2.8787 (5.2415)	3.3127 (6.4515)
COLD WAR	-.2901 (.3255)	-.2044 (.3662)	-.2637 (.3369)	-.1251 (.3827)	-.1098 (.3699)	.3975 (.4354)
GTTRADE	-	-6.47e-07 (4.70e-07)	-	-6.06e-07 (4.81e-07)	-	-8.21e-07 (5.39e-07)
Log Likelihood =	-177.48	-118.40	-178.20	-118.72	-178.33	-115.52
N =	182	123	182	123	182	123
LR chi ² (5) =	20.39	17.15	19.15	16.49	18.69	22.91
Prob > chi ² =	0.0011	0.0088	0.0018	0.0114	0.0022	0.0008
Pseudo R ² =	0.0543	0.0675	0.0510	0.0649	0.0498	0.0902

Note: Models 7a, 8a, and 9a include observations from 1816-1997. Models 7b, 8b, and 9b include observations from 1870-1992. ** signifies significance at the .05 level or below. *** signifies significance at the .01 level or below.

The most important finding of this paper is that the democratic peace thesis gets almost zero support and in many cases, though the coefficients are not significant, there is some small evidence that democracies are positively correlated with interstate and extra-state war. Perhaps not so surprisingly, democracy is positively *and* significantly correlated with the incidence of intra-state war in some of the models. The advent of the democratic age, particularly following the messianic impulse first tested in the Spanish-American War by the United States and then in earnest in the two World Wars, has coincided or resulted in waves of separatist movements across the globe. The instability of democracy, particularly of immature democracies, probably contributes to this phenomenon. A surprising finding is that COLD WAR is highly significant in Models 4a, 4b, 5a, 5b, and 6a as well as positive. This could perhaps be explained as capturing the high point of the democratic age.

This paper also finds much support for Mansfield's concentration of power variables with regards to interstate war. Mansfield did not test the applicability of his variables to intra-state and extra-state wars; he thought that they would have no effect (84). Perhaps he should have, however, as this paper does find some interesting and significant, though qualified, results. Although concentration of power is itself significantly related to interstate war, it is MSYSMOVE that appears to have the greatest impact. This is perhaps to be expected, as it measures the change in proportion of the power that each major power holds. The change in proportion of the power that each major power holds has a strong, positive effect on the incidence of war.

Conclusions

In this paper I sought out to replicate and build upon the findings of Mansfield with regard to his concentration of power variables and, primarily, to test for the effect of the proportion of democracies in the international system on the incidence of war. I employed three different measures of increasing strictness for democracy. I tested these variables on three dependent variables – interstate war, intra-state war, and extra-state war – using negative binomial regression. The results offer almost zero support for the democratic peace thesis and even some support against it with regards to intra-state wars. There is even more reason now to believe that the democratic peace was an artifact of the Cold War. Indeed, it seems likely that much of the positive effect of democracy on intra-state war derives from the Cold War period, since it is in the truncated dataset that this result is statistically significant. Some support was also found for the Kantian and classical liberal/libertarian argument that trade reduces conflict. Finally, the validity of Mansfield's concentration of power variables has been corroborated and their effect shown to be broader than Mansfield thought. However, it would still be both interesting and useful for someone to create a concentration of power measure that more fully represents the concentration of power in the entire international system.

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