Democratic Peace Theory
La théorie de la paix démocratique

Anthony Mouchantaf
Fourth Year, Bilingual Double Major in Economics and International Studies

Abstract: In this paper I present a summary and analysis of the existing literature surrounding the democratic peace theory. I argue that due to methodological gaps in the conceptualization of the theory, empirical evidence has so far yielded non definitive results. This is due to two crucial factors; the first is that proponents tend to mistakenly present democracy as a dichotomous variable, and the second is that other independent variables are often empirically inseparable from democracy. I hypothesize that by re-conceptualizing democracy as a measurable rather than dichotomous variable, we will be better equipped to determine whether or not the observed relationship between democracy and a reduction in militarized interstate disputes is a causal relationship or a mere correlation.

Résumé: Dans cet article, je présente un résumé ainsi qu’une analyse de la littérature existante au sujet de la théorie de la paix démocratique. En raison de lacunes méthodologiques dans la conceptualisation de la théorie, les études empiriques ont jusqu’ici donné des résultats non définitifs. Je soutiens que cela est dû à deux facteurs: d’une part, ses promoteurs font fausse piste en présentant la démocratie comme une variable dichotomique et, d’autre part, ils oublient l’importance de variables indépendantes tiers qui sont souvent empiriquement inséparables de la notion de démocratie. Je pose l’hypothèse que, par la re-conceptualisation de la démocratie comme une variable mesurable plutôt que dichotomique, nous serons ainsi mieux équipés à déterminer si la relation observée entre la notion de démocratie et la réduction des conflits inter-étatiques militarisés constitue une relation de cause à effet ou une simple corrélation.
In recent years, western countries (but more specifically U.S. governments) have cited the democratic peace theory, an unproven and increasingly vulnerable ideological framework, as prime justification for their foreign policy. At the most basic level, the theoretical underpinnings of the democratic peace are based on the supposed existence of a causal relationship between democracy and a reduction in the propensity to go to war. It stems from a positivist epistemological approach in that it seeks to establish a law that democracy necessarily reduces likelihood of warfare, which according to proponents, is due to pacifistic behaviour stemming from the normative and institutional characteristics of democratic states.¹

The theoretical debates on the issue emerge at the most basic definitional level. Proponents tend to define democracy along normative lines, with relatively arbitrary concepts. According to John M. Owen, a democracy is “a state that instantiates liberal ideas, one where liberalism is the dominant ideology”.² For critics on the other side of the spectrum, the concept of democracy tends to be much more concrete. According to Schwartz and Skinner, a democracy can be defined along six objective criteria, mainly “broad adult suffrage, competitive elections, the usual civil liberties, the rule of law, equality before the law, and a fair measure of either popular choice or legislative control over the executive.”³

Furthermore, definitional inconsistencies, particularly the differences between the abstract and concrete conceptualizations, will be a crucial point of analysis.

Although empirical studies have demonstrated a clear and incontestable correlation between democracy and a reduction in the likelihood of Militarized Interstate Disputes⁴ (MIDs), the central issue is proving that this correlation amounts to a causal relationship between the two variables. To this end, proponents must establish through empirical evidence that variations in MIDs between states (the dependent variable) are directly and necessarily caused by variations in the governmental systems of these same states (the independent variable).⁵ Critics who reject the theory do so with three central arguments. The first is that due to ambiguities surrounding the definitions of key terms like democracy, the theory cannot be reliably tested because the object of analysis is too vaguely and arbitrarily defined.⁶ Secondly, due to historical contradictions of democratic states going to war, the theory has already been disproved.⁷ Finally, many scholars assert that peace among democratic states is not caused by democracy, but by other independent variables such as modernity,⁸ cultural

---

⁵ Proponents must establish that democracy necessarily causes a reduction in MIDs because the positivist epistemological nature of the theory requires the establishment of a clearly defined law of human or state interactions. If democracy doesn’t always reduce the likelihood of MIDs, then the theory, with its current positivist undertones, would not hold.
factors\textsuperscript{9}, economic development\textsuperscript{10} or even a natural affinity among democratic states stemming from a mixture of these variables.\textsuperscript{11} Keeping these critiques in mind, proponents of the democratic peace conceptualize the theory with two distinct models of analysis.

The first is the static model, which simply seeks to establish a direct causal relationship between democracy and a reduction in the likelihood of MIDs. Using a propositional calculus methodology\textsuperscript{12} and a complex subsequent game theory analysis, Zinnes argues that a dyad of democracies does not engage in MIDs because their mutual pacifistic characteristics, stemming from their democratic nature, creates a non zero-sum interaction.\textsuperscript{13} On the other hand, dyads of democratic and authoritarian states do engage in MIDs because the actions taken by authoritarian regimes create a zero-sum interaction,\textsuperscript{14} compromising the security of democratic states and forcing them to engage in MIDs.\textsuperscript{15} The basic static model has two crucial implications, one at the micro and the other at the macro levels. Looking first at the micro analysis, the model

\textsuperscript{12} Propositional calculus refers to a form of mathematical logic dealing with the relationship between formed propositions disregarding their internal structures. For example, A1 causes A2 which in turn causes A3. The internal structures of the variables are disregarded.
\textsuperscript{13} In game theory, a non zero-sum game refers to a situation whereby the sum of the gains and losses of participants do not equal 0. In other words, both parties can gain from the interaction. Hence both participants can be winners.
\textsuperscript{14} In game theory, a zero sum game refers to a situation whereby the sum of the gains and losses of participants is equal to 0. This means than one party’s gains are exactly matched by another party’s losses. Hence, there must be a winner and a loser.
implies, as mentioned above, that a dyad of states sharing a common form of democratic government will not engage in MIDs. The macro implication is more interesting, implying that peace and stability in the world system is dependent on the proportion of democratic to non-democratic states within the system as follows:

Let:

\[ N = \text{the number of states in the international system} \]
\[ M = \text{the number of non democratic states in the international system} \]
\[ T = \text{threat level in terms of MIDs within the international system} \]
\[ T = \frac{(M[N – M] + M[M – 1])}{2} \]

Accordingly, if \( M = 0 \), then \( T = 0 \), implying that if all states within the system are democratic, then there would be no threat of war.\(^{16}\) Similarly, the lower the \( M / N \) ratio, the lower the threat of war. At face value, this theory mounts a strong defence against one of the most prominent criticisms of the theory; the historical inconsistencies.\(^{17}\) After all, most of the historical contradictions cited by critics have taken place before the Cold War, when the number of democratic states in the system was much smaller, i.e. the \( M / N \) ratio was relatively high.

Though it succeeds in addressing the historical contradictions, the static model is vulnerable in that it is unable to empirically prove a causal link between

\(^{16}\) Ibid., 448.
democracy and peace; rather, it is only successful in establishing a mere
correlation. This stems from the fact that modern democracies also consistently
possess other variables such as modernity and developed economies, which
have been hypothesized themselves to create mutually pacifistic state
characteristics and in turn reduce the likelihood of MIDs.\textsuperscript{18} Though this presents
a difficulty, the definitional issue brought forth by Schwartz and Skinner in
regards to the criteria used to define a democracy, specifically that democracy
can be objectively measured in degrees (i.e. a state can be a perfect democracy
or only somewhat a democracy) is what ultimately tears down the static model.\textsuperscript{19}
The static propositional calculus methodology is inherently flawed in that by
definition it fails to take into account internal characteristics of its units of
analysis. In order to do so, the model would have to introduce an additional $\beta$
variable\textsuperscript{20} where $0 \leq \beta \leq 1$ to measure the intensity of its propositions i.e.
differentiate between perfect democracies and those that are only somewhat
democracies. This is one of the crucial methodological and empirical gaps in the
literature surrounding the democratic peace theory. Proponents of the theory
tend to mistakenly treat democracy as a dichotomous variable (i.e. a state either
is or is not a democracy); whereas a strong case can be made through which the
democratic characteristics of a democracy can be measured. By employing a

\textsuperscript{20} Generally in economics and game theory the $\beta$ variable serves as a measure of intensity. In
this context, for the purpose of empirical research, a “perfect democracy” would have a $\beta$ value
close to 1, whereas a state that just barely qualifies as a democracy would have $\beta$ value close to
0.
clear and concrete definition of democracy, as proposed by critics, future empirical research can establish a $\beta$ value for various states, which would yield more empirically relevant results.\(^\text{21}\) On the other hand, using the vague definitions of the theory’s proponents would be quite problematic. After all, measuring “liberal ideas” or “liberalism” would be an empirical nightmare, and proponents can always argue that contradictory evidence involving MIDs between a dyad of democracies can be explained away by one of the states not being “liberal” enough and hence a non-democracy, without being subject to objective measurements.

The second model is dynamic in nature, in that it introduces a new variable of time as an essential element of analysis.\(^\text{22}\) Proponents argue that the likelihood a MID between a dyad of states at time $t + 1$ is dependent on the state of affairs at time $t$ with the inter-temporal variations being due to the fact that actors learn from positive experiences. According to Cederman, “in our context, the argument assumes that pacific relations generate benefits in terms of wealth and security that gradually will be factored into the decision-making calculus of those states capable of learning”.\(^\text{23}\) Furthermore, the model is based on two crucial assumptions: “first, learning implies behavioural modification over time.

\(^{21}\) The concrete definition must be used because it defines key measurable characteristics of a democracy such as rule of law, equality before the law, and competitive elections. These variables can be empirically measured with a methodology similar to that of the democracy index developed by the Economist Intelligence Unit. The data can then be extrapolated to assign a $\beta$ value for every participating country.


\(^{23}\) Ibid., 21.
Second, at least in the long run, there should be a differentiation between inter-
democratic relations and all other exchanges.\textsuperscript{24} The model, based on the
classical stochastic model of Bush and Mosteller,\textsuperscript{25} is constructed as follows:

Let:

\[ \pi_t = \text{probability of engaging in MIDs in period } t \]
\[ \pi_{t+1} = \text{probability of engaging in MIDs in period } t + 1 \]
\[ C = \text{coefficient of learning,}^{26} \ 0 \leq C \leq 1 \]
\[ \pi_{t+1} = (1 - C)\pi_t \]

At first glance, this model provides a strong defence against critics. The
historical inconsistencies can be explained away by the dynamics of the model,
as it only makes sense for MIDs to take place between early democracies.
However, due to a positive learning coefficient, the tendencies for MIDs are
reduced as time passes, and indeed this has been the observed trend.\textsuperscript{27} The
weakness of the model lies in the empirical gap in proving that C is indeed a
function of democracy. Though between mutual democracies the likelihood of

\textsuperscript{24} Ibid., 19.
1-365.
\textsuperscript{26} In this context, the C coefficient refers to a factor that determines how much positive learning is
taking place in a given period. The underlying assumption is that for a dyad of democracies, the C
value will be high, causing the likelihood of MIDs to decrease drastically from period to period.
For non-democratic states, the C value will be much smaller or even negative, resulting in a much
slower process, or even, if negative, increasing the likelihood of MIDs from period to period.
\textsuperscript{27} Cederman & Rao, “Exploring the Dynamics of the Democratic Peace,” 824.
MIDs has indeed gone down significantly, the assumption by Cederman and Rao that the reduction of MIDs is due to the effects of democracy is in line with the constant theme of the literature; proponents consistently confuse correlation with causation.\textsuperscript{28} What’s more, the model doesn’t account for why the likelihood of MIDs for democratic and non-democratic states alike have fallen sharply. Alternative explanations are many, for example, according to Gat: “the modern transformation accounts for the fact that not only liberal-democratic countries but all countries, once swept by the industrial-technological age, engaged in war far less than they previously did, a fact overlooked by the democratic peace theorists”.\textsuperscript{29}

Whether it is the static or the dynamic conceptualizations, the crucial methodological and empirical gaps in the literature arise from definitional inconsistencies and an inability to isolate the democracy variable.\textsuperscript{30} I hypothesize that by re-conceptualizing democracy as a measurable non-dichotomous variable, we could take potentially crucial steps to fill these gaps. Firstly, in order to achieve empirically relevant data, democracy must be defined clearly and objectively. Though proponents may argue that this conceptualization does not take into account the “liberalism” of a state, defining democracy along such arbitrary lines with such vague concepts makes the theory “vacuous: there can

\textsuperscript{28} Ibid., 823-824.  
\textsuperscript{29} Gat, “The Democratic Peace Theory Reframed: The Impact of Modernity,” 98.  
\textsuperscript{30} As previously mentioned, this difficulty stems from the fact that democracies tend to also be economically developed, modern and culturally similar. For that reason when observing a correlation between democracy and a reduction in MIDs, we’re also observing a correlation between a reduction in MIDs and the aforementioned variables.
be no disconfirming evidence, but for that very reason there also can be no confirming evidence”.\textsuperscript{31} From the described objective definition, I propose developing the aforementioned $\beta$ variable as a measure of democracy. This new dimension would be a potentially crucial addition to the literature by allowing for the separation of the democracy variable from other independent variables.\textsuperscript{32} The consequences for the existing literature would be rather interesting. The static model would have to move to an increasingly complex game theory model and explore the internal characteristics of its variables. The consequences for the dynamic model are much more exiting. If the data were to show that the learning coefficient and the inter-temporal reduction in likelihood of MIDs is independent of the $\beta$ variable, then there would be sufficient grounds to conclude that the observed correlation is caused by another independent variable. However, if the opposite were shown to be true (i.e. a dyad with high $\beta$ values has a higher learning coefficient), then we could reliably conclude that democracy is indeed the crucial factor which reduces MIDs. From this point we could potentially dissect and reconstruct the learning coefficient as a function of $\beta$. For example, in a dyad of two democratic states:

\textsuperscript{32} If the empirical data were to show that states with a high $\beta$ (almost perfect democracies) and states with a low $\beta$ (barely democracies) were just as likely as any other dyad of democracies to experience a reduction in MIDs, then we could safely conclude that it is another independent variable and not democracy which causes this reduction. On the other hand, if only dyads of states with high $\beta$ values experienced a reduction in MIDs, than the democratic characteristics of those states may indeed be the crucial factor.
Let:

\[ D_1 = \text{state 1}, \beta_1 = \text{level of democracy in state 1} \]
\[ D_2 = \text{state 2}, \beta_2 = \text{level of democracy in state 2} \]
\[ C(\beta_1, \beta_2) = \beta_1 \times \beta_2 \]

The 20th century offers several potential case studies that would be quite useful in exploring the above hypothesis. In 1915, the idea of Germany, France and the United Kingdom in a political and economic union would have been laughable. Of course, the question is whether or not this diplomatic rapprochement was caused by the liberalization and democratization of institutions in these countries during the twentieth century. Elsewhere in the Middle East, the region’s three great democracies (Turkey, Lebanon and Israel) have generally avoided large scale war. Turkey and Israel maintained good relations throughout the late twentieth century, and Lebanon, despite significant pressure, did not participate in the wars of 1967 and 1973. However, by 2012, relations between Turkey and Israel have largely deteriorated, and as recently as 2006 Hezbollah and Israel had engaged in a month long war. Has this deterioration in relations been due to de-liberalization or the weakening of democratic institutions? Perhaps there are other more complex variables at play? By studying the evolution of democratic institutions in these countries, and observing the evolution of diplomatic relations, these case studies promise to provide some invaluable insights into the viability of the democratic peace.

In conclusion, the proposed research hypothesis could build on the literature by potentially strengthening existing theories. Empirically isolating the
democracy variable would be a crucial step towards either proving or disproving its causation. On the other hand, the possibility arises that it will instead weaken the theoretical underpinnings of the democratic peace, prompting increased research into other independent variables. The research can potentially have an impact on International Studies as a whole, prompting either increased interest in the normative and institutional characteristics of a democracy as means of promoting peace and stability, should the theory be strengthened, or perhaps accepting the plurality of governmental systems as an equally valid model for peace, should the theory be weakened.