Projecting the Danger of Territorial Claims:
Lessons from Two Centuries of Conflict
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Abstract: This paper attempts to learn from the past two centuries of territorial claims to make projections about the most dangerous claims in today's world. These projections are based on an analysis of preliminary data on territorial claims across the world since 1816, as collected by the Issue Correlates of War (ICOW) project. Characteristics of each claim (such as strategic or economic value of the claimed territory, ethnic/identity ties between each claimant and the territory's inhabitants, and recent militarization of the claim) and of the claimants (such as relative capabilities and joint democracy) are used to draw lessons about the most conflict-prone situations. These lessons are then used to make projections about the claims that remain ongoing today, in order to predict which are most likely to experience serious armed conflict. The paper concludes with a discussion of the findings' relevance for policymakers, an important direction that political scientists would do well to consider in our research.

Territory has been a leading source of conflict for centuries (e.g., Holsti 1991; Vasquez 1993; Hensel 1996, 2012; Huth 1996). Territorial sovereignty has been involved in around one third of all armed conflict in the past two centuries, as well as a majority of all full-scale wars since 1648. Conflicts over territory are also more likely to escalate to serious levels than conflicts over other issues, particularly when the territory at stake is more valuable.

Somewhat surprisingly, though, quantitative scholars of international conflict have made relatively little effort to discuss the implications of their findings for policymakers. While many quantitative studies conclude with an obligatory paragraph hinting at a few ideas that policymakers could consider, little effort is devoted to presenting these suggestions in a format that policymakers could actually understand (if, indeed, they actually came across the article). This has led to political criticism of research funding for the social sciences and repeated efforts to end National Science Foundation (NSF) funding for Political Science research, culminating in the 2013 congressional limitation of NSF Political Science funding to research that is certified as "promoting the national security or the economic interests of the United States." While critics of this limitation responded by highlighting a number of studies funded by NSF that had made just such a contribution, it seems clear that such work has not gotten the attention of policymakers.

The current project represents the beginning of an effort to draw policy-relevant conclusions from the Issue Correlates of War (ICOW) research project, and to present those conclusions in a format that is accessible to those without high-powered training in quantitative methodology. This project begins by attempting to identify all territorial claims, or explicit

disagreements between nation-states over territorial sovereignty, that have been active in the past two centuries These territorial claims are then analyzed to identify the factors that have been most likely to lead to serious armed conflict, and the results are used to identify the ongoing claims that are most likely to escalate to serious levels in coming years. The paper concludes with a brief discussion of how territorial claims have been settled in the past, in order to begin suggesting ways that conflict over these dangerous territorial claims can be avoided. Future papers will follow up on this initial contribution with more detailed investigation of peaceful techniques for managing or settling territorial claims, as well as with similar projections for the risks and management of river claims and maritime claims (both of which are also covered by ICOW data collection).

Past Research on Territory

The growing body of research on territorial claims is based on the idea of studying contentious issues, or the subjects of disagreement between nation-states (for more detail see Hensel 2001, Hensel et al. 2008). There are many types of contentious issues that might arise in international relations, ranging from trade policy (such as the long-running disagreement between the United States and the European Union over unfair subsidies to Boeing and Airbus) to the treatment of one state's citizens on the territory of another (such as the 1994 caning of U.S. citizen Michael Fay in Singapore). States that disagree over an issue have many options that might be used to pursue their issue-related goals, ranging from the threat or use of force to bilateral negotiations with the adversary or turning to third party mediation or arbitration to help settle the issue. Under an issue-based approach, the nature of the issues at stake between two states is thought to influence both the strategies that they choose to pursue their goals and the results of these strategies. In particular, issues that are seen by decision makers as more "salient," or important, are expected to be more likely to lead to militarized conflict and more difficult to resolve to both sides' satisfaction.

Although many types of issues may be salient enough to lead to war, many scholars have suggested that territorial issues are especially salient and especially likely to lead to conflict and war (e.g. Vasquez 1993; Hensel 1996). Territory is described as highly salient for three reasons: its tangible or physical attributes, its intangible or psychological value, and its effects on a state's

reputation. Perhaps the most obvious benefit of territory is the tangible elements that it contains (Goertz and Diehl 1992; Hensel 1996). Many territories have been valued because they contain strategic minerals, oil, fresh water, or fertile agricultural land. Territories are considered valuable because of a strategic location that can provide access to the sea or to major trade routes, particularly when they include deep water ports, warm water ports, or control over strategic waterways. Militarily, strategic territories such as the Golan Heights or the Sudetenland may allow for advance warning of an impending attack and may contribute to national defense, particularly to the extent that the territory contains defensible geographic features. Territory may be valued more highly when it includes major population centers with their own industry and infrastructure, rather than when it is largely uninhabitable.

Beyond its physical contents, territory can also be important to states for less tangible reasons (Hensel 1996; Newman 1999; Hassner 2003; Goddard, 2006). Territory is argued to lie at the heart of national identity and cohesion, with the very existence and autonomy of a state being rooted in its territory (e.g., Murphy, 1990: 531). Many territories are seen as important for their perceived historical connections with a state or its citizens, particularly to the extent that the territory in question was the scene of significant events for a culture or religion. Similarly, Bowman (1946: 177) argued that there is a "profound psychological difference" between the transfer of territory and other types of interstate interactions, because of the strong personal feelings and group sentiments evoked by territory. Toft (2003) makes a similar point regarding ethnic conflict, arguing that the members of a nation can develop an attachment to territory that becomes indivisible from their conception of self and nation, essentially preventing compromise over what is considered a vital part of the national identity. In short, territory can have "a psychological importance for nations that is quite out of proportion to its intrinsic value, strategic or economic," and territorial issues are seen as arousing sentiments of pride and honor more rapidly and more intensely than any other type of issue (Luard, 1970: 7). Beyond its tangible and intangible value, territory can be important for reasons of reputation (Hensel, 1996). That is, if a leader gives in to an adversary over territory, other adversaries might be encouraged to press their own demands on other issues. To Schelling (1966: 124), a country's reputation is one of the few things to be worth fighting for; even parts of the world that are not intrinsically worth the

risk of war by themselves can be important because of the precedents that may be set for events in other parts of the world and at later times. Because of the high perceived salience of territory, states' actions over territorial issues may be more likely to produce reputational effects than actions over other types of issues. Walter (2003, 2006) notes a similar pattern for secessionist movements, with states that face multiple potential secessionist threats acting more coercively to avoid showing weakness against one adversary that would encourage other movements.

If territorial issues are more salient than other issues because of their tangible, intangible, and/or reputational importance, scholars have suggested, interaction over territory should be different from interaction over other issues. Quantitative research on territorial disputes (e.g., Hensel 1996, 2012; Senese and Vasquez 2008; Vasquez and Henehan 2001) suggests that territorial issues should be more prone to militarized conflict behavior than most other issue types, confrontations over territory should be more escalatory than confrontations over other issues, and territorial issues can be very difficult to settle peacefully. Over one-fourth of all militarized disputes have involved territorial issues, as have roughly half or more of more serious conflicts, and disputes over territorial issues are much more likely to escalate to full-scale war than are those over other issues. Furthermore, this escalatory impact of territorial issues seems to be above and beyond any effect of contiguity, rather than being a consequence of neighbors simply being more likely to have territorial claims; even noncontiguous states are involved in a number of territorial disputes, and the conflictual impact of territory remains strong after controlling for contiguity.

Identifying Territorial Claims

The first stage of any systematic effort to study the outbreak of armed conflict over territory involves the identification of potential territorial conflicts, or situations where actors disagree over the ownership of specific pieces of territory. A useful approach for identifying such situations is the work of the Issue Correlates of War (ICOW) project, which is currently collecting comprehensive data on territorial claims around the world since 1816. The ICOW project is described by Hensel (2001) and Hensel et al. (2008), and publicly released data and documentation associated with the project are available online at <http://www.icow.org>.

ICOW defines a territorial claim as being present when three conditions are met. There must be explicit claims to sovereignty over territory; implicit or vague statements that do not specifically demand sovereignty do not qualify (such as demands for the independence of a secessionist territory rather than for its transfer to the demanding state), nor do demands over the usage of territory (such as demands over the treatment of ethnic minorities or requests for the demilitarization of border regions). These explicit statements must concern one or more specific pieces of territory; vague statements seeking *Lebensraum*, affordable energy sources, or a route to the sea without specifying a specific territory do not qualify. Finally, these statements must be made by official government representatives who are authorized to make foreign policy; statements or actions by private citizens, legislators, or soldiers do not qualify unless they are supported by policymakers such as the president, prime minister, or foreign minister (depending on the political system) and thus represent official government policy.[1]

[Tables 1 and 2 about here]

Using this definition, the ICOW project has collected a preliminary list of all territorial claims in the world from 1816-2008, which is currently being finalized and will be released for public use before the end of 2013.[2] Table 1 shows the distribution of these claims over time. There have been 835 distinct territorial claims since 1816, about one-fourth of which (217) began during the nineteenth century. Another 297 began during the first half of the twentieth century, 258 more began during the Cold War, and 63 have begun (so far) in the post-Cold War era. Most of these claims have already ended, though, leaving just 102 of the 835 claims still ongoing at the current end of the data set in 2008.

Table 2 presents the geographic distribution of these territorial claims. The Western Hemisphere has seen 129 claims over the past two centuries, although most of these have been settled, with only 18 remaining ongoing in 2008. Europe has seen the most claims, with a total of 239, many of them related to the two world wars -- although most of these have been resolved, leaving only ten claims still ongoing. The remaining regions still have a large number of ongoing

[1] It should be noted that the ICOW project is currently limited to territorial claims that have at least one nation-state on each side; secessionist or ethnic conflicts that involve a state against one or more non-state groups are not covered by the current stage of data collection, although this could be a new direction for future research after the interstate work is completed.

[2] More detailed data, including data on all peaceful attempts to manage or settle each claim, are also available for claims to territory in the Americas and Europe from 1816-2001.

claims, as many of the borders in these regions are newer; while many states in the Americas and Western Europe have been independent since the nineteenth century and many in Eastern Europe since the end of World War I, most states in Africa, the Middle East, and Asia only achieved independence since World War II. Africa thus has 26 ongoing claims out of its total of 166, the Middle East (with the fewest states of any region) has five of its 96 claims ongoing, and Asia has 43 ongoing claims -- nearly half of the 103 that remain ongoing around the entire world.

The purpose of this paper is to project which territorial claims are most likely to escalate to the level of serious armed conflict. The most commonly used measure of militarized conflict in academic research is the "militarized interstate dispute" (MID), collected by the Correlates of War (COW) project. A militarized dispute is a series of interactions involving the threat, display, or use of military force between nation-states (Ghosn et al. 2003), but this covers a broad range of events, not all of which can reasonably be considered "serious" conflict. For this reason, this paper will focus primarily on those militarized disputes that produce battlefield fatalities among the military forces engaged in the dispute.

[Table 3 about here]

Table 3 shows some general patterns in the militarization of territorial claims. Well over one-third of all claims (40.4%) have experienced at least one militarized dispute, with an average of 1.07 disputes each. Despite this low average, there is a great deal of variation; fifteen different claims (representing each region of the world) have experienced at least ten militarized disputes, with a maximum of 29. Most regions are similar to the global patterns, with four of the five regions ranging from 41.7-47.3%; only Africa is substantially lower, with only 26.5% of its interstate territorial claims being militarized. Accounting for this lower level of militarization of African claims is beyond the scope of this present paper, but this is similar to more general findings on African interstate conflict reported by other scholars (such as the "African peace" discussed by Lemke 2002). Beyond any general patterns in African conflict, one possibility that is specific to territorial claims is the general regional rejection of territorial revisionism under the charter of the OAU and African Union (due to fears that most borders in the region were created artificially in the colonial era, so any successful revision could lead to dozens of additional challenges).

Turning to militarized disputes that produced fatalities, slightly more than one fourth of

all claims (26.2%) have experienced at least one such deadly conflict. The average is 0.51 fatal disputes per claim, with a range from zero to nineteen (led by the Kashmir claim between India and Pakistan). Three regions -- Europe, the Middle East, and Asia -- have a greater than average likelihood of at least one fatal dispute, and the latter two have a higher than average number of fatal disputes per claim.

While these tables are useful in a general, descriptive sense, they do not help us to identify the claims that are most likely to produce serious armed conflict, and they do not offer much in the way of solutions to reduce the risk of such conflict. The remainder of this paper attempts to move in such a direction.

Research Design

This paper's analyses will use a statistical technique called logistic regression (logit) analysis to model the likelihood that a given claim will produce a fatal militarized dispute in any given year of observation. Two types of factors are used to help model this likelihood: claim salience, measured by details of the territory being claimed, and characteristics of the countries involved in the claim. Together, these factors should give us a reasonable idea about the most dangerous types of claimed territories, as well as the conditions under which these claims are most likely to escalate to dangerous levels.

Measuring Claim Salience

Six different indicators are used to measure the salience, or value, or each territorial claim to the participants. Each indicator addresses a factor that is believed to make a claimed territory more valuable to the states. More detail on the measurement of each indicator can be found in the coding manual for the ICOW territorial claims data set (available at http://www.icow.org), and more discussion and justification of each indicator is available in several articles that use the data (Hensel 2001; Hensel and Mitchell 2005; Hensel et al. 2008).

The first three indicators are intended to measure the tangible or physical salience of the territory, as discussed earlier:

- Is the claimed territory known or believed to contain valuable resources?
- Does the territory have a (militarily and/or economically) strategic location?

- Is the area populated, rather than uninhabitable?

The remaining three indicators are intended to measure the intangible or psychological salience of the territory, as discussed above:

- Does the claim involve territory that both states claim as their own homeland territory, rather than territory that one or both claim as a colony or dependency?
- Does at least one of the states have a (religious, ethnic, linguistic, or similar) identity-related connection with the claimed territory or its inhabitants?
- Have both states administered the territory within the past two centuries, meaning that they both have a history of owning it?

These six indicators are used in two different ways. First, a model is run with each indicator included separately, in order to assess the separate impact of each one (for example, is strategic value more or less likely to lead to armed conflict over a territory than economic resources?). A second model is then run with an aggregated salience index, which assigns a value of one to each salience indicator for each state that is affected.[3] With six indicators and two states, this produces a salience measure that ranges from zero (none of these six indicators is relevant for either claimant) to twelve (all six indicators are relevant for both claimants). This measure should give a more complete picture of the overall value of each claimed territory, with higher scores indicating territories that are generally considered more valuable by the claimants.

Characteristics of the Claimants

Finally, this paper's analyses control statistically for the impact of the claimant countries' characteristics, which might be expected to have a substantial impact on the way they manage their disagreements. First, a variety of published research finds conflict to be more likely when states are more evenly matched in capabilities and less likely when both are democratic. Consistent with past research, relative capabilities are measured with the COW project's National

[3] For the three tangible salience indicators (resources, strategic location, populated land), both sides are considered to benefit if the indicator is present. The three intangible salience indicators (homeland vs. dependency, identity connection, historical sovereignty) are measured separately. This is because one state may consider the claimed territory to be part of its homeland while the other may administer it as a dependency (e.g. for the Falkland/Malvinas Islands or Gibraltar, which are claimed as part of the Argentine and Spanish homelands respectively, but administered by the United Kingdom as British Overseas Territories).

Material Capabilities data set, which includes the "Composite Index of National Capabilities" (CINC) score. This measures the percentage of total capabilities in the entire international system held by each country in each year; this paper's analyses divide the CINC score of the stronger state in each claim by the combined CINC scores of the challenger and target states, producing a measure that ranges from 0.50 (when both challenger and target have exactly equal capabilities) to 1.0 (when the stronger state has all of the capabilities and the weaker state has none).

Extensive published research has found that armed conflict is less likely between two democratic states than between other combinations of states. Following much of this research, democracy is measured here using the Polity data set, which includes a variety of details of the institutions in each country's political system. The specific Polity measure used in this paper subtracts a country's institutionalized autocratic characteristics from its institutionalized democratic characteristics, producing a range from -10 (entirely autocratic with no democratic institutions) to +10 (entirely democratic with no autocratic institutions). Consistent with past research, this measure is used to identify claimant states that are both democratic (where each has a score of at least +7 on this Polity scale).

Two other characteristics are considered that might be expected to reduce the likelihood that a territorial claim will become militarized: shared alliances and trade patterns. The COW project's alliance data set (Gibler 2009) is used to determine whether the claimant states shared at least one defense pact during each year of the study, with the expectation that -- all else being equal -- claimants sharing such a military alliance will be less likely to provoke each other militarily. Finally, the COW project's international trade data set (Barbieri et al. 2009) is used to measure the amount of trade between the countries in each year, with the expectation that -- all else being equal -- claimants with higher levels of trade will be less likely to jeopardize their economic ties with serious armed conflict. Trade is measured as the total of exports from state A to state B and exports from state B to state A in a given year, and the resulting total is transformed by taking the natural logarithm to prevent extreme values from distorting the results.

It should be noted that this is a very preliminary research design that is meant as a first cut at this topic, rather than a definitive model of all factors that might plausibly affect the risk of armed conflict over territory. In particular, one factor that could not be included in the initial

version of this project is the impact of recent efforts to manage a territorial claim. Past research (e.g. Hensel 2001, Hensel et al. 2008) has found that armed conflict over a territorial claim is more likely when there is a history of recent armed conflict over the same claim, as well as when there is a history of recent failed negotiations over the claim. The needed data on negotiations and other peaceful settlements are not yet available for the entire world (ICOW has only finished collecting this information for claims to territory in the Americas and Europe), so that can not be used in global analyses such as this one. Measurement of recent armed conflict over each claim, while possible with the materials that have already been collected, is time-consuming, and there was not sufficient time to include that in the present version of this project -- although this will be added in future versions of this paper.

Patterns of Territorial Conflict

Table 4 presents the results of a logit analysis of fatal armed conflict over territorial claims. As noted earlier, two models are presented. Model I measures the salience of the claimed territory by using the individual salience indicators, while Model II measures salience using the 0-12 ICOW salience index. Both models produce consistent results, and the significance of the Wald X^2 measure ($p<.001$ in each model) reveals that both significantly improve our understanding of fatal territorial conflict compared to the null model.

[Table 4 about here]

Model I reveals that many of the salience indicators significantly increase the risk of fatal armed conflict in any given year. In particular, fatal conflict is more likely when the claimed territory has a strategic location ($p<.001$), when it is considered homeland rather than dependent territory by the target state in the claim ($p<.001$), and when the residents of the territory have identity ties with either the challenger ($p<001$) or target state ($p<.001$). Several other salience indicators do not reach standard levels of statistical significance, indicating that they do not have a systematic impact on fatal conflict (even if they might be inflammatory in specific cases), and one reduces the likelihood of conflict (historical sovereignty over the territory by the target state).[4]

[4] The target state has sovereignty over the claimed territory in the vast majority of cases, as the challenger is seeking to acquire territory that is already owned or administered by the target. A more useful interpretation of this effect might be that armed conflict is significantly more likely

Model II reveals that aggregating all of the salience indicators into a single measure of salience produces similar results, with higher salience scores significantly increasing the risk of armed conflict. The impact of the two claimant characteristics is consistent in both models, with fatal conflict being much less likely ($p<.001$) when one state in the dyad is substantially stronger than its opponent -- consistent with the variety of research showing armed conflict to be more likely between relatively evenly matched adversaries. Neither joint democracy nor shared defense pacts systematically affect conflict in either model, while higher levels of trade significantly reduced the likelihood of conflict ($p<.001$).

In short, this table supports the issues approach's key argument that issue salience has an important impact on states' decisions over how to pursue their goals over an issue. In both models, the more salient the territory -- whether measured by individual salience indicators or by the aggregated index -- the greater the risk of armed conflict over the claim. I now turn to applying the results of this analysis to a projection of future territorial conflict.

Forecasting Likely Future Conflict

The analyses in Table 4 were based on territorial claims across the globe between 1816-2001, which is the period covered by the Militarized Interstate Dispute data set used to measure armed conflict.[5] The ICOW territorial claims data set currently runs through 2008, though, which allows us to use the results of the analyses from Table 4 to make a projection of the risk of territorial conflict closer to the present day. Table 5 thus uses these results to predict the risk of fatal conflict for all claims that remained ongoing in the year 2007 based on characteristics of the claims and claimants in that year, which is the most recent year covered by the national capabilities data used in this analysis.

[Table 5 about here]

Table 5 reports the predicted probability of armed conflict for the most dangerous claims in the year 2007, defined as those that had higher-than-average predicted probabilities in both

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when the claimed territory is not currently administered by the target state, which typically happens when the two claimants are competing to acquire territory that neither currently possesses, than when the target already owns the territory.

[5] The results reported in Table 4 actually cover 1870-2001, because the COW trade data set only goes back to 1816. Nearly identical results for the other variables in the model are obtained, though, if the trade variable is excluded and the same models are run for the 1816-2001 period.

models from Table 4. A few of these cases that are included here (or that are excluded) might be considered surprising, but it must be remembered that this is a very preliminary analysis that is based only on characteristics of the claimed territory and several characteristics of the claimants. Future predictions are likely to be improved by consideration of recent interactions over the claimed territory -- some territories that have high salience based on these characteristics have not seen armed conflict in decades (if ever), so considering this peaceful history is likely to reduce their predicted risk, while considering the conflictual history of territories that have experienced substantial conflict is likely to increase the accuracy of predictions over those territories. Keeping this limitation in mind, I now consider the implications of these analyses for future fatal conflict in each geographic region.

Western Hemisphere

Serious armed conflict seems to be unlikely in the Western Hemisphere for the near future. Table 2 revealed that 18 claims remain ongoing in the region, but few have very high salience levels, high capability disparities also seem likely to help keep the peace, and the only claim that experienced fatalities since 1990 (Ecuador/Peru) has already ended. Low-level militarized disputes might occur, perhaps involving the seizure of fishing boats around claimed islands, but the only claim that both models from Table 4 predict as having a greater-than-average likelihood of fatal conflict involves Bolivia's quest to regain its Pacific seacoast (which has been ongoing without fatalities for more than a century since the end of the War of the Pacific in 1883).

There also seems to be little prospect of dangerous new claims beginning. New claims could potentially arise over islands in waters that are believed to be rich in oil or fish, but most of the land borders in the region have been settled for some time now. Furthermore, the region has been very successful at avoiding fatal conflict; outside of the already-settled Honduras/El Salvador, Ecuador/Peru, and Argentina/Chile claims, the only ongoing territorial claim that has experienced fatal conflict since World War II is the Argentine claim to the Falklands (Malvinas) Islands.

Europe

If serious armed conflict over territory is to erupt in Europe, it will almost certainly be in the Eastern portion of the continent; Ireland's 1998 dropping of its claim to Northern Ireland left Gibraltar as the only ongoing territorial claim in Western Europe. Even Eastern Europe seems to be a generally unlikely setting for major armed conflict over territory, with only three claims appearing on this list, and little reason to fear major escalation in any of these three. The Greek/ Turkish claim over various Aegean Sea islands has led to frequent incidents but little actual death; the fatalities tend to involve the death of a single pilot, rather than large-scale combat, and the two sides have recently worked to implement a variety of confidence-building measures. The Croatia/Slovenia claim has been handled peacefully, culminating in a 2009 agreement to send their issues to binding arbitration so that Croatia could enter the European Union in July 2013. Finally, while Croatia and Serbia experienced a great deal of armed conflict in the first half of the 1990s, they have avoided armed conflict for nearly two decades now, and their remaining territorial claim over small stretches of land along the Danube River has been handled peacefully with no hint by either side of military escalation.

The greatest risk of major territorial conflict in Europe seems to lie with entities that have not currently obtained statehood, but could conceivably do so in the future. Despite significant fears in the international community, the independence of Kosovo from Serbia has been handled peacefully (perhaps assisted by international peacekeepers), and Serbia seems unlikely to jeopardize its path toward European integration with military action (even if it has not abandoned its diplomatic disagreements over the status of Kosovo). A similar risk would seem to apply should Transnistria ultimately become independent from Moldova. Otherwise, the many potential territorial claims in the region -- such as concerns over the status or treatment of ethnic Hungarians in Transylvania (Romania), Slovakia, or Vojvodina (Serbia) or ethnic Albanians, Germans, Poles, Russians, and others elsewhere -- seem likely to remain at the level of peaceful disagreements over treatment of minorities (as they have since World War II) rather than becoming interstate territorial claims.

Africa

Africa is a plausible location for serious territorial conflict in coming years, with four claims being projected with an above-average probability of serious conflict based on the

salience of the claimed territory. The highest projected likelihood in both models is the Yenga issue, which began with the Guinean occupation of territory while opposing rebels in the Sierra Leone civil war; despite occasionally fiery rhetoric from citizens and journalists, leaders on both sides have managed to avoid any recent escalation over this issue, and there has been talk of a peaceful settlement. None of the four claims has experienced recent serious conflict this far, so their projected risk is likely to decrease substantially once the model is improved by adding recent interactions over claims.

Adding recent militarization is likely to increase the projected risk of fatal conflict between Ethiopia and Eritrea, which fought a bloody war between 1998-2000 and have subsequently failed to resolve their territorial issues despite an adjudicated ruling; their relations have also been worsened by proxy fighting in Somalia and alleged Eritrean support for rebels in Ethiopia's Ogaden region. Another serious risk is the territorial claim between Sudan and the new state of South Sudan, which is not included in this analysis because South Sudan achieved independence after the end of the current data set; there have already been deadly clashes over this territory since independence, compounded by each side's allegations that the other is supporting anti-government rebels. The other ongoing African claims generally involve relatively small and unimportant territories and have been managed short of fatal armed conflict; several African claims have been settled recently by the ICJ, and several others are currently being heard at that court or may be soon.

Africa has traditionally been viewed as a hotbed of potential claims, with nearly every border on the continent cutting through traditional boundaries or incorporating distinct groups into a single artificial state. Yet there has generally been little serious interstate conflict over territory, with those territorial claims that have emerged since decolonization either ending quickly or being managed at low levels with little risk of escalation (with a few notable exceptions such as Somalia's invasion of Ethiopia's Ogaden region in 1977). There seems to be little current risk of dangerous new claims emerging in the continent, although there is some prospect for territorial problems arising should Somaliland and/or Puntland be recognized as independent (they have already fought each other over territory since their unrecognized secessions from Somali rule, and an independent future could see more conflict with each other or with the rump Somali state). Another possible problem could emerge if Western Sahara ever

achieves independence from Moroccan rule; several states previously claimed the territory, although currently those opposing Moroccan rule argue for independence rather than for their own sovereignty over the territory.

Middle East

The Middle East seems to be an obvious location for serious territorial conflict, given its turbulent history over the past six decades, but this paper's models identify only one of the five current claims as having a higher than average risk of escalation. The Syria/Israel claim over the strategic Golan Heights is predicted by both models to be one of the highest risks for escalation. This claim has generally been conflict-free for several decades, though, as Israeli/Syrian competition has shifted to Lebanon. There have been several recent (non-fatal) incidents there during the ongoing Syrian civil war, and analysts suggest that Syrian President Assad is considering using the Golan issue to unite his people.

Outside of the Golan Heights, the greatest risk of serious armed conflict in the Middle East over coming years would seem to involve what today are non-state actors. Most of the cross-border armed conflict in the region in recent years (except for Iraq's invasions of Iran and Kuwait as parts of two claims that have since been ended) has involved such actors as Hezbollah or Hamas. The Palestinian National Authority is not currently recognized as a state, but should it be recognized in the future, there would likely be multiple Palestinian/Israeli claims over various areas along the borders between Israel and the Gaza Strip and West Bank; given the large number of deaths in the past two decades, it is not hard to imagine any resulting claim reaching high levels of fatalities. Furthermore, should Iraq or Syria disintegrate into multiple states, it would not be surprising to see Turkey seek to regain previously Turkish-held or -claimed territory in the northern Iraqi entity or to prevent the creation of a separate Kurdish state, or to see Iran become involved with respect to relations between the Shia and Sunni entities (whether claiming territory for itself or assisting the Shia entity pursue conflict and claims against the Sunni entity).

Asia and Oceania

The region with the most high-risk claims listed in Table 5 is Asia. This includes claims throughout the continent, ranging from East Asia (Korean unification) and Central Asia and the

Caucasus (most notably Nagorno-Karabakh) to South Asia (Kashmir). This is not too surprising, as many of these claims have experienced frequent militarized disputes, with several of these claims experiencing repeated fatalities. Based on these two models' results, Asia is clearly the region to watch most closely, and this is likely to be even more true once recent militarization is added to these models.

The problems of Asia could also be compounded by several other events. First, as with several other regions, potential complications loom nearby with secessionist states in Central Asia and the Caucasus. Should South Ossetia and/or Abkhazia achieve independence from Georgia, territorial claims and potentially armed conflict seem likely to result -- whether between the new state(s) and Georgia or even involving Russia, as some nationalists in both Russia and South Ossetia have argued for Russian annexation to merge South Ossetia with (Russian) North Ossetia. Second, for now, most of the island claims in the region (such as the Dokdo/Takeshima, Diaoyutai/Senkaku, and Spratly and Paracel Islands claims) have recently experienced only low-level conflict (typically nationalist demonstrations such as planting a flag, shows of force by warships seeking to demonstrate one side's commitment to the islands, or seizure of foreign fishing boats). Given the number of these low-level incidents and the intense feelings that are often aroused over the islands, though, it would not be far-fetched to see one incident escalate to a higher level.

Notes about Claim Termination

The preceding discussion has identified a number of cases where armed conflict over territory seems to be most likely. While that is useful, as it offers a guide to dangerous situations where outside states or institutions may want to focus their efforts to prevent future conflict, it does not offer clear guidelines over how these outside actors might be able to help. I conclude this paper with a brief examination of the ways that territorial claims have been ended in the past, as a potential guide for actors seeking to help end the claims that remain ongoing.

[Table 6 about here]

Table 6 categorizes the 731 claims that have already ended by the way in which the claim was considered to have stopped. In addition to the first column that lists all claims, a second column only includes "highly salient" claims (those with scores of 8-12 on the ICOW salience

index), to give insight into how what might generally be seen as the most dangerous cases have been ended. The first important observation from this table is that relatively few claims have ended through military conquest -- just 5.8% of claims overall and 8.1% of the most salient claims ended this way, which suggests that military techniques (despite their frequency) are not very effective and that there is plenty of room for peaceful techniques to work.

Bilateral negotiations between the claimants themselves have been the most frequent way that claims have ended overall, covering over one-third of cases (35.7%); even the most salient claims have frequently been ended this way (29.1%). Encouraging the claimants to settle their differences themselves might be a useful activity for interested outside actors, although this may not be successful in cases that have a long legacy of violence and hatred. A variety of forms of third party activity have helped to end claims where the claimants could not settle their problems bilaterally. Non-binding third party activities such as mediation have accounted for the endings of 6.7% of claim, legally binding arbitration or adjudication has ended a full 10.0% overall and 12.6% of highly salient claims, and regional or global peace conferences (notably the conferences that followed the two world wars) have ended 7.9% overall and 10.6% of the highly salient claims. Nine claims (1.2%) have ended through plebiscites, and about one-sixth (15.6% overall and 17.9% of the highly salient cases) were simply dropped or renounced by the challenger.

It is worth noting that this table only lists the way that each claim was ultimately settled. This does not tell us much about the likelihood that a given attempt to settle a claim peacefully will succeed. Indeed, some claims have experienced dozens of rounds of talks -- often some combination of bilateral and third party activities -- before the negotiations that finally end the claim. Nonetheless, it is useful to learn which techniques have accounted for the greatest number of successful settlements, and future researchers are encouraged to focus on the specific conditions under which each type of settlement attempt has been most likely to succeed (as Mitchell and Hensel 2007 did with respect to compliance over agreements related to territorial, maritime, and river issues).

Closer investigation would be useful to suggest the most effective ways that outside actors might be able to get involved, whether directly (as mediators or arbiters) or indirectly by encouraging bilateral talks, plebiscites, or dropping a fruitless claim. Beyond the specific

settlement technique that produces the final settlement of an issue, too, third parties may be able to offer useful incentives to help settlement in other ways. For example with the Camp David Accords between Israel and Egypt (reached through U.S. mediation), the United States helped ensure settlement by increasing foreign aid to both parties, and the 1998 Ecuador/Peru settlement was assisted by security guarantees by the guarantor powers who helped mediate the agreement.

Discussion

This paper has used a new list of territorial claims around the world over the past two centuries to study the factors that have made fatal armed conflict most likely. The findings of this analysis have then been used to produce a list of ongoing claims that have the greatest risk of future armed conflict. This is by no means a definitive statement on the topic -- as noted several times in the research design, time or data constraints have prevented a more complete model of factors affecting the risk of armed conflict -- but I believe this is a useful starting point.

Future research could benefit from more complete models of the factors that might affect the risk of armed conflict, as discussed earlier. The very brief discussion of claim termination could also be extended substantially, to provide greater detail on the specific ways that third parties have been able to help solve past claims and suggest better recommendations for policymakers seeking to end the claims that remain ongoing. Furthermore, this effort need not be limited to territorial claims. The ICOW project has also been collecting data on river claims and maritime claims, which raises the possibility of future efforts to forecast the risk of conflict over such claims as well as to identify possible paths to solution.

References

Barbieri, Katherine, Omar M. G. Keshk, and Brian Pollins (2009). "Trading Data: Evaluating our Assumptions and Coding Rules." *Conflict Management and Peace Science* 26, 5: 471-491.

Bowman, Isaiah (1946). "The Strategy of Territorial Decisions." *Foreign Affairs* 24, 2 (January): 177-194.

Ghosn, Faten, Glenn Palmer, and Stuart Bremer (2004). "The MID3 Data Set, 1993- 2001: Procedures, Coding Rules, and Description." *Conflict Management and Peace Science* 21, 2: 133-154.

Gibler, Douglas (2009). *International Military Alliances, 1648-2008*. Washington, DC: CQ Press.

Goddard, Stacie E. (2006). "Uncommon Ground: Indivisible Territory and the Politics of Legitimacy." *International Organization* 60, 1: 35-68.

Goertz, Gary, and Paul F. Diehl (1992). *Territorial Changes and International Conflict*. New York: Routledge.

Hassner, Ron E. (2003). "To Halve and to Hold: Conflicts over Sacred Space and the Problem of Indivisibility." *Security Studies* 12, 4 (Summer): 1-33.

Hensel, Paul R. (1996). "Charting a Course to Conflict: Territorial Issues and Interstate Conflict, 1816-1992." *Conflict Management and Peace Science* 15, 1 (Fall): 43-73.

Hensel, Paul R. (2012). "Territory: Geography, Contentious Issues, and World Politics." In John A. Vasquez, ed., *What Do We Know about War?*, 2nd edition. Lanham, MD: Rowman and Littlefield, pp. 3-26.

Hensel, Paul R. (2001). "Contentious Issues and World Politics: The Management of Territorial Claims in the Americas, 1816-1992." *International Studies Quarterly* 45, 1: 81-109.

Hensel, Paul R., and Sara McLaughlin Mitchell (2005). "Issue Indivisibility and Territorial Claims." *GeoJournal* 64, 4 (December): 275-285.

Hensel, Paul R., Sara McLaughlin Mitchell, Thomas E. Sowers II, and Clayton L. Thyne (2008). "Bones of Contention: Comparing Territorial, Maritime, and River Issues." *Journal of Conflict Resolution* 52, 1 (February): 117-143.

Holsti, Kalevi J (1990). *Peace and War: Armed Conflicts and International Order, 1648-1989*. Cambridge: Cambridge University Press.

Huth, Paul K. (1996). *Standing Your Ground: Territorial Disputes and International Conflict*. Ann Arbor: University of Michigan Press.

Huth, Paul K., and Todd Allee (2002). *The Democratic Peace and Territorial Conflict in the Twentieth Century*. Cambridge: Cambridge University Press.

Lemke, Douglas (2002). *Regions of War and Peace*. Cambridge: Cambridge University Press.

Luard, Evan (1970). *The International Regulation of Frontier Disputes*. New York: Praeger.

Mitchell, Sara McLaughlin, and Paul R. Hensel (2007). "International Institutions and Compliance with Agreements over Contentious Issues." *American Journal of Political Science* 51, 4 (October): 721-737.

Murphy, Alexander (1990). "Historical Justifications for Territory Claims." *Annals of the Association of American Geographers* 80, 4: 531-648.

Newman, David (1999). "Real Places, Symbolic Spaces: Interrelated Notions of Territory in the Arab-Israeli Conflict." In Paul F. Diehl, ed., *A Road Map to War*. Nashville, TN: Vanderbilt University Press, pp. 3-34.

Schelling, Thomas (1966). *Arms and Influence*. New Haven: Yale University Press.

Senese, Paul D., and John A. Vasquez (2008). *The Steps to War: An Empirical Study*. Princeton, NJ: Princeton University Press.

Toft, Monica Duffy (2003). *The Geography of Ethnic Violence: Identity, Interests, and the Indivisibility of Territory*. Princeton, NJ: Princeton University Press.

Vasquez, John A. (1993). *The War Puzzle*. Cambridge: Cambridge University Press.

Vasquez, John A., and Marie T. Henehan (2001). "Territorial Disputes and the Probability of War, 1816-1992." *Journal of Peace Research* 38, 2: 123-138.

Walter, Barbara F. (2003). "Explaining the Intractability of Territorial Conflict." *International Studies Review* 5, 4 (December): 137-153.

Walter, Barbara F. (2006). "Building Reputation: Why Governments Fight Some Separatists but Not Others." *American Journal of Political Science* 50 (2): 313–330.

Table 1: Territorial Claims Underway by Historical Era

Historical Era	New Claims during Era	Total Claims Underway	Claims Ended during Era
19th Century (1816-1899)	217	217	148
World Wars (1900-1945)	297	366	303
Cold War (1946-1989)	258	300	216
Post-Cold War (1990-2008)	63	168	66
Total	*835*	*835*	*733 (102 ongoing)*

Table 2: Territorial Claims by Region

Region	Total Claims	Ongoing at End of 2008
Western Hemisphere	129	18
Europe	239	10
Africa	166	26
Middle East	96	5
Asia & Oceania	205	43
Total	*835*	*102*

Table 3: Militarization of Territorial Claims

	All Militarized Disputes		Fatal MIDs Only	
Region	At least 1	Mean (SD)	At least 1	Mean (SD)
Western Hemisphere	42.6%	1.39 (3.15)	21.7%	0.34 (0.91)
Europe	42.3%	0.72 (1.38)	32.2%	0.43 (0.71)
Africa	26.5%	0.55 (1.66)	16.9%	0.34 (1.18)
Middle East	41.7%	1.53 (3.45)	31.2%	0.95 (1.96)
Asia & Oceania	47.3%	1.47 (3.39)	27.3%	0.67 (2.00)
Total	*40.4%*	*1.07 (2.64)*	*26.2%*	*0.51 (1.42)*

Note: Each observation in Tables 1-3 is a dyadic claim, which is one phase of a claim over a specific territory. A territory may experience multiple dyadic claims if multiple countries seek to acquire it (at the most extreme, the Spratly Islands have been the subject of 18 dyadic claims featuring different combinations of overlapping claimants), if a former colony or possession acquires independence from its former empire (as with former Spanish colonies in Latin America or former portions of the Hapsburg or Ottoman Empires) or if the claim ends at one point in time and later restarts (e.g., a challenger may end its claim by acquiring the territory, but the former target of the claim may then begin a claim of its own to recover its former possession).

Table 4: Modeling Fatal Conflict over Territory

	Model I: Separate Measures of Claim Salience	Model II: Aggregated Index of Claim Salience
Variable	Coefficient (Robust S.E.)	Coefficient (Robust S.E.)
Claim Characteristics		
Resources	- 0.02 (0.09)	---
Strategic location	0.80 (0.10)***	---
Populated area	0.12 (0.14)	---
Non-colonial - challenger	0.03 (0.18)	---
Non-colonial - target	0.90 (0.14)***	---
Identity ties - challenger	0.38 (0.14)***	---
Identity ties - target	0.34 (0.14)***	---
Historical sov. - challenger	- 0.07 (0.09)	---
Historical sov. - target	- 0.35 (0.20)**	---
Aggregated salience index	---	0.22 (0.02)***
Claimant Characteristics		
Stronger side's capabilities	- 1.36 (0.28)***	- 1.74 (0.25)***
Both democratic	0.13 (0.17)	0.04 (0.17)
Shared defense pact	0.06 (0.12)	0.04 (0.11)
Ln(trade)	- 0.08 (0.02)***	- 0.09 (0.02)***
Constant	- 2.90 (0.41)***	- 3.01 (0.28)***
N:	11,770	11,770
LL:	-2303.31	-2350.83
Wald X^2:	370.06 (13 df, $p < .001$)	306.95 (5 df, $p < .001$)

Notes:
• Each observation in this table is a single year of an ongoing territorial claim. The table is modeling the probability that a fatal militarized dispute over the claim will begin during the year in question, based on characteristics of the claim and the claimants.
• This table is limited to observations between 1870-2001 because of temporal restrictions in the trade data (which begins in 1870) and MID data (which ends in 2001) that are used. No substantive conclusions change if the trade variable is removed so the analyses can be extended back to the 1816 beginning of the territorial claims data.
*** $p \leq .01$, ** $p \leq .05$, * $p \leq .10$ (one-tailed tests)

Table 5: Greatest Projected Likelihood of Future Fatal Conflict over Territory

Claimed Territory	Claimant States	Predicted probability: Model I	Model II
Western Hemisphere			
Antofagasta/Tacna/Arica	Bolivia/Chile	.067	.069
Europe			
Danube coastal strip	Croatia/Serbia	.077	.089
Dragonja R-Secovlje-Sneznik	Croatia/Slovenia	.107	.067
Aegean Sea Islands	Greece/Turkey	.068	.054
Africa			
Yenga	Guinea/Sierra Leone	.172	.189
Corisco Bay Islands	Equatorial Guinea/Gabon	.082	.126
Ilemi Triangle	Kenya/Sudan	.179	.077
KaNgwane-Ngwavuma-Nsikazi	South Africa/Swaziland	.114	.087
Middle East			
Golan Heights	Israel/Syria	.179	.202
Asia & Oceania			
Korean Unification	North Korea/South Korea	.177	.147
Kuril Islands (Northern Territories)	Japan/Russia	.087	.097
Nagorno-Karabakh & Karki	Armenia/Azerbaijan	.167	.121
Sokh Enclave Corridor	Kyrgyzstan/Uzbekistan	.072	.081
Arunachal Pradesh	China/India	.076	.065
Kashmir & Northern Areas	India/Pakistan	.099	.071
Three Pagodas Pass	Myanmar/Thailand	.093	.048

Notes

• This table lists all ongoing territorial claims that are predicted to have an above-average chance of fatal territorial conflict in both models in Table 4, using data from the most recent year (2007) for which the needed information is available on all variables.

Table 6: Termination of Territorial Claims

Type of Termination	All Claims	Only Highly Salient Claims
Militarized conquest	42 (5.8%)	29 (8.1%)
Bilateral negotiations	261 (35.7)	104 (29.1)
Non-binding party (e.g. mediation)	49 (6.7)	11 (3.1)
Binding party (e.g. arbitration)	73 (10.0)	45 (12.6)
Regional/global peace conference	58 (7.9)	38 (10.6)
Plebiscite	9 (1.2)	7 (2.0)
Dropped/renounced	114 (15.6)	64 (17.9)
Other	125 (17.1)	60 (16.8)

Notes

• This table only includes claims that have ended as of the current end of the dataset in 2008.

• "Other" includes cases where the claim ends because one of the claimants leaves the COW interstate system, the territory no longer exists (such as an island falling below sea level), and other events not covered by the categories included in this table,