The Political Economy of Territorial Ambitions

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** DRAFT **

The 20th century witnessed a remarkable change in the territorial preferences of powerful states. Empires declined, and advanced states rarely sought to annex or permanently occupy foreign territory, even after overseas military victories. One part of the story is surely the rise of colonial nationalism, but another part of the explanation, less well understood, has to do with changing interests within the advanced states. I argue that two factors help account for this change in territorial preferences: energy modernity and regime type. High energy consumption per capita, relative to 19th century standards, signifies an underlying economic transition that changes the political balance of power away from those who benefit economically from imperialism and toward groups who are more sensitive to its costs. Regime type affects the ease with which domestic groups that would benefit from aggressive imperialism can engage in state capture. When a state is both democratic and energy modern, its preferences for imperialism (long-term occupation of foreign territories) are likely to be low. When a state is energy traditional, however, a state is likely to have strong territorial preferences even when it is democratic. This theory is tested with a broad historical analysis over the period of 1850-2000, focusing on the six major combatants of World War II: Britain, Germany, France, Japan, Russia, and the United States. Each of these states started with strong imperial preferences, but there is significant variation in the timing of the subsequent change in each state's preferences.
The 20th century witnessed a remarkable change in the territorial preferences of powerful states. In 1900, empires were the dominant form of political organization, and territorial conquest was common. Empires then declined. By the end of the 20th century, sovereign states were the principal units of world politics, and territorial conquest was rare, even after military victories. One part of the explanation for these changes is surely the rise of colonial nationalism, which raised the costs of local rule for foreign occupiers. Yet empires always faced a certain amount of local resistance, and normative explanations tend to attribute more faith in powerful states than seems warranted by the facts. Various Western interventions since 1945 suggest that democracies are, sadly, willing to accept tens of thousands of non-Western casualties in pursuit of their aims. So how is the shift away from imperialism best explained?

I argue that an economic transition within advanced states contributed to the end of empire and the weakening of territorial preferences, and that energy modernization was central to that transition. Energy modernity is a stage of development that occurs when engines powered by fossil fuels or electricity become the predominant basis for transportation and physical economic output. Energy modernity fits between 19th century industrialization and the post-industrial "knowledge economy" that first appeared in the 1970s. Energy modernity might also be called Fordism, though that term carries unwanted connotations. I differ with scholars who argue that a knowledge economy is the key step in changing a state’s foreign policy behavior. Energy modernity changed the political economy of territorial conflict and imperialism.

One crucial effect of energy modernization is a change the interest group structure of society. Two groups are particularly affected: the primary sector and the finance sector. Energy modernization leads to changes in the size or the preferences of those groups, or both. For instance, those with economic interests in the primary sector (agriculture and natural resources) often have strong preferences to acquire or hold foreign territory. Energy modernization shrinks that sector in relative terms, thereby reducing the coalition in favor of imperialism. The finance sector, by contrast, grows and shifts its preferences away from imperialism. A third group affected, depending on the regime, is the state’s policymaking community, including the civilian bureaucracy. Energy modernization affects the policymaking community’s ideas by increasing the net fiscal and opportunity costs of colonial and military activities. Significantly, many imperial metropoles

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1 Fazal 2007
transitioned to energy modernity nearly simultaneously in the period 1945-1973, including Britain, Belgium, Holland, and France. The transition facilitated a wave of decolonization. Notably, the United States energy modernized around 1918 and became the first major power to turn away from imperialism – though not before its own period of formal imperialism just prior to that transition.3

This paper makes two major intellectual moves. First, I argue that the observed Democratic Peace is fundamentally intertwined with economics, not simply regime type.4 Empirical evidence shows that democracies do not militarily fight each other, since roughly 1945.5 Scholars have struggled, however, to offer a clear theoretical account of this phenomenon based on regime alone. Increasingly, scholars have begun to look at economic factors as an alternative explanation. Some even argue that the “Capitalist Peace” can be explained without reference to regime type at all.6 By contrast, I join a body of research that suggests that an interaction of regime type and economic factors underpin the observed change in state preferences and behavior.7 Notably, countries like the United States, Britain, and France had strong territorial ambitions until the early 20th century, which changed not with democratization but with energy modernization. The observed Democratic Peace might follow as a consequence: if two countries (democracies) do not have ambitions to expand their territory, they ought to fight less frequently than if at least one does have such ambitions. My approach helps resolve a number of outstanding anomalies with standard democratic peace theories, discussed at this paper’s conclusion.

Second, I argue that while the shift in world politics is economic in nature, it is not only – and perhaps not at all – about economic interdependence between states. The literature on trade and interdependence is plagued by endogeneity, making it unclear whether trade causes peace or vice versa.8 Perhaps interdependence does play a causal role in peace but insufficient attention has been paid to the within-country shift in political economy caused by economic development. I argue economic factors play a key role within states, by shifting the balance of domestic political power.9 Previous research struggled to identify a clear relationship between domestic economic development and interstate peace, and thus tended to conclude that regime variables are more

3 Roughly 1865-1918: see Narizny 2007
4 The “Kantian tripod” which includes both regime and economic factors, but in the standard conception, democracy and trade are independent, cumulative factors (Russett and O’Neal 2001). By contrast, I theorize a conditional effect.
5 Russett and O’Neal 2001; Bueno de Mesquita et al. 2004; McDonald 2015
6 Gartzke 2007; McDonald 2009
7 Hegre 2000; Mousseau 2009
8 Barbieri 2005; Gowa and Hicks 2013; the broader literature includes Kant 1983 [1795]; Angell 2012 [1910]; Russett and O’Neal 2001; Mansfield and Polins 2003; Brooks 2007; Lupu and Traag 2013; Copeland 2014
9 My approach builds on Frieden 1994; Narizny 2007; Kirshner 2007; Cohen 1973; and others
important.\textsuperscript{10} Simply put, I argue the net returns to peaceful production increased in the 20\textsuperscript{th} century even as the net returns to predation declined. For many states, that shift altered preferences at the microeconomic level, which underpinned preference change at the national level.

Understanding the role of energy modernization starts with a simple observation: economic incentives often motivate interstate wars, especially territorial conflicts. Hawkish and dovish political coalitions within a state are born, in part, out of the fact that not everyone shares equally in the costs and benefits of war. Other motivations like national honor, religion, and ideology can co-mingle with, and rhetorically justify, economic incentives. Not all conflicts are about economics, but conflicts over territory or other assets are common.\textsuperscript{11} Sometimes the economic roots of conflict are obvious, like the Boer Wars. Other times, leaders are compelled to hide economic motives. For example, President HW Bush quickly retreated from his early statement that US would go to war against Iraq in 1990-91 because of oil, instead emphasizing international order.\textsuperscript{12} Even major wars like World War II, typically viewed in political terms, are often underpinned by the participants’ desire to secure economic factors like land, labor, and internal markets ("Lebensraum," as Hitler put it).\textsuperscript{13}

Among other things, my argument offers a corrective to recent research on how various forms of energy consumption contribute to international politics. Most research casts energy in a negative light,\textsuperscript{14} identifying especially oil\textsuperscript{15} and nuclear energy\textsuperscript{16} as potential sources of conflict and militarization. My argument here views energy more positively. More broadly, it contributes to new research at the intersection of economics and international security.\textsuperscript{17} Still, I emphasize that the end of empire is too large a historical process to have a single cause. I claim only that energy modernization is an important and neglected component of this story.

**Empire, Territorial Preferences, and Nationalism**

Empire and imperialism are terms that are used in so many different ways that they risk losing all meaning. I define empires as relationships of formal political control imposed by one polity over the sovereignty of other polities.\textsuperscript{18} *Metropole* indicates the polity controlling the empire.
(e.g., Britain). Colony includes all protectorates and mandates that do not have sovereignty. Imperialism is the desire to conquer and hold foreign territory.

Some would say that imperialism continues today under different guises. True, various forms of international inequality and coercion persist. Describing the current practices of major powers as imperialism or empire can be useful, but analytically it can be confusing. For instance, it diminishes the significance of decolonization and the achievement of sovereign independence. Consequently, I find it useful to define empire in a way that distinguishes it from other forms of hierarchy, coercion, and international sovereign contracting. Between 1945 and 2000, empires declined so dramatically that we can refer to them as having ended.

My dependent variable is territorial preferences or ambitions. I call territorial preferences strong when a state seeks to expand its territorial holdings through conquest. Preferences are moderate when a state seeks to preserve the status quo. Territorial preferences are weak when a state decolonizes territory without having being defeated by an external military power. Preferences are not directly observable, but they are indicated indirectly: states with weak territorial preferences avoid military conflicts over territory; if they do engage in military conflict, they avoid permanently occupying territory after victory; and they tend to decolonize existing colonies. Preferences and observed behavior do not have a perfect one-to-one correspondence, but in general behavior often indicates underlying preferences.

The creation of an empire involves territorial conquest, defined as the occupation of foreign lands after defeating local authorities. Territorial conflicts make conquest possible. A war can be a territorial conflict for one side but not the other. For instance, Iraq sought to invade and occupy Kuwait in 1990, whereas the US-led coalition sought to defeat Iraq but not occupy Kuwait. For Iraq, it was a territorial conflict; for America, it was not. Historically, most conflicts have been territorial.

The decline of empires in the 20th century is often attributed to the role of ideas, norms, and nationalist movements. Clearly, nationalism did spread in some parts of the world, and in those places it increased the costs of holding foreign territories as colonies. One limitation of ideational explanations, however, is that they do not account for why nationalist ideas caused decolonization in the post-1945 period even though ideas of nationalism had been around since at least the French

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19 Lutz 2009; Morefield 2014
20 Cooley and Spruyt 2009; Nexon and Wright 2007
21 Vasquez 1993:130; Gibler 2012:11
22 Philpott 2001; Crawford 2002; Abernethy 2002; Wimmer 2013
Normative arguments “face a heavy burden in explaining the persistent impotence of anti-colonialist ideas, as well as their sudden salience.” Moreover, normative explanations offer little insight on the variation in timing between early decolonizers (United States) and later ones that were just as rhetorically committed to anti-colonial norms (USSR). Material changes in the metropole might have facilitated normative change and decolonization.

My argument is not that energy modernization explains all instances of imperial decline. Clearly some empires ended in military defeat (e.g., Ottoman, German, Japanese), but this type of demise is not unique to the 20th century and does not explain empire extinction. What makes the 20th century special is that seven major empires ended without such a defeat: Britain, France, Belgium, Holland, Portugal, the United States, and the USSR. Never before had multiple massive empires crumbled in such a way. Energy modernization helps explain this momentous change.

Energy Modernization Leads to Change in Territorial Preferences

I develop my theory in five steps. First, what is energy modernization? Second, how does having an energy modern economy affect territorial preferences? Third, how does regime type mediate and alter the way in which society's preferences affect state behavior? Fourth, how do these different pieces all fit together? And finally, how does my theory relate to older ideas between developed by Kant, Angell, Rosecrance, and others?

Energy Modernization

As defined earlier, energy modernity is a stage of development that occurs when engines powered by fossil fuels or electricity become the predominant basis for transportation and physical economic output. Inventions of the Second Industrial Revolution in the late 1800s made energy modernization technically feasible. Even in the most advanced states, however, it took decades for the inventions to be widely adopted. Moreover, energy modernization is a national process that each country undergoes for itself.

Energy modernization transforms domestic economic production in the agriculture and manufacturing sectors. It raises productivity of land by raising agricultural yields via motorized tractors, pumped water for irrigation, and artificial fertilizers. It raises productivity of domestic

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23 Crawford (2002: 7-8) points out that normative rhetoric opposing colonialism extends back to at least 1550.
24 Gartzke and Rohner 2011:530
25 There was an earlier wave of decolonization in the Americas in the late 18th and early 19th centuries. That wave was quite different, however. It did not cause the end of empires, and subsequently the same metropoles continued to pursue territorial ambitions.
labor by allowing people to use machines to accomplish far more work than possible by muscle alone. The hallmark of energy-modern manufacturing is that it generates strong physical forces without relying on human or animal labor, using construction vehicles, power tools, or industrial machines, for example.\textsuperscript{26} Energy modernity also changed the transportation sector, in which cars become the dominant form of transportation. Even when railways and steamboats came to prominence in the 19th century, horseback and foot travel were still the dominant forms of day-to-day civilian transportation. This was true in Europe even until World War II, when horses were still in use for military and civilian purposes.

Other forms of modernization tend to occur simultaneously with energy modernization, such as increased urbanization, literacy, and mass education. It is plausible that these factors play a role in the shift in states’ territorial preferences. Yet energy and the economic stage of development I refer to as “energy modernity” are fundamentally interrelated. Strictly speaking, one might claim either that (i) energy consumption is simply a good proxy for measuring that stage of development or (ii) that the availability of low-cost energy supply actually plays a causal role in economic development. There is a large body of research that supports the latter, stronger claim.\textsuperscript{27}

Still, I will only claim that energy is a good proxy measure for this stage of economic development. It seems superior to other measures. Germany, for instance, had comparable levels of urbanization to Britain or America in the period 1900-1939, and higher education and literacy rates than Britain, but its domestic political economy was quite different. The latter difference was crucial, as discussed below.

One might wonder about reverse causation: perhaps peace causes energy modernity rather than the other way around. Peace certainly does facilitate economic growth and rising energy consumption. But peace is neither necessary nor sufficient. Even in the current age of global technological diffusion, there are many relatively peaceful places on earth that remain mired in poverty and low energy consumption. Using the measures identified below, I find that there were 121 states that experienced at least one period after 1900 of at least 25 years with zero interstate conflicts, and of those states, only 21 crossed the threshold of energy-modernity in that period. In other words, most states that had a prolonged stretch of interstate peace, giving them an opportunity to energy-modernize, failed to do so. By contrast, most of the states that energy

\textsuperscript{26} Industrialization prior to energy modernization, by contrast, used fossil fuels for industrial heat but only rudimentary or weak forms of industrial power (e.g., the spinning jenny). Watermills or windmills could generate strong forces, but their applications were geographically fixed.

\textsuperscript{27} Pomeranz 2001; Wrigley 2010
modernized did so despite having had at least one interstate conflict in the previous 25 years. Thus endogeneity is not a major concern for this analysis.

The Political Economy of Territorial Preferences

Energy modernization affects a state’s foreign policy through a variety of mechanisms. Here I concentrate on the change in the state’s domestic political economy, following Robert Gilpin, who observed "Strictly speaking, states, as such, have no interests ... the state may be conceived as a coalition of coalitions whose objectives and interests result from the powers and bargaining among the several coalitions composing the larger society and political elite." Energy modernization has a significant affect on the balance of political power domestically. The primary and finance sectors are especially important.

First, energy modernization tends to shrink the primary sector, thereby reducing the coalition in favor of territorial conquest. Conquest has always created economic winners and losers. The economic winners typically include those who would gain rights to primary commodity businesses in the conquered territory, such as mines and plantations. Prospective economic winners are often among the strongest proponents of territorial conquest. Economic motives are typically amplified by patriotic appeals to nationalism. Thus British colonial wars in the 18th and 19th centuries were supported by those who enriched themselves from plantations and mines in India and Africa once the territories were colonized; early 20th century American interventions in Latin America were supported by the fruit industries seeking to establish pliant ‘banana republics’; and so on. Yet energy modernization shrinks this class of economic winners from conquest. Increasingly, fortunes are made in manufacturing and finance, rather than in primary commodity operations. Note that portfolio investment implies that this shift between winners and losers is not just between individuals, but also within them: as a capitalist’s profit opportunities change from one type of investment to another, energy modernization shifts his or her preferences towards non-imperial foreign policy. Energy modernization creates prosperity without the need for territorial conquest and occupation.

Second, energy modernization enlarges and changes the finance sector. The role of finance is controversial among scholars. Some, like Hobson, argue that finance is imperialistic and warlike.

28 Gilpin 1981: 18-19
29 Hobson (1938:xii) writes “The sort of patriotism ... for such aggression does not really proceed from the economic necessities cited in its defence. ... But, though this patriotism has its own basic instinctive origins, it is fed and directed in its activities by economic motives.”
30 Frieden 1994
in nature, as it pursues overseas markets and investment opportunities.\(^{31}\) By contrast, Kirshner argues that finance opposes wars because they are costly, create macroeconomic problems, and introduce massive business uncertainties, all of which the finance sector has incentive to oppose.\(^{32}\) Yet the finance sector is actually composed of two groups, financial intermediaries and capital owners, which are analytically distinct but overlap in practice. Kirshner’s theory neatly describes financial intermediaries per se, but ignores the fact many intermediaries are also owners of capital. For instance, the Rothschild Bank in the 19th century was arguably the biggest financial beneficiary of British and European imperialism.\(^{33}\) Not surprisingly, they favored military interventions that protected their investments.

I argue that finance has mixed incentives: finance abhors the costs of war but sometimes wants the spoils of victory, particularly in the primary sector. Cheap wars with high economic returns are best. Military interventions and colonialism are driven in part by the degree to which they can be used to gain or protect assets. Assets or investments can be crudely categorized by the difficulty by which they can be expropriated: “seizable” assets such as plantations and mines in the primary sector and physical investments like railroads, and “non-seizable” assets such as manufacturing and service companies.\(^{34}\) Ultimately, the preferences of the finance sector depend heavily upon the underlying type of capital. Owners (or prospective owners) of primary sector assets tend to have strong territorial ambitions; owners of manufacturing and commercial capital have weak territorial ambitions and generally want to avoid wars. Energy modernization grows the size of the finance sector, making it economically and thus politically more important. It also changes the composition of the underlying capital: energy modernization increases the domestic opportunities for manufacturing and commercial investment, outside of the primary sector. Consequently, energy modernization grows the constituency opposed to (or at least uninterested in) territorial conquest.\(^{35}\) Moreover, it is likely to be a politically powerful interest group.

The preferences of these groups translate into policy by way of three micro-mechanisms: lobbying, leader selection, and political climate. Lobbying is the most direct route but in practice, difficult to do effectively. A second pathway is to affect the leader selection, weeding out individuals who would be likely to act against a group’s interests once in office. The way this type of

\(^{31}\) Hobson 1938
\(^{32}\) Kirshner 2007
\(^{33}\) Ferguson 2004:282
\(^{34}\) Frieden 1994:568
\(^{35}\) The effects of energy modernization are amplified if the international environment allows for easy capital flows across borders. The finance sector can then invest in other energy modern economies, further reducing its desire to use imperialism to generate profit opportunities.
influence is actually wielded depends on the domestic political institutions of the state, but often involves elite networks. Third, various groups can influence the ideas, political climate, and the degree to which policy options are regarded as feasible, legitimate, or effective.\textsuperscript{36}

The effect of energy modernization is roughly linear at the subnational level, but exhibits a threshold effect at the level of state preferences. A hypothetical example illustrates the point. For simplicity, consider energy modernization as a process that shrinks the primary sector and increases the finance sector. Imagine a society made up of 80 percent primary sector interests (mostly in favor of conquest), 20 percent finance sector interests (mostly opposed to it). The relative political importance of these sectors typically varies in proportion to their economic importance (though admittedly there are important exceptions, whereby small groups wield an outsized political influence).\textsuperscript{37} Suppose the initial stages of energy modernization shift the balance by ten percent, so that the finance sector is now 30 percent of society. About 30 percent of the country now opposes territorial conquest. Energy modernization thus has a roughly linear effect at the sub-national level. An observer outside the state, however, would still see a state that was strongly in favor of territorial conquest. From the outsider’s perspective, it matters little whether 70 or 80 percent of the country favors territorial aggression, because either one is sufficient to drive state behavior. Only once the society reaches some tipping point – near 50 percent, depending on the institutions of society – where the state’s leaders start to see conquest unfavorably would we say that the state’s preferences had changed. When the state is near its tipping point, even relatively minor changes in the economy might have a major impact on state preferences. Beyond the tipping point, further changes in subnational group sizes and interests matter little.

A third group affected by energy modernization is the manufacturing sector, but its preferences cannot be easily predicted. All else equal, manufacturers tend to oppose imperialism, because it is costly and brings relatively few benefits to them. An example is the Manchester School, composed mainly of manufacturing interests, opposed to British imperialism in the early 19\textsuperscript{th} century. However, some empires have policies that benefit specific home industries. Thus the Manchester School gradually became the Lancaster Lobby over the course of the 19\textsuperscript{th} century, as imperial policies favored the British textile and steel industries, thereby giving them an economic stake in the empire. The indeterminacy of the preferences of the manufacturing sector itself stands in contrast to the preferences of manufacturing capital owners. Capital owners are less tempted or threatened by changes in imperial policies, because portfolio investors have mobile capital that can

\textsuperscript{36} Goldstein and Keohane 1993
\textsuperscript{37} Olson 2009
shift in response to the best opportunities, whereas manufacturers can find the whole profitability of their enterprise at risk if a government’s policy changes (e.g., if a major protected market is lost because of decolonization).

Despite the interest group changes identified here, one might reasonably wonder whether energy modernization might actually strengthen a state’s preferences for imperialism because it tends to increase the capacity of a state to project its military power overseas. I call this tendency the power-projection effect of energy modernization, and it does appear that energy modern states are more likely to intervene militarily in a distant place if it perceives some violation of its interests. Yet interventions are not the same as long-term occupations or imperialism.\textsuperscript{38} For the latter, the state must have preferences to actually control the territory. Those preferences are precisely the focus of my theory. The theory expects that the combination of energy modernity and a democratic or broad-based regime tends to generate weak territorial preferences. Under those conditions, the cost of power projection becomes irrelevant, because the state has no incentive to occupy even if military victory can be obtained easily. I expect such states to limit their military conflicts to non-territorial issues.

\textit{Regime Type and the Political Economy of Territorial Preferences}

The political incentives of energy modernization are mediated by the state’s regime type. Regime type matters principally because it lowers the probability that a narrow coalition of interests can ‘capture’ the state and dictate its behavior. If the state’s leader can repress or ignore many of the state’s economic interest groups, their preferences do not matter much. In general capture is less likely in democracies. Selectorate theory, however, suggests that what matters is not so much democracy or autocracy but rather the breadth of the ruling coalition.\textsuperscript{39} Indeed, empirical analyses suggest that some autocracies behave like democracies in international relations, and only autocracies with very narrow ruling coalitions, known as personalist regimes, are highly likely to be conflict-prone.\textsuperscript{40}

When a regime is based on a broad ruling coalition, energy modernity creates incentives for moderate or weak territorial ambitions. With a narrow ruling coalition, however, energy modernity may or may not translate into weak territorial preferences. This helps explain why democracies

\textsuperscript{38} Some research suggests that the mechanized armies that energy modernization allows are good at power projection but bad at the counterinsurgency necessary for maintaining an empire (Lyall and Wilson 2009).
\textsuperscript{39} Bueno de Mesquita et al. 2004
\textsuperscript{40} Weeks 2008, 2012
find it easier to decolonize than non-democracies.\textsuperscript{41} In the latter case, much will depend on the individual leader and his ruling coalition, which is idiosyncratic. Varying perceptions of national interest, matter greatly here. Consequently, I expect a state to have weak territorial preferences when it has a combination of energy modernity and a democratic or broad-coalition regime. The theory’s expectations are mapped in Figure 1.

The state’s policymaking community amplifies the interaction between energy modernization and regime type. This community is defined loosely as those who have some influence in setting the national interest. The community’s size and influence depends on the regime type, and tends to be larger in a democracy than an autocracy. In a democracy, the state bureaucracy, party elites, and leaders of the “chattering classes” are part of the policymaking community.

Energy modernization changes the preferences of the policymaking community by increasing the net fiscal and opportunity costs of the state’s imperial activities. In a sense, imperialism is an investment, in which the state expects revenues from new acquisitions that offset its military expenses. The state’s investment includes not only the direct military costs but also the opportunity cost of not having the occupying personnel at home as taxpayers. This opportunity cost exists regardless of the actual wages paid: military conscription does not eliminate it. Energy modernization increases the fiscal opportunity cost of war and occupation by boosting domestic economic productivity. It means that if workers are at home rather than occupying territory, they have private sector wages to tax (rather than government wages as an expense), and higher wages than in an energy-traditional era. Note that this mechanism of increased fiscal costs should be understood in the context of state budgets, not the overall economy. Foreign occupations often function on various forms of indirect rule, and need not be labor-intensive as a proportion of the state’s overall economy. However, military and administrative labor often consumes a significant portion of the state’s budget, and represents an opportunity cost in terms of lost taxes. Energy modernization increases that opportunity cost, creating an incentive for policymakers, especially those focused on fiscal or monetary economic policy, to oppose occupying foreign lands.

Are energy modernization and regime type completely independent? The underlying ideas and institutions of a society probably affect both democratization and the kind of economic transformations associated with energy modernization. Yet that does not mean they are two sides of the same coin. Many democracies are energy modern, but so too are many autocracies, such as Russia and Singapore. China is undergoing that transition now. Conversely, many democracies are

\textsuperscript{41} Goldsmith and He 2008; Ravlo et al. 2003
not energy modern, like India. Given that energy modernity is neither necessary nor sufficient for democracy, it makes sense to treat them as separate variables.

*Bringing it All Together: Cascading Effects and Dyadic Interaction*

I theorize that energy modernization and regime type shape a state’s territorial preferences. No state exists in isolation, however. The first state to achieve the combination of democracy and energy modernity was the United States. This achievement created a cascading effect on other states, characterized by push and pull factors. To some extent the United States pushed metropoles to give up imperialism and to some extent states voluntarily emulated the American model. The push by the United States was often more rhetorical than real: when forced to confront tradeoffs, the United States was typically more interested in winning the Cold War than it was in anti-colonialism. Only when colonies could be changed into pro-Western states was the United States truly interested. Still, the US did set up an international order loosely based on sovereign states, respect for territorial integrity, and free trade. Free trade and national sovereignty were at odds with mercantile imperialism. This system was designed to be attractive for metropoles to join, and they did. Pressure to decolonize was part of the price.

In sum, American hegemony after 1945 meant that many states had incentives to integrate internationally (the push factor) and viewed the United States as a model for maximizing their own state’s power and prosperity (the pull factor). As an increasing number of states joined into the American-led system of economic integration, the incentives for outsiders to also join it grew. Domestic productivity, free trade, and the avoidance of territorial conquest thus became an increasingly attractive national strategy. A virtuous feedback cycle was born.

While important, this cascading effect does not vitiate the need for the two primary explanatory factors: energy modernization and regime type. They are crucial for two reasons. First, they help explain how this feedback circle got started, with the United States being first to achieve the right conditions. Second, they help explain why only some states participated in the virtuous feedback cycle. Iraq, Iran, and North Korea also exist in the world where other states, like Britain, Japan, and Brazil, eschew territorial conflicts.

This theory focuses on the monadic preferences of individual states. How does it produce the observed peace between democracies, which is dyadic? I take up that question in more detail.

42 Schraeder 1994
43 Ikenberry 2000
44 Spruyt 2005; Hyam 2006
elsewhere. Briefly, state preferences affect but do not determine the probability of interstate conflict, because those interactions are dyadic and a result of strategic interaction. Still, when both states in a dyad have weak territorial preferences, we can expect less frequent conflict than when at least one state has strong territorial preferences. Territorial conflict is only one type of interstate conflict, but it is an important one, and I expect its decline to result in a decline in the overall conflict rate. Energy modernization theory also helps resolve many outstanding anomalies stemming from Democratic Peace Theory, discussed in the conclusion.

**Distinguishing the Theory from Other Arguments**

Theorizing a major transformation of world politics, like the shift away from imperialism, is intimidating because so many previous theories by intelligent people proved incorrect. Immanuel Kant and Norman Angell made arguments that have some similarities to mine. Yet their arguments got ahead of their times. While both thinkers foresaw that territorial conquest would decline if there were some other way for states to enrich themselves, they did not understand that modern energy consumption would provide the crucial substitute to conquered land and labor. Moreover, both emphasized interdependence between states, rather than the change in preferences within a single state identified here.

Other scholars, such as Stephen Brooks and Richard Rosecrance, suggest that it is the knowledge economy stage, rather than the energy-modern stage, that contributes most to peace. I disagree. Further economic development, from energy modernity to a knowledge economy, does little to change the basic shift in domestic political economy identified earlier. There is no systematic evidence that knowledge economies are more peaceful than energy modern economies.

Taking the opposite perspective, Liberman argues that wars are still profitable, even when the targets of conquest are economically advanced. Yet Liberman studied conquests by energy traditional states, and focused his critique on the argument that advanced economies are unattractive as targets of conquest (made by Rosecrance, Brooks, and others). By contrast, my argument is that advanced economies are unwilling conquerers, not that they are poor targets of conquest. If, as Brooks and Rosecrance argue, advanced economies do not conquer each other

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45 Author’s working paper  
46 Kant 1983 [1795]; Angell 2012 [1910]  
47 Rosecrance 1986, 2000; Van Evera 1991: 14–15; Brooks 2007:65-70. To me, the distinguishing feature of a knowledge economy is that economic growth is not necessarily linked to energy consumption, whereas in an industrial or energy modern economy, energy consumption and growth are strongly correlated.  
48 Liberman 1998  
49 Rosecrance 2000; Brooks 2007
because they are unattractive targets of conquest, they still ought to conquer targets that have easily extracted assets, like Kuwait. Yet they do not. Energy modernization theory helps explain why.

**Measuring Energy Modernity and Regime Type**

I measure energy modernity using three components: total energy consumption per capita, electrical output per capita, and car registrations per capita. Most data come from Mitchell.\textsuperscript{50} Collectively, these three measures provide a good indication of the extent to which an economy has moved away from primary sector activity and toward manufacturing and service sectors. All three measures are needed because some countries, especially those with high population densities and mild climates, can have an energy modern economy based on engines even with relatively low energy consumption per capita. To combine the three measures, I first transform the data into comparable indices by dividing the raw data by a reference threshold: energy consumption of 20 barrels of oil equivalent per capita; 50 cars per 1000 people; and 5000 MJ of electricity generated per person.\textsuperscript{51} I identified these reference points by considering the point at which societies transitioned away from the primary sector (less than 20 percentage of GDP) and toward the service sector (service sector greater than 50 percentage of GDP).\textsuperscript{52} I then simply took the unweighted average of the three indices to calculate an overall energy modernization index. Precise quantitative values for each country in each year are shown in the appendix; Figures 2-5 in the main text are illustrative only.

I emphasize that the energy data proxy for a broader economic transition. Again, energy is not necessarily doing the causal work. The theory suggests a shift in the size and preferences of various domestic groups has implications for foreign policy, and these energy-related measures proxy for that shift in domestic political economy. One alternative approach is to measure directly the relative size and importance of various groups, like the primary sector and the finance sector. That approach runs into at least three problems, though. First, it is impractical: data on energy

\textsuperscript{50} Data on electrical output are from Mitchell 1988. The data on energy consumption come from the Energy Information Agency (for years after 1979), the BP Statistical Review of World Energy (1965-1979 where available), and the Correlates of War (all others), which in turn come from Mitchell 1988.

\textsuperscript{51} Constant thresholds like these ones are imperfect as indicators of economic production because private consumption of energy, cars, and electricity increases over time (rather than as inputs to production). Still, the thresholds are a reasonable proxy over the time period under analysis.

\textsuperscript{52} Using these thresholds, 97 percent of states in which agriculture was more than 20 percent of GDP were not coded energy modern; 96 percent of energy modern states have agricultural production worth less than 20 percent of GDP. Similarly, 75 percent of energy modern states have service sectors worth more than 50 percent of GDP; 86 percent of those with service sectors less than 50 percent of GDP were coded non-energy modern.
consumption, electricity, and car registrations are available over a far greater number of countries and years than are data on relative sector size. Second, it is flawed even in principle because although one might find a proxy for the relative size of each group, the theory suggests that some groups' interests and ideas change even if the relative size of the group does not (e.g., policymakers' incentives for state revenue). And third, some states have small primary sectors for reasons that have little to do with having an advanced economy with a strong finance sector. Some states, for instance, have major tourist industries (Cuba, Jamaica) and others have strong low-level manufacturing sectors that do not require much domestically-owned capital (e.g., China and Mexico during the 1990s). Consequently, energy measures provide arguably the best measure of the broad economic and societal change described earlier. Also, energy modernity is not equivalent to a certain level of GDP – rather, it indicates a particular type of economic development.

For the purposes of this paper, I measure regime type using Polity IV, which ranges from -10 to +10, with higher values indicating greater democracy and openness. Consistent with standard research practice, a regime is coded democratic/broad-based if its Polity score exceeds +6. Figures 2-5 only show values from 0 to +10; negative values (all of which indicate autocracy) are set to 0. I emphasize, however, that Polity is only a crude measure of the concept of broad-coalition type on which my theory is based. I use Polity because it is available over a long time span, unlike many other regime measures.

**Historical Analysis**

I illustrate the theory by showing how it operates over the period 1850-2000. The six countries studied are the major participants of World War II: Britain, Germany, the United States, France, Japan, and Russia. My emphasis is on the first three. The evidence is summarized in Table 1.

Testing the theory developed above faces a double challenge. On one hand, how do we know that changes in territorial preferences are caused, in part, by the transition to energy modernity, recognizing that so many other factors also play a role? Multicausality in the dependent variable is the first problem. On the other hand, of the many effects associated with energy modernization, how do we know that what matters principally is the change in each country’s domestic political economy? Multicausality from the independent variable is the second problem. Solving these problems ultimately requires more evidence than can be brought to bear in a single

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53 Only 51 percent of the states in which agriculture was less than 20 percent of GDP were coded as energy modern, while 96 percent of energy modern states have agricultural production worth less than 20 percent of GDP.
paper. Yet the plausibility of the argument can be probed by investigating three questions. First, was the change in a state’s territorial preferences roughly coincident with energy modernization? Second, does the timing of those changes vary cross-nationally enough to render it unlikely that some systemic factor can explain preferences? And third, are the changes in the size and interests of various domestic interest groups sufficient to plausibly alter the state’s behavior? I apply these questions to each historical period.

1850-1900

Figure 2 maps the six countries’ regime type and degree of energy modernity 1850-1900. Prior to 1900, all states had energy traditional economies, and all states had strong territorial preferences. Some states, especially Britain and later America, were developing economically, but none of them had yet reached energy modernity. This was a period when empire building was normal and legitimate. Even the United States, which avoided the language of empire, was highly expansionist: in addition to settling the American West (large parts of which it conquered from Mexico in 1846-47), it conquered Cuba, Hawaii, the Philippines, Guam, and other territories during this period. European empires, meanwhile, claimed dominion over more than half the planet. Individual adventurers seeking personal fortunes often drove imperial expansion, sometimes without their governments’ knowledge or even consent, only later having their actions legalized.54

Britain and France became substantially democratic during this period, but that did not change their territorial ambitions. In the 1852, Britain and France were monarchies. Their Polity scores were +3 and -8, respectively. In 1870, France became a republic. In Britain, democratization was more gradual, marked by various electoral reform laws. By 1900, Britain and France’s Polity scores were +7 and +8, respectively. In neither case, however, did the change to democracy weaken their territorial ambitions. Indeed, the Scramble for Africa was underway and the British Empire was still expanding to its zenith.

Strong territorial ambitions by states led to many wars and military interventions. According to the Correlates of War dataset, there were 2.8 major wars per year in this period, as compared to 1.7 per year in the second half of the twentieth century.55 There is an active debate among social scientists about whether interstate conflict has actually gotten rarer over time.56 My
claim here is only that there were many wars and military interventions in the 19th century, consistent with the theory's expectations of strong territorial preferences by all major states.

Furthermore, many of the wars and military interventions in this period were explicitly economic in nature, as in the Franco-Mexican War, the Boer Wars, the Franco-Prussian War, the Second Opium War, and the Spanish American War. Territorial expansion was a common goal. Gunboat diplomacy was occasionally used to settle investment and debt disputes, a practice that faded in the 20th century. Some military interventions were designed to protect or seize assets. During this period, foreign investments were mainly (i) in the primary sector, such as plantations and mines, (ii) railroads designed to move primary sector products, or (iii) financial debt that supported the first two categories. Ultimately, the vast majority of foreign investments depended directly or indirectly on the primary sector. That changed in the 20th century, when energy modern economies changed the nature of foreign investments and found new ways to resolve investment disputes.

The link between economic interests and military interventions in the 19th century is especially clear when political rulers had personal financial stakes in the matter. This was relatively common. For instance, British Prime Ministers Disraeli and Gladstone, like many other Parliamentarians, had personal investments in Egypt and the Suez Canal. "Some 37 percent of the [Gladstone’s] investment portfolio was sunk in Egyptian shares ... it is therefore perhaps not surprising that the interventionists, led by Radical Joseph Chamberlain, soon gained the upper hand." In 1882, Britain invaded Egypt and conquered it, thereby protecting British investments and laying the groundwork for further profit. The Rothschild Bank, especially, profited from investment and bond issues in Egypt and South Africa. As Ferguson points out, "What is even more conspicuous is the closeness of the relationships enjoyed by the Rothschilds with the leading politicians of the day. Disraeli, Randolph Churchill and the Earl of Rosebery [Prime Minister in the 1890s and married to Lord Rothschild’s cousin Hannah] were all in various ways connected to them both socially and financially." Even when leaders did not have a personal financial stake, they commonly defended economic interests of their class and social peers. "Gentlemanly capitalism" has rightly been identified as one of the key spurs of imperial expansion during this period.

57 Finnemore 2003; see also Tomz 2007
58 Frieden 1994; Tomz 2007
59 Lee 2005: 102
60 Ferguson 2004: 237
61 White 1996:34-38,100; Stockwell 2000:49-52
62 Cain and Hopkins 2001
Even in the 19th century, some parts of the manufacturing and finance sector opposed territorial conquest. In Britain, the Manchester School of foreign policy thinking, favoring free trade and opposing imperialism, grew out of even earlier attempts by Cobden and others to limit British imperialism. In the United States, much of the finance sector opposed the Spanish American War.63 Consistent with the theory, these preferences tended to be held by those in the non-primary sector. Also consistent with the theory, they tended to be too weak to meaningfully impact the state’s policy. Furthermore, in Britain the aristocratic capitalists shaped imperial policy in ways that gave manufacturing interests, especially in iron, steel, and textiles, a financial stake in the empire through favorable tariff and industrial policies – thus muting their criticism of imperialism.64

1900-1930

Figure 3 shows regime type and energy modernization in the six countries 1900-1930. All but the United States continued to have energy traditional economies, though the United Kingdom was considerably closer to energy modernity than France or Germany. Most states continued to seek empire, as the theory expects. Germany’s desire for empire was a significant cause of WWI.65 Britain and France remained committed to their empires. Japan and Russian fought a major war with each other in 1904-05, and each was imperial in nature (though Russia mostly focused on its internal turmoil). The calamity of World War I moderated the territorial preferences of Britain, but not so much that it wanted to give up its empire. During the war, Britain made substantial promises to Indian nationalists about sovereignty and independence, but largely broke those promises after WWI.66 Its status quo preferences made it reluctant to fight another war in Europe. Here the difference with France is significant: France remained belligerent against Germany, for instance militarily occupying the Ruhr in the 1920s against British desires. Some of this difference is clearly attributable to France’s geographic proximity to Germany and its different experience of World War I. Nonetheless, it is notable that primary sector assets in the Ruhr (mainly coal mines) were a major economic interest for the French, and at least a partial motivation for the occupation.67 This is consistent with the theory, as France’s economy was considerably less developed than Britain’s, so primary sector interests were of greater relative importance to its economy.

63 Kirshner 2007
64 Cain and Hopkins 2001
65 Fischer 1968
66 Abernethy 2002
67 Fischer 1968
The most interesting change is in the United States. Its territorial preferences were highly mixed. On one hand, its behavior in Latin America was imperialism in all but name. The US intervened militarily in Nicaragua, Haiti, the Dominican Republic, Mexico, Honduras, and other countries, often multiple times, collectively known as the Banana Wars. In some cases, formal treaties gave the United States partial sovereign rights over the territory (e.g., the 1916 Bryan-Chamorro Treaty with Nicaragua) involving long-term military occupations. Significantly, narrow economic interests in the primary sector drove the US interventions. The fruit, sugar, and oil industries all had significant interests in the Caribbean, and managed to convince the US government to engage in some relatively low-cost wars that served their interests. The United Fruit Company was especially involved. This practice came to an end, in part, because the Great Depression made fiscal expenditures on even minor wars less attractive. Also important, however, was the changing character of US business. As US manufacturing boomed and the economy diversified, the primary sector became a progressively smaller part of the economy. Consequently, wars of this nature served increasingly narrow special interests, which had to work harder to justify such behavior.

Even as the US practiced quasi-imperialism in the Caribbean, it grew opposed to colonialism and territorial conquest in other respects. In 1909, America granted Cuba its independence. In 1918, Woodrow Wilson endorsed the principle of self-determination, a key step in the anti-colonial movement and a precursor to the dissolution of empires. And just after this period, in 1933, the US adopted the Good Neighbor policy towards Latin American, marking a significant reversal in its overall approach to the region dating back to the Monroe doctrine. In 1934, Congress passed the Philippine Independence Act, which paved the way for full independence in 1946. These were remarkable steps in an age when empires were still dominant across the globe.

Both the mixed nature of America's foreign policy behavior and the direction of change (towards aversion to territorial conquest) are consistent with its economic transition during this period. The United States rapidly became an energy modern economy: it started the period consuming less energy per capita than the United Kingdom and ended it consuming far more. The car became a mass consumer product, urban electrification became common, and mass production spread. As the theory suggests, American territorial preferences and foreign policy gradually changed over the same period. For instance, the sugar industry's assets in Hawaii and Puerto Rico but not the Philippines help explain why only the latter was decolonized. Many or even most US

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68 Musicant 1990
69 Pepinsky 2015
military interventions in Latin America were motivated by primary sector economic concerns or opportunities, but these became increasingly unpopular among the US elite and electorate as the primary sector shrank in relative size. The finance sector in particular opposed many of the military interventions. And while the finance sector was too small for its opposition to matter much for the Spanish-American War, the situation was quite different by the 1920s. America’s future prosperity lay in production and finance, not overseas predation.

The change in US policy towards Mexico during this period is illustrative, and suggests a “dog that didn’t bark” example in the late 1920s. Recall that the US intervened, diplomatically and militarily, in the Mexican revolution 1910-1920. It opposed any Mexican leader that did not guarantee the safety of US nationals and investments. In 1914, the US invaded Veracruz and occupied the city for seven months, primarily to protect American oil interests.\textsuperscript{70} Although the invasion was successful in securing US corporate oil access in the short term, it created a legacy of anti-Americanism and inspired the authors of the 1917 Mexican Constitution to forbid foreign ownership of Mexican oil. The US invasion was not territorial ambition in the strictest sense (the US did not actually annex the territory), but it was a military conflict designed to ensure US ownership and control of specific primary sector assets (oil fields), very much consistent with the theory here.\textsuperscript{71} In the late 1920s, the oil lobby again called for US military intervention when their interests were threatened. This time, however, other parts of the US economy was more economically and political powerful. Key members of the US banking sector such as Dwight Morrow (who also served as US Ambassador to Mexico) pressured the President to resist the oil industry lobby’s call for military action.\textsuperscript{72} They succeeded. Thus energy modernity contributed to changing US foreign policy preferences.

\textbf{1930-1960}

Figure 4 again maps regime type and energy modernization, this time for 1930-1960. In the 1930s, Britain’s economy sat at the cusp of energy modernity. As the theory expects, it had relatively weak territorial ambitions. It was reluctant to fight another war in Europe. Opposition to war came especially from the finance sector and capital owners, as the theory expects.\textsuperscript{73} Britain also made various attempts to reconfigure its empire, using the 1931 Statue of Westminster to

\textsuperscript{70} Cline 2013
\textsuperscript{71} It is worth distinguishing the 1914 intervention from the US-led invasion of Kuwait 1991. Preventing Iraq from dominating the world oil market was almost certainly part of the US motivation for the latter war, so in that sense “oil interests” mattered. Yet the Kuwaiti invasion, unlike the Mexican one in 1914, did not lead to US ownership of local oil fields. The difference is significant. The lion’s share of the economic profits come from owning the actual oil reserves.
\textsuperscript{72} Cline 2013
\textsuperscript{73} Kirshner 2007
grant more autonomy to its Dominions (such as Canada and Australia), while simultaneously trying to bolster economic ties within the empire at the 1932 Ottawa Conference.

After 1945, Britain finally energy modernized. That change, along with the independence of India in 1947-48, opened up an entirely new way for it to look at its empire. The rise of Indian nationalism and the loss of British legitimacy were the primary drivers of India’s independence, while economic factors played a minor role. Nonetheless, one key change wrought by energy modernization helped British policymakers accept India’s departure: the decline of the textile sector. For more than fifty years, the Lancashire Lobby opposed Indian autonomy and the maintenance of imperial policies that repressed competition from the growing Indian textile industry. With more than two million English employees in the industry in the early 20th century, the textile industry was a powerful constituency. Yet in the 1930s, the British textile industry went into steep decline: the number of spindles active in Britain peaked in 1929, then fell by 50 percent by 1950 (80 percent by 1960). The industry’s decline swept aside a key opponent of Indian decolonization.

India’s independence was a severe blow to the British Empire, but further decolonization was not inevitable at that point. Popular accounts of British decolonization often point to India’s departure and the high cost of World War II, purportedly leaving Britain unable to afford an empire. Indeed the war was costly, but that does not mean that policymakers decided that their best response was to jettison the empire. In fact, policymakers took the opposite view: that the empire was crucial to rebuilding Britain’s economy. British policymakers were desperate for foodstuffs and raw materials not priced in dollars, so they turned to their colonies and tried to swiftly develop them. Primary documents show that the British cabinet viewed the costs of empire as being offset by the economic benefits. Nor did Britain face much actual armed resistance, especially in Africa. The Mau Mau Rebellion in Kenya was the only significant act of violence, and it was easily put down by the British military.

By the 1950s, though, Britain’s energy modernity was generating strong economic incentives to let go of the empire. Britain’s manufacturing base left the labor-intensive textile

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74 Cheap labor is the key input in the textile industry, which in that particular industry cannot easily be replaced by energy-modern machines.
75 Dewey 1978
76 Lee 1979
77 Mitchell 2003: 511
78 Darwin 1991: 43-45
79 Louis 1977; Darwin 1991:45
industry behind to take advantage of ever-cheaper electricity and energy as inputs: the average price of industrial power plummeted by 60 percent from 1945 to 1965.\textsuperscript{81} Britain’s manufacturing shifted towards products where it had a comparative advantage and thus did not need protected colonial markets. Moreover, finance was now Britain’s main industry. Primary sector assets like colonial mines and plantations were no longer the means to fortune for the British middle and upper classes. Significantly, in 1957 Prime Minister Harold MacMillan explicitly requested his government generate “something like a profit and loss account for each of our Colonial possessions.”\textsuperscript{82} That moved economic considerations to the fore, since the moral legitimacy of the empire was already under attack.\textsuperscript{83} The bureaucracy’s response to MacMillan’s request indicated that the costs and benefits of empire roughly balanced out. Gone was the economic rationale for empire. In 1960, MacMillan gave his “Winds of Change” speech in Africa, and the process of winding up the British Empire was on.

Two underlying economic changes, each driven by energy modernization, further facilitated the shift in British thinking. First, British foreign investment preferences had changed dramatically since the heyday of the empire. British investors preferred to make seizable investments like mines and railroads within its Empire, and non-seizable investments like manufacturing plants in the rest of the world, suggesting that colonialism served to protect overseas investments.\textsuperscript{84} As the theory predicts, investors in colonial mines and agriculture lobbied against decolonization, whereas manufacturing interests in the colonies generally did not.\textsuperscript{85} Energy modernization in Britain meant that the balance gradually shifted away from those with seizable investments towards non-seizable investments. Manufacturing and commerce made up just 15 percent of British outward investment 1918-1931, but it grew rapidly thereafter, accounting for more than half British outward direct investment by 1965.\textsuperscript{86} Not surprisingly, British economic policymakers reoriented their economy towards integration with Europe (ultimately joining the EU in 1972). Thus energy modernization reduced the demand for empire by causing relative decline in the type of investments that most benefited from it.

The second key change was the rising fiscal and opportunity costs of deploying labor to occupy the colonies, as opposed to using them in the economic sphere. The empire was expensive

\begin{thebibliography}{99}
\bibitem{Fouquet2008} Fouquet 2008:416-417
\bibitem{CAB134/1555} CAB 134/1555, CPC(57)6 “Future constitutional development in the colonies: minute by Mr. MacMillan to Lord Salisbury,” 28 Jan 1957
\bibitem{Philpott2001} Philpott 2001
\bibitem{Frieden1994} Frieden 1994
\bibitem{Kahler1984} Kahler 1984:280-294
\bibitem{Frieden1994581} Frieden 1994:581; Shepherd et al. 1985:15-20
\end{thebibliography}
to maintain, and generated insufficient revenue for the state to justify that expenditure. "Between 1870 and 1913 Britain spent an average of about 3 percent of her national income on defence ... [which was small] compared with 5 or 6 percent of a much larger economy after 1945."87 In 1952, the British cabinet pegged the cost of imperial defense even higher, at 10 percent of national product, and rising personnel costs were a major concern.88 Military costs increased for multiple reasons, but one reason was due to rapidly rising wages after 1945, caused by the productivity gains associated with energy modernization. Rising civilian wages were not just a problem because they put upward pressure on soldiers' wages; they also reflected the opportunity cost of deploying soldiers for imperial occupation, in terms of lost taxes. Archival evidence suggests that policymakers were aware of the opportunity costs of defense, though not necessarily the underlying structural forces. For example, British policymakers noted "it is not in fact possible to recruit large bodies of men for defence purposes without prejudicing the supply of labour to local industrial and agricultural projects whose output is important ... in the economic sphere."89 Britain's military also grew after 1945 in response to external threats (the Cold War) and internal ones (rising colonial nationalism). Yet even without these threats, energy modernization would have increased the fiscal costs of empire. Simply put, British young men could be put to use more profitably at home then ever before, and failing to do so meant lost tax revenues for the state.

Turning now to Germany, its behavior was quite consistent with the theory. In the 1930s, it was both autocratic and energy-traditional, and had strong territorial ambitions, as the theory expects. It might surprise some readers to see Germany characterized as energy traditional until after World War II. Nazi Germany certainly had a mechanized military, but it did not have an energy modern economy as defined here. Upwards of 15 million Germans depended directly on peasant agriculture or traditional handicrafts for their livelihood.90 Most of those lived three- or four to a room, without indoor bathrooms or access to electricity. Horses and other animals carried the burden of agricultural work, not tractors. Germany had considerably fewer cars than Britain or France: 18 per 1000 people, compared to 42 and 45, respectively.91 Similarly, Germany’s energy

87 Offer in Louis et al. 1998:704-705
90 Tooze 2007: xxiii and xxiv
91 Data is for 1939 (author’s calculations using MMVA data).
consumption per capita was much less than Britain’s, and only half of America’s.\textsuperscript{92} Germany’s industry was impressive, especially its chemicals industry, but on average capital owners in interwar Germany held far more primary sector assets (land) than other kinds of assets. Landowners had strong agricultural economic interests. And part of the genius of the Nazi political platform was to link foreign policy aggression with agricultural interests.\textsuperscript{93}

Interwar Germany turned autocratic, so its initiation of World War II would fit my theory proposed even if it had been energy modern. Still an interesting thought experiment is, how would Germany have behaved if it had had a fully energy modern economy? I suggest the Nazis might never have come to power. Much of the Nazis’ electoral support came from the rural sector, linked to the large primary sector in energy-traditional Germany.\textsuperscript{94} And once the Nazis captured the largest share of the vote, further political maneuvering was necessary to take office. Again, the agrarian lobby proved crucial, which intervened decisively in 1933 to push President Paul von Hindenburg, himself the owner of a large agrarian estate, to accept Hitler as Chancellor.\textsuperscript{95} In turn, the agrarian lobby became the principal early beneficiary of the Nazi regime.\textsuperscript{96} Thus half of the 19th century “iron and rye” German political coalition, indeed the more important half, supported the Nazis. The other half, German heavy industry, was far less enthusiastic. Some scholars allege German big business supported the Nazis, but more recent scholarship disputes that claim.\textsuperscript{97} Unfortunately, (a) the Great Depression temporarily robbed German industry of the resources with which it might have politically resisted the Nazis; (b) the Nazi promises of rearmament and labor market repression appealed to at least some parts of big business; and (c) once in power, the autocratic nature of the regime allowed it to entice some businesses and co-opt the rest.\textsuperscript{98} In the end, though, agrarian support was enough. As a percentage of the labor force, Germany’s agricultural sector in the 1930s was almost four times the size of Britain’s, in relative terms (30% compared to 7.6%), and was even substantially larger than in the United States (which had more land and thus comparative advantage in food production).\textsuperscript{99} Had the German electorate looked

\textsuperscript{92} Based on Correlates of War data.
\textsuperscript{93} Tooze 2007: 1-31
\textsuperscript{94} From the Protestant rural areas, to be more precise; the Catholic minority voted heavily against the Nazis. See Hamilton 1982
\textsuperscript{95} Tooze 2007:29
\textsuperscript{96} Rogowski 1987:1126; Gerschenkron 1943:154-163
\textsuperscript{97} Abraham (1986) argued that industry actually favored the Nazis. A significant controversy surrounds his work, with some scholars finding that much of Abraham’s work was either incorrect or fabricated entirely (Stimely 1984). Tooze (2007:28-29) finds the opposite: German industry’s preferences were mixed and not decisive in the Nazis’ rise to power.
\textsuperscript{98} Manchester 1968; Tooze 2007: 661
\textsuperscript{99} Broadberry 1998
more like the one in Britain or America, the Nazis’ political base would have been smaller and weaker. While we cannot be certain, an energy modern Germany would have lowered the probability that the Nazis gained power. In turn, World War II was less likely without the Nazis, though again one cannot say for certain.100

In the 1930s, Japan was energy traditional. As the theory expects, domestic interests in Japan were keen to conquer parts of Asia that were rich in natural resources. Interestingly, energy modernity had a double effect on Japan. On one hand, energy modernization in other parts of the world meant that cars and other technology existed, which made primary materials like rubber and oil highly valuable. On the other hand, Japan’s economy continued to be energy traditional, so domestic productivity remained low, resulting in low returns from industry. This meant there were powerful constituencies that could gain significant profits, relative to their other investment opportunities, from acquiring overseas primary materials. Japan took that path.

Russia’s situation and behavior was similar to Japan’s, even though they were on the opposite sides of the war. It had an energy traditional economy, and as the theory expects, its territorial ambitions were high. It initially pursued territorial expansion through a tactical alliance with the Nazis. After the Nazis betrayed them, the Russians aggressively fought to incorporate much of Eastern Europe under its control, either formally (as part of the USSR) or informally (as satellite states).

France’s economy energy modernized during this period, in the late 1950s. As the theory expects, its territorial preferences changed significantly. At the beginning of the period, France was very much an empire, still deeply concerned with retaining its territories and expanding when possible. It fought to maintain its colonial possessions right up until the 1950s, notably in Algeria and Indochina. Its decolonization experience was more violent than Britain’s, in part because of the institutional factors.101 Yet by the end of this period, France’s preferences had clearly changed. It accepted that its empire had to be dismantled, which it mostly did in the 1960s. The change in preferences can principally be attributed to the disastrous violence in Algeria and Indochina. It was facilitated, however, by a change in regime structure in 1958 and by the declining economic importance of sectors that benefited from the empire, particularly agriculture and textiles. As their economic importance declined – meaning fewer jobs and fewer profits that can be spent shaping political opinion – the political power of these sectors waned as well. Anti-colonial norms gradually took hold in France as the resistance to them faded.

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100 One scenario is that Germany would have gone to war anyway. But other, more peaceful, scenarios seem plausible.
101 Spruyt 2005; Kahler 1984
Finally, the United States behaved precisely as one would expect of a fully energy modern economy. It completed its decolonization of the Philippines in 1946. It was the clear victor of a massive world war but took no major territories for long-term occupation, notwithstanding its occupation of Germany and Japan. Indeed US behavior after 1945 is another significant “dog that didn’t bark” – although the United States could easily have established permanent imperial control over valuable territories like Japan, Saudi Arabia, and much of the Persian Gulf, it chose not to do so. Throughout the postwar period, the United States continued to fight wars (Korea, Vietnam, Kuwait) and minor interventions (Grenada). Strikingly, the US did not occupy or even seek to occupy any of them permanently. These wars were almost entirely about regime type and violations of its desired international order. Even when occupying oil-rich Iraq after 2003, the US pursued only a (disastrous) temporary occupation.

1960-2000

Finally, Figure 5 maps the six countries 1960-2000. Britain and France, now with fully energy modern economies, completed the decolonization of their empires. The United States and Germany did not have empires to dissolve, but importantly, they did not try to build their own. Domestic political opinion firmly shifted against any attempt to acquire new territorial possessions. Narrow political interest groups, like the US fruit companies that were so instrumental in previous US interventions in Latin America, were too small, relative to the large economy, to divert national policy towards military adventurism. In Germany, the electorate gave up its preferences for territorial gain primarily because of its disastrous historical experiences with that policy, its newly democratic regime, and the international constraints in Cold War Europe. Even so, the newly energy-modern economy of postwar West Germany (and East Germany, which also rapidly modernized economically in the 1950s) would have made it hard for a new Hitler to gain political traction. The postwar German case is consistent with the theory, even if energy modernity does not alone account for its preferences.

Japan energy modernized in this period. Despite a persistent reluctance to fully accept responsibility for its WWII actions, Japan also turned away from imperialism or territorial annexation as a foreign policy. A significant peace movement exists in Japanese civil society.102 Again, these preferences are shaped in large part by its historical experiences, but economic factors help consolidate that shift. Even if it were militarily possible for Japan, the economic returns to territorial conquest would be small compared to the economic returns of deploying Japanese labor and capital in modern manufacturing and services.

102 Mekata 2000 (in Florini 2000)
Russia is the most interesting and complex case. Russia sat at the center of both a formal empire (the Soviet Union) and an informal one. World War II allowed it to massively expand its territory, and it continued to have expansionist goals in the early Cold War period. Russia also gradually modernized its economy, and by about 1970 it was consuming as much energy per capita as Britain had in the 1950s. Even so, it continued to lag behind the West economically. By the 1980s, some of its leaders began to see the Soviet empire as unsustainable.

The essential question for Russia in the 1980s and 90s was whether to pursue a strategy based on economic and political liberalization, or one based on traditional authoritarianism and geopolitical power. In the late 1980s, some people (but not all) in the USSR understood that its Communist system would not sustain it as a superpower capable of rivaling the United States, economically and in other ways. Imperial methods of expansion and control, such as the Soviet Union’s disastrous campaign in Afghanistan, were not working. Reformers tried, with mixed success, to change the Soviet empire, which ultimately led to its collapse in the early 1990s. In short, energy modernization had its expected political effect on the Soviet Union (a weakening of territorial preferences and the end of empire), but that does not mean that those effects were widely understood. And crucially, the political and socio-economic incentives generated by energy modernization matter little if actors do not perceive them, or believe them to be less important than other factors. In the wake of the USSR’s collapse, only part of Russia’s elite viewed economic productivity as the primary source of modern power, rather than territorial imperialism.

Russia also tried to democratize in the 1990s, unsuccessfully. Russia also experienced economic setbacks in the 1990s, culminating in the 1998 crisis. These difficulties opened the door for a return to authoritarianism and a shift in national strategy. Vladimir Putin emerged as a leader who pursued geopolitical greatness first, and economic productivity only secondarily. Putin maintains the trappings of democracy in Russia but in practice rules it autocratically. He took control over the country’s oil and energy sector, providing his regime with massive non-tax revenues, thereby facilitating autocracy. A narrow economic elite led by Putin has captured the state. Consequently, business interests that might oppose an aggressive foreign policy strategy, such as an advanced manufacturing or finance sector characteristic of an energy modern economy, are too weak to meaningfully alter Russia’s behavior. Territorial conquest, at least where Russia could get away with it, was back on the table as a path to national greatness. At the time of writing, this approach appears to be highly successful for Putin in terms of his popularity with the Russian public.\footnote{Ross 2012; Colgan 2013}
people. It is much less clear that it will prove to be a sustainable geopolitical strategy in the long-term. Russia’s economy continues to lose ground compared to other leading states.

Many scholars consider nuclear weapons and the Cold War as having contributed to the changes in world politics after 1945. This view seems partially correct but on its own insufficient to explain the changes in territorial preferences and decolonization, especially in Russia. Variation in earlier periods is also not easily explained on this account.

Conclusion

This paper postulates a profound shift in the political and economic incentives for territorial conquest. Modern energy consumption led to new ways of increasing states’ prosperity and power without resorting to conquest, by lowering the relative value of acquiring foreign land and labor. This economic shift altered the state’s domestic political economy. By reducing a state’s territorial ambitions, it also changed the state’s propensity for interstate conflict. In a sense, energy modernity not only split the world between haves and have-nots economically, but also with regard to peace and security. Energy modernization helps us understand not only the changes in territorial preferences, but also other phenomena, including the Democratic Peace, the decline of interstate conflict between certain non-democratic regimes, and the decline of “state death” via complete territorial conquest.

Energy modernity is in some ways a complementary explanation to the Democratic Peace, but it is different in one important way. The Democratic Peace and its variants seek to explain the decline in all forms of interstate conflict between the relevant states. Energy modernity primarily affects the incentives for territorial conquest, which is only a subset of all forms of interstate conflict. Yet the peace between energy modern states also appears to explain the overall decline in conflicts among the relevant countries.

Energy modernization theory also helps resolve many outstanding anomalies stemming from Democratic Peace Theory. First, several scholars have noted that the tendency of democracies not to fight each other only becomes statistically observable after roughly 1945; before that time, democracies states are not demonstrably more peaceful than other pairs of states. This observation is easily explained by the near absence of energy modernity before 1945, and its rapid rise afterwards, precisely in the pairs of countries that behave peacefully. Second, several scholars

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104 Waltz 1993
105 Glaser 2010
106 Fazal 2007
107 Gowa 2000; McDonald 2015:13-14
have noted an “autocratic peace” between certain kinds of autocracies, especially economically advanced autocracies and those that have broad-based ruling coalitions. Those findings also make sense in light of the theory advanced here, as energy modernization shifts economic incentives away from territorial conquest even in autocratic societies. Third, Gowa points out that after about 1990, the difference in conflict initiation rates between democracies and non-democracies disappears. This pattern is rendered sensible when one realizes that many non-energy modern states have democratized, and many autocracies had energy modernized, since 1990. That makes energy modernity the key cleavage in rates of interstate conflict, even more than regime type, as a table in the appendix illustrates.

In addition, several specific wars and crises, like the Fashoda incident, World War I, and the Kargil War between then-democratic (and nuclear-armed) India and Pakistan, are easily explained by the absence of energy modernity among the participants. For instance, Britain and Germany were heavily trade interdependent just prior to going to war with each other in 1914. This is an important outlier case, potentially undermining the argument for the benefits of economic interdependence. This paper, however, suggests that the incentives preventing war grow strong only when both sides of the dispute have achieved a high-level of energy consumption. Crucially, Germany and the other Central Powers were not energy modern in 1914. As this paper indicates, trade and interdependence is not sufficient on its own; the mechanisms of energy modernization are also needed. Thus the energy traditional stage of industrialization in Europe 1914 helps explain how war could occur despite relatively high levels of economic trade.

Energy modernization theory also helps explain other empirical patterns outside of the democratic peace. For instance, it helps explain the variance in the timing of decolonization by various metropoles. Of the seven major empires ended in the 20th century without being defeated by an external power, at least six of the seven loosely correspond to a recent transition to energy modernity. The United States was first (c.1918); then Britain, France, Belgium, and Holland, 1945-1960; and finally two late decolonizers, Portugal and the USSR, both of which were late to energy modernize. The partial exception, the USSR, had a gap between its date of energy modernization (c.1970) and decolonization (1989-91). Still, that gap is not so large in the long sweep of history, and theoretically it is not surprising given the autocratic nature of its regime. Second, energy modernization helps explain the tendency of economically advanced states to avoid annexation of foreign territory, even after military victory. Again, the United States was the first to begin avoiding

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108 Peceny et al. 2002
110 Barbieri 2005
formal annexation; other powerful countries followed later. While the tendency of advanced democracies to fight non-democracies with considerable regularity has been widely noted,\textsuperscript{111} the tendency to avoid territorial conquest has drawn less attention. Energy modernization highlights that pattern. Finally, energy modernization creates incentives for powerful oil consumers like the United States and Britain to offer oil-for-security arrangements to major oil exporters, which in turn does much to shape the pattern of conflict in one of the most violent regions on earth, the Middle East and North Africa. I explore that topic elsewhere.\textsuperscript{112}

Why is it important to understand the decline of territorial ambitions in today's world? In some sense, the theoretical importance of this question is so high that it would be worth of scholarly attention even if it were merely a backward-looking historical exercise. But territorial ambitions and the return of imperialism are also important for today's world. On one hand, some have suggested that there are few barriers to America becoming a global empire in the future.\textsuperscript{113} This paper would suggest otherwise. On the other, many wonder about China's present and future territorial ambitions. This paper suggests that China's current transition to energy modernity lowers the probability of Chinese territorial aggression, and it would be lower still if China democratized.

\textsuperscript{111} Bueno de Mesquita et al. 2004
\textsuperscript{112} Author's working paper
\textsuperscript{113} MacDonald 2009
References


Figure 1: Theoretical expectations for territorial preferences (monadic)

*DV: Preference for Foreign Territory*

<table>
<thead>
<tr>
<th>Regime Type</th>
<th>Energy Modernity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democracy/Coalition Rule</td>
<td>Low</td>
</tr>
<tr>
<td>Strong</td>
<td>Weak</td>
</tr>
<tr>
<td>Strong</td>
<td>Varies, but weaker on average</td>
</tr>
</tbody>
</table>
Figure 2: Regime type and energy modernization 1850-1900

Energy Modernity

- USA
- UK
- Russia
- France
- Japan
- Germany
- Germany
- USA
- UK
- Russia
- France
- Japan
- Germany
Figure 3: Regime type and energy modernization 1900-1930

Energy Modernity

- USA
  - France
  - UK

- Germany
- Russia
- Japan

Regime Type

- Democracy/Coalition Rule
- Personalist/Narrow

Low

High
Figure 4: Regime type and energy modernization 1930-1960

Energy Modernity
Figure 5: Regime type and energy modernization 1960-2000

<table>
<thead>
<tr>
<th>Regime Type</th>
<th>Energy Modernity</th>
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</thead>
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<tr>
<td>Democracy/Coalition Rule</td>
<td>• USA</td>
</tr>
<tr>
<td>Personalist/Narrow</td>
<td>• UK</td>
</tr>
<tr>
<td>• Germany</td>
<td></td>
</tr>
<tr>
<td>• France</td>
<td></td>
</tr>
<tr>
<td>• Japan</td>
<td></td>
</tr>
<tr>
<td>• Russia</td>
<td></td>
</tr>
</tbody>
</table>

Low | High

Energy Modernity
Table 1: Summary of Empirical Evidence, 1850-2000

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>USA</strong></td>
<td>DV: prefs</td>
<td>Strong</td>
<td>Declining</td>
<td>Weak</td>
</tr>
<tr>
<td></td>
<td>IV: type</td>
<td>Dem-Trad</td>
<td>Dem-Trans</td>
<td>Dem-Mod</td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td>DV: prefs</td>
<td>Strong</td>
<td>Strong</td>
<td>Declining</td>
</tr>
<tr>
<td></td>
<td>IV: type</td>
<td>Trans-Trad</td>
<td>Dem-Trad</td>
<td>Dem-Trans</td>
</tr>
<tr>
<td><strong>France</strong></td>
<td>DV: prefs</td>
<td>Strong</td>
<td>Strong</td>
<td>Declining</td>
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<td>IV: type</td>
<td>Trans-Trad</td>
<td>Dem-Trad</td>
<td>Dem-Trans</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>DV: prefs</td>
<td>Strong</td>
<td>Strong</td>
<td>Mixed</td>
</tr>
<tr>
<td></td>
<td>IV: type</td>
<td>Aut-Trad</td>
<td>Aut-Trad</td>
<td>Mix-Trans</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
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<tr>
<td><strong>Russia</strong></td>
<td>DV: prefs</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
</tr>
<tr>
<td></td>
<td>IV: type</td>
<td>Aut-Trad</td>
<td>Aut-Trad</td>
<td>Mix-Trans</td>
</tr>
</tbody>
</table>

Legend: Dem = Democratic, Mod = Energy Modern, Aut = Autocratic, Trad = Energy Traditional, Trans = Transitional
Table A-1: States with Modern Energy and Dates of Transition (thru 2008)
[Great Powers and Former Empires only in this table]

<table>
<thead>
<tr>
<th>Country</th>
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</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>1952</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1960</td>
</tr>
<tr>
<td>Belgium</td>
<td>1955</td>
</tr>
<tr>
<td>France</td>
<td>1955</td>
</tr>
<tr>
<td>Portugal</td>
<td>1977</td>
</tr>
<tr>
<td>West Germany</td>
<td>1958</td>
</tr>
<tr>
<td>East Germany</td>
<td>1957</td>
</tr>
<tr>
<td>Austria</td>
<td>1960</td>
</tr>
<tr>
<td>Italy</td>
<td>1963</td>
</tr>
<tr>
<td>Japan</td>
<td>1968</td>
</tr>
<tr>
<td>China</td>
<td>--</td>
</tr>
<tr>
<td>Russia</td>
<td>1967</td>
</tr>
<tr>
<td>USA</td>
<td>1918</td>
</tr>
</tbody>
</table>

-- indicates transition had not occurred by 2008

Figure A-1: Partial overlap of Democracy and Energy Modernity

[n.b. The rest of the appendix is in a separate file.]