

# **Status Matters: Exploring Variation in Status Attribution among Major Powers.**

Keith A. Grant  
University of Arizona

Ryan G. Baird  
University of Arizona

Renato Corbetta  
University of Alabama-Birmingham

&

Thomas J. Volgy  
University of Arizona

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The idea that a select group of states have a unique ability to shape international politics is present in nearly all international relations paradigms. Even under conditions of anarchy, where all states are viewed as similar units, this special club has emerged. The neorealist tradition is perhaps most influenced by this belief. Kenneth Waltz (1979) asserts that the most relevant characteristic of the international system at any given time is ascertained by simply counting the number of major powers present. The concept of systemic polarity, where major powers serve as power centers around which international politics unfold, is then thought to dictate the prevalence of conflict and/or cooperation, while providing insight into the overall stability of the international system.

Cold War bipolarity exemplified this belief. Because international politics revolved around two superpowers, major conflict could only unfold along one fault line, and although “peace” was tense, it prevailed (Waltz 1964). Yet, the available data on great powers do not match these theoretical expectations. The widely used data from the Correlates of War project do not suggest only two “major powers” during the Cold War period, but rather five: the United States; the Soviet Union; the United Kingdom; France; and the People’s Republic of China (Correlates of War 2008).<sup>1</sup> The presence of five “major powers” during an era marked by bipolarity seems quite counterintuitive; if polarity is determined by the number of major powers within the system, the Cold War era should have been considered multipolar rather than bipolar and therefore subject to the instabilities of that type of system as opposed to the stabilities of the bipolar order.

Ultimately, this problem poses little challenge to the just discussed image of global politics. While there were five “major powers” during the Cold War, two of them – the U.S. and

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<sup>1</sup> The Correlates of War project defines major powers based on surveys given to diplomatic historians, who in their opinion, determine which states were thought to be major powers by other states at the given time.

the U.S.S.R. – attained “superpower” status, as they possessed capabilities and leadership traits far exceeding those of the other major powers. In fact, some have even argued that this era was actually characterized by bipolarity with hegemony (Volgy and Imwalle 1995), where the capabilities of the Soviet Union dwarfed the other major powers, while the capabilities of the United States dwarfed even those of the Soviet Union. Regardless, the perception of bipolarity thrived during this era (Gaddis 1992, 1997), and with the exception of China, the other major powers fell in line with the more dominant United States.

This discussion of the Cold War demonstrates one important caveat in the conventional thinking on major powers. While there is a small group of countries that through their unusual capabilities and influence are able to take a vanguard role in international affairs, there is significant and relevant differentiation within this club.<sup>2</sup> The emergence of the United States and the Soviet Union as superpowers during this era, and America’s lone superpower status following the Cold War clearly exemplifies this fact. Upon the conclusion of the Cold War the Correlates of War project (COW) identifies two additional states as reaching major power status: a unified Germany and Japan. Despite the major power club now consisting of seven members, the international system actually appears to be unipolar, at least in the most conventional sense of the concept (Wilkinson 1999). The unipolarity of the system is clearly demonstrated by the enormous differences in states’ military spending. In 2007, the United States alone accounted for roughly 45% of global military spending,<sup>3</sup> and exceeding the military budget of the next largest spender, the United Kingdom, by a factor of 9. Contrastingly, the military spending of Russia, still considered a major power, despite the fall of the Soviet Union, is more akin to that

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<sup>2</sup> With regard to major powers, Waltz (1979) discusses the existence of “hierarchy with anarchy” and refers to the existence of a certain rank-order among the great powers.

<sup>3</sup> Authors’ own calculations, using the Stockholm International Research Institute’s (SIPRI) military expenditure data.

of Germany (considered a major power since 1990), Saudi Arabia, and Italy, rather than the remaining states that are attributed major power status.

Of course, we would be remiss to suggest that major power status is a one-dimensional concept that is based solely on military capabilities. Specifically, patterns of violent conflict suggest a noticeable decrease in interstate conflict in the post-Cold War era, as the main sources of violence appear to arise domestically (Harbom and Wallensteen 2007). Even with the rise of international terrorism and the perpetual problem of failed or failing states, perhaps the most relevant form of international instability has arisen due to the world's economic sectors. In responding to critics, Waltz (1986) himself addressed both the growing importance of economic capabilities for major power states and the impossibility of separating them from military might. In addition, the end of the Cold War brought to the surface new sources of international instability beyond military competition among major powers. This instability is evidenced by the world financial crisis of 2009 and the ongoing clash between China and the United States over China's refusal to revalue its currency (Wong and Landler 2010). Responding to these recent economic crises as well as economic rivals requires states to make use of economic capabilities rather than military capabilities. Clearly, the role of a major power cannot be fulfilled solely by military means.

This brief discussion suggests two major shortcomings in the current classification of major powers. First, the fact that the bipolar system of the Cold War actually contained five major powers and required the emergence of "superpowers" to explain why the system was bipolar suggest not insubstantial variation amongst major powers, meaning the current dichotomy between major powers and non-major powers may not be sufficient. Second, the question of what explains this variation becomes relevant. Simply, possessing heightened

military or economic capabilities does not equate to “shaping international politics”, which is an important criterion of a major power, as hypothesized by Waltz (1979). This question is not just an empirical one, it is also has an important theoretical dimension, in that *theory* must drive expectations about *who* gets to label a state a major power, and *what* grants the attribution of such a label.

Informed by existing (sociological) theories on status attribution, by the well known opportunity and willingness framework (Most and Starr 1989), and as well by previous and current efforts to define and identify major powers, this research seeks a means to differentiate amongst the exceptional states by tracking levels of capabilities, behavior, and status attribution in the post-Cold War era. Drawing from Corbetta, Volgy, Grant and Baird (2008), we construct a three-dimensional concept and dataset of Major Power Status (MPS) for the years 1990 – 2007. This conceptualization is based on the intersections of unusual economic and military capabilities, unusual behavior and leadership activity, and ascribed recognition from other states in the system. Moreover, we explore and analyze how the endogenous aspects (the aspects the state itself controls) of major power status, (capabilities and behavior), affects the exogenous aspect of major power status, (ascribed international and leadership status).

## **Major Powers in International Relations**

While there can be very little controversy over the existence of an elite group of states that exert increased influence within the international system, specifying precisely which states belong to the “major powers club” and the reasons for their membership is a much more elusive task. In many cases, scholars have recognized that major powers are likely to behave differently than other states, leading to the inclusion of binary variables representing “major power state” or

“major power dyads” in applied statistical research, often with little justification. Unsurprisingly, these binary variables turned out to be significantly related to a broad variety of international behaviors under examination, leading to the widespread practice of using major power status as a selection criterion for defining political relevance. With very few exceptions, scholars adopt the Correlates of War (COW) major power classification, which distinguishes between major power states and other states through the perception of great power status, as identified by a panel of diplomatic historians (Singer 1988).<sup>4</sup>

The COW typology is used extensively in the literature. Yet its binary nature—major power or non-major power—imposes non-arbitrary theoretical assumptions on those who theorize about major powers. First, the binary nature of the COW major power concept suggests *equality* among those states in the club relative to tangible aspects such as material capabilities, observable aspects such as foreign policy behavior, as well as the much more subtle component, ascribed status. Examining the material capabilities of the COW major powers during the post-Cold War era in greater detail, two trends are immediately noticeable: levels of capabilities among COW major powers appear to be more characterized by *inequality* than equality; and some non-major powers appear to have equivalent or superior military capabilities than the COW major powers. Table 1 lists the ten most powerful countries according to the COW Composite Index of Material Capabilities (CINC) score (Singer, Bremer, and Stuckey 1972) at five year intervals beginning in 1990. The CINC score, a well know measure of potential military capabilities, combines military spending and personnel with resource extraction (iron and steel), energy production, and population demographics, and in its composite form is an approximation of a state’s share of total systemic capabilities. While all five of the COW major powers appear in the list for 1990, and all seven for 1995 and 2000, the disparity between the

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<sup>4</sup> See Levy (1983) and Morton and Starr (2001) for these exceptions.

strongest (the United States) and the weakest COW major power (France) is immense, at about a factor of 7. Moreover, India, never considered a major power under the Correlates of War framework, consistently holds either the 3<sup>rd</sup> or 4<sup>th</sup> place seat, possessing approximately three times the material capabilities of France and the United Kingdom.

Secondly, a cursory glance at the COW major power classification demonstrates incredible stability and durability among major powers. The only country to permanently lose major power status (while not dissolving) is Italy, while other countries appear to gain major power status without corresponding increases in their individual material capabilities. Germany, regaining COW major power status in 1991, exemplifies this observation. Prior to reunification, the combined capabilities of East and West Germany were approximately .057 (CINC scale), while only 4 years after unification, the German share of global capabilities *fell* to .031, a level equivalent to the West German share of capabilities only 5 years prior. Still, according to the COW classification, Germany attained major power status with reunification, despite the apparent disappearance of roughly half of its aggregate, pre-reunification capabilities.

Indeed, the attribution of COW major power status does not appear to closely follow trends in military capabilities. Focusing on when states gained and lost major power status, Corbetta (2006) found no apparent pattern between fluctuations in military expenditures, military personnel, or other components of the CINC measure and entrance or exit from the “major powers’ club”. Of course, the COW operationalization of major power status does not fully rely on material capabilities, but rather on the combination of material capabilities as well as international reputation (Singer and Small 1966: 238). That attaining major power status does not seem to mirror notable increases in material capabilities raises the broader issue of how major power status *is* attributed to certain states.

We begin our task of reconceptualizing major power status with two specific goals in mind. While our study will inevitably require distinction between those states attaining major power status, and those falling short of the threshold, the identification of major powers is not our primary concern. Recent and ongoing investigations by Corbetta, Volgy, Grant, and Baird (2008a, 2008b) have already undertaken this task, producing a tridimensional theoretical framework for identifying major power status. That typology produced a means of differentiating amongst types of major powers—status consistent, status inconsistent overachievers, and status inconsistent underachievers—based on the correspondence between their ascribed status, their major power-like behavior, and their capabilities. Rather, our task here is to build on this framework to 1) provide continuous measures of the three dimensions of major power status, allowing scholars to differentiate among the positions of states within the major powers’ club, hence moving beyond the simple dichotomy of major power or non-major power, and 2) to demonstrate the statistical relationship between the capabilities and behavioral components of major powers and ascription of major power status, highlighting how these endogenous aspects of major powers, and states in general, affects the status that they are ascribed.

## **Redefining Major Powers**

How one defines “major powers” will depend on one’s theoretical orientation. The most commonly used classification—that of the Correlates of War project—adopts what seems akin to a “we know one when we see it” mentality, relying on panels of diplomatic historians to identify states’ perceptions of other state’s major power status. While producing a plausible list of major powers, subsequent efforts to dissect these COW major powers into their component parts have

produced inconsistent results at best (e.g. Corbetta 2006). Yet attempting to identify precisely what contributes to being attributed COW major power status may be at worst an exercise in futility, and at best, subject to severe selection on the dependent variable. Rather, we adopt a theoretical model of *major power status* developed by Corbetta, Volgy, Grant, and Baird (2008 PSSI and Russia), which defines the ideal typology for a major power, termed a *status consistent major power*, as the intersection of heightened military and economic capabilities and reach, unusual and independent foreign policy behavior, and high levels of status ascribed from other states in the system.

The theoretical model presented by Corbetta, Volgy, Grant, and Baird (2008) emphasized the role of *status* for major powers. Status is an elusive concept in international relations, drawn from the social position of one state as attributed to them by others. Being a *major power* requires having abnormal capabilities, and using them to pursue an independent and expansive international agenda. Attaining *major power status* combines these factors with the consistent recognition of being a global leader (VCGB 2010: 7). The attribution of major power status is thus, in large part, appears related to the capabilities and behavior of states.

## **Status**

Possessing major power status coincides with a position of leadership in the international system. Policy makers turn to states they recognize as being of high status for leadership on global initiatives. As such, being attributed high levels of status adds an element of legitimacy to major powers, augmenting their ability to authoritatively shape global affairs. Using Social Identity Theory (SIT),<sup>5</sup> we identify two relevant means through which major power status may be attributed: community attribution and in-group attribution.

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<sup>5</sup> For examples see Mercer (1998), Hymans (2002), Larson and Shevchenko (2003; 2009), and for recent status literature, including SIT theory, Wohlforth and Kang (2009).

In-group attribution refers to being invited to join a club, where those already enjoying high status recognize another as deserving of similar status. Community attribution refers to the attribution of status from the collective members of the community. This form of status attribution is most likely to manifest through the consultation of states with those deemed their equal or of higher status than they. This sort of status is most indicative of open channels of communication, either on an issue-based or permanent basis, and denotes a certain level of authority and legitimacy accorded to the state receiving status.

Commanding high status adds a certain legitimacy to states, both internationally and domestically. Internationally, status serves to enable more expansive foreign policies, and to legitimize efforts to regulate and govern international affairs. Domestically, elevated status provides a sense of pride that may serve to empower political leaders in both their domestic and international political endeavors. Once attaining major power status, domestic constituencies may be hesitant to allow it to slip; in the event that it does, the desire to regain lost status becomes a strong force for domestic change. This is arguably demonstrated by the popular support for Vladimir Putin in Russia, whose stated goal is to maintain Russia's place in the major power club (Trenin, 2009).

### **Capabilities**

Derivatives of the realist and neorealist traditions tend to place emphasis on material capabilities as a primary indicator of major power status. Thucydides (1951: 331) succinctly states that “the strong do what they can and the weak suffer what they must,” illustrating this capability-based divide between “weak” and “strong” countries. Both Morgenthau (1964) and Waltz (1979) place emphasis on the importance of material capabilities for states, and the opportunity those capabilities provide for states to take a heightened role in shaping “the story of international

politics” (Waltz 1979: 72). Scholars of power transition theory, viewing the international system as hierarchical rather than anarchical, assign the burden of global leadership to those atop the power hierarchy (Organski and Kugler 1980; Kugler and Organski 1989).

Proponents of long cycle theory emphasize not only the possession of great power capabilities, but the ability to project those capabilities to all corners of the globe (Thompson 1986; Modelski and Thompson 1989; Modelski 1990). Indeed, elevated levels of material capabilities provides little more than defense without a global reach capacity, and powers possessing heightened capabilities without the complementary military reach component would be unable to pursue and enforce their interests abroad. Many of the behaviors associated with major powers—multilateralism and the construction of organs of global governance; conflict initiation, intervention, and resolution—are simply impossible if military capabilities are not coupled with an ability to project those capabilities abroad.

Yet military capabilities alone are not the only relevant source of power a major power must possess. The expansion of global trade and interdependence, varieties of globalization, and the recent international banking crisis all points towards the importance of economic strength and influence over the global economy. That European integration, for example, was more geared towards producing an economic entity capable of competing with the US economy than towards augmenting European security is evident through the continued deepening of intra-EU economic ties despite the failure to create an European military wing or a rapid reaction force, both policy initiatives for more than a decade.

Possessing advanced military and economic capabilities, along with the ability to employ those capabilities globally provides states with the opportunity to behave as major power, while increasing the likelihood that they will be attributed major power status (CVGB 2008; VCGB

2010). The amount of economic and military capabilities as well as the ability to projects these capabilities appears to be a clear determinant of major power status attribution in the international system. This suggests that we should observe a clear and non-trivial relationship between the economic and military capabilities and reach of a state and the level of status it is ascribed by the international community.

### **Behavior**

A second factor contributing to the attribution of major power status is the behavior of states. Unusual capabilities alone do not mandate their use; not only must major powers be capable of pursuing a broad and diverse foreign policy agenda but they must have the willingness to do so. Major powers need to engage both in cooperative relations, forming governance institutions, providing assistance and relief, and encouraging collaboration, and also use coercion to protect those institutions as well as others from potential sources of instability and aggression (Keohane and Nye 1977; Keohane 1984). Additionally, their focus cannot be specific to any singular geographic region, but rather must represent their role as a global leader and policy entrepreneur. In addition to enacting an expansive global policy agenda, major powers must pursue their own foreign policy agendas, independent from the agendas of others, especially the system leader. While we expect that most states, and especially major powers, will exhibit some similar patterns in their foreign policy behavior, highly similar foreign policy behavior likely suggests the absence of independent orientation to try to shape global order, and may result in less status than states demonstrating an independent foreign policy orientation. Arguably, the United Kingdom could be an example of this during and after the Cold War, as its foreign policy appears to mirror the United States, much more so than any other COW major power.

The relationship between foreign policy behavior and attributed status should be obvious. Only through observable behavior and foreign policy initiative, both of which are supported by superior capabilities, will states gain recognition from others. Moreover, both cooperative and conflictive behaviors should be needed to attain major power status recognition from others. States that only engage in conflictive behaviors will be viewed as aggressors, contributing to global instability rather than governance. Contrastingly, those countries that only engage in cooperative behavior might be perceived to lack the motivation or strength to enforce or stand behind their policy objectives. Together, cooperative behavior demonstrates a willingness to assume a leadership role in the system, while conflictive actions denote both the capacity and willingness to defend them against those who would seek to undermine them. Noting this, major power status should be more likely to be attributed to those states that demonstrate elevated levels of foreign policy initiative independent from other major powers in the system.

### **Reconceptualizing Major Powers and Major Power Status**

We begin the task of developing and measuring the concept of major power status with a brief return to the typology developed by Corbetta, Volgy, Grant and Baird (2008; 2010). According to their theoretical model and the discussion above, major power status is inherently a tridimensional concept. The three identified components of major power status—capabilities, behavior, and status—can overlap in differing ways. Their overlap represents meaningful differentiation amongst differing types of major powers: (1) status consistent major powers, who display all of three dimensions; (2) status inconsistent underachieving major powers, who display unusual capabilities and behavior, but fail to be recognized by other major powers or by the community of nations; and (3) status inconsistent overachieving major powers, who are

conferred major power status while lacking either capabilities or major power-like behavior (see Figure 1). It is then necessary to develop and maintain each facet of major power status separately. We begin by outlining procedures for measuring each of the three components below, while postponing the task of combining the three components into a unique measure for future research.

Previous efforts by Corbetta, Volgy, Grant, and Baird (2008) have demonstrated that the United States represents the only status consistent major power throughout the 1950—2005 time period. For our purposes, this identifies the United States as an ideal case—the only state to consistently receive full scores on each of the three dimensions. The United States is also assumed to be the relevant system leader for this time period, and is used as a benchmark for determining the independence of foreign policy behavior, as well as a potential constraint on overall status attribution.

### **Measuring Status Attribution**

Social Identity Theory suggests that major power status may be attributed from at least two different sources. Community based status attribution is derived from the entirety of the international community, while in-group attribution stems from a smaller group of “elite”, high status states. However, the in-group must inherently be identified by their status before we can identify their role in attributing status. This creates a problematic tautology, where we must know levels of status to determine the potential of in-group status attribution. Rather than tackle this onerous task directly, we assume that in-group status attribution is most likely mirrored through community based attribution, allowing us to avoid recursive traits in our measures of status attribution (Volgy, Corbetta, Grant, and Baird 2010). We conceptualize community based

attribution as a function of direct recognition from the international system, constrained by the system leader's influence over that system.

Fluctuating relative to its power, the system leader can either reinforce or constrain community based status attribution. In reinforcing community based status attribution, the system leader may mirror community-based attribution, thus having little to no bearing on overall levels of status. In contrast, the system leader can constrain community based status attribution by allocating either proportionately more or less status than the remainder of the international community. We assume that this constraint is proportionate to the strength of the system leader at that time. We build this constraint into our measure of community status attribution by measuring two sources of community attribution. International recognition refers to status derived from the greater international community, while system leader recognition is that specifically derived from the system leader. We weight these measures relative to the system leader's structural strength, allowing the ability of the system leader to constrain status attribution to vary relative to its structural strength.

In measuring the strength of the system leader, we rely on the measure of structural strength developed by Volgy and Bailin (2003). Structural strength represents an estimate of the ability of a state to shape global politics. Measured as the combined resources a state spends on foreign policy activity relative to the complexity of the international system<sup>6</sup> and its own autonomy, this indicator places the United States firmly atop the international system for the 1950—2005 time period. Peaking in 1953, the structural strength of the US has diminished over time, ranging between about 40% of its peak strength in 1990, and about 20% of its peak

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<sup>6</sup> Measured as the number of states in the system.

strength by 2004.<sup>7</sup> We assume that, at its peak of structural strength, the United States as system leader may attribute up to half of a state's total status. Although this may appear an arbitrary coding decision, we believe it is well justified. At its peak (of structural strength), the United States was actively reshaping the international system, creating organizations and other governance mechanisms, both at the beginning and at the end of the Cold War.

In using the United States' structural strength as a weighting mechanism between international recognition and system leadership recognition, we begin by scaling the United States' structural strength for the 1950—2004 period to its peak in 1953.<sup>8</sup> This 0-1 variable and its inverse can then be used as a weighting mechanism on the unconstrained recognition attributed by both the system leader and the overall international community, respectively.

Operationally, unconstrained recognition by members of the international community is measured through two indicators: received state visits and the establishment and maintenance of a permanent embassy-level diplomatic contact from other states. We count the number of state visits received by each state (minus those from the system leader) for each given year, as reported by the Integrated Data for Events Analysis (IDEA) dataset (Bond, Bond, Oh, and Taylor 2003), before rescaling received state visits to a 0-1 scale, annually. In rescaling, we use percentiles, rather than simply dividing by the maximum, when rescaling in order to prevent significant outliers from having undue influence on our measures, as may be the case when using the annual maximum as a reference point. We repeat the same process for diplomatic contacts,

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<sup>7</sup> Because the structural strength measure only covers the 1950—2004 time period, we use the 2004 value as our best estimate of US structural strength for 2005—2007.

<sup>8</sup> Despite our current focus on the post-Cold War era, we use the 1953 peak as a reference point for two reasons. First, our intention is to extend backwards in time. Using the 1953 data point ensures that any results produced in this effort will be comparable to results derived from previous time periods. Second, we recognize that the United States' structural strength has been in decline since that point, while that peak may have represented a theoretical maximum in structural strength given the increasing complexity of the system. To use the peak for the post-Cold War era as a reference point would, we believe, drastically overstate the role of system leader recognition in the attribution of major power status.

with the additional stipulation that a minister level official must be overseeing the embassy for that given year, using the Correlates of War Diplomatic Contact data (Bayer 2006), updated to ensure a currently sitting minister-level official.<sup>9</sup> To allow for partial but not complete substitutability between received visits and diplomatic contacts, we combine the two data-level indicators using the arithmetic mean as our aggregation method. Because both measures are annually rescaled 0-1, the resulting indicator of unconstrained international recognition also ranges from 0-1, representing the overall scaled level of recognition to a state from the international community.

We then repeat the same process to measure unconstrained system leader recognition with one additional caveat: because the system leader is a single state, diplomatic contact from the system leader is measured as a binary variable, representing whether a state had an US embassy located within its territory. This binary variable is then averaged with the scaled indicator of state visits from the United States, forming the unconstrained system leadership measure.

The final step in measuring status attribution involves applying the weights to both unconstrained recognition measures –system leader and community- and combining them into a single indicator. Because we assumed earlier that the system leader can attribute up to 50 percent of a country's status, we apply the weights by multiplying by one half the rescaled structural strength measure by unconstrained system leader recognition. When weighting international recognition, we subtract one half the rescaled structural strength indicator from one, before multiplying it by our measure of unconstrained international recognition. These two weighted measures are then added together, forming our final measure of international status attribution that ranges from 0 to 1. As a final note, because the United States is considered the

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<sup>9</sup> Updates are provided in Rhamey et. al., 2009.

system leader for the entire period, thus making system leader recognition undefined for it, we recode the United States to have a status value of 1 for the entire period.

### **Major Power Capabilities**

As stated earlier, although material capabilities are not the sole constitutive element of major power, they still represent a necessary and inescapable component. Major power states must possess a combination of heightened military and economic capabilities, as depicted in figure 3. Because of the fungibility of economic resources (Waltz 1986), we believe that there is some partial substitutability between military and economic capabilities. While the strongest and most influential among the major powers would exhibit both heightened military and economic capabilities, we do not believe that some minor asymmetry between the two components should drastically diminish our overall indicator of major power capabilities. As such, after independently measuring both military and economic capabilities for each state, we aggregate them together using the arithmetic mean.

Military capabilities consist of two components representing military strength and the ability to project that strength. We focus on military spending as our indicator of military bulk.<sup>10</sup> We create annual scales of military expenditures using data from the Stockholm International Peace Research Institute by ranking each state's annual military spending into percentiles. Again, we prefer percentiles rather than dividing by the annual maximum because the United States is an atypical outlier in military spending.

Because military spending does not always equate to an ability to project those resources, we create a second component of military capabilities which we term military reach. Military reach is measured as total expenditures over military personnel (Fordham 2006). This measure

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<sup>10</sup> An alternate measure commonly used in the literature, the Correlates of War Composite Index of Material Capabilities (CINC score), more accurately measures military potential, through its incorporation of population demographics, energy consumption, and iron and steel production.

captures a technological component of states' militaries, and proxies for a state's ability to project their military to all corners of the world. Again, we rescale this variable annually, using percentiles, before aggregating it with the indicator of military strength using the arithmetic mean.

Similar to the military components of major power capabilities, economic capabilities are divided into one measure of bulk and another of reach. We rely on the overall size of the economy (GDP) as our indicator of economic bulk, using data from the Penn World Tables, which are again rescaled 0-1 using annual percentiles to account for outliers. Economic reach is operationalized as a state's contribution of global trade for each given year. Using COW bilateral trade data (Barbieri, Keshk, and Pollins 2008), we divide the value of exports from each country over the total value of all exported goods for each year. The resulting value is rescaled annually using percentiles, to form our indicator for economic reach. This measure of economic reach is aggregated with our scale of economic size using the arithmetic mean to create our indicator of economic capabilities. As a final step, we average the cumulative measure of economic capabilities with the cumulative measure of military capabilities in order to create creating our final indicator of material capabilities.

## **Behavior**

Our theoretical model suggests that willingness to behave like a major power, as well as the ability to act independently of other great powers, are the final crucial components required for status attribution. We look for indications of foreign policy leadership and independence in both cooperative and conflictive aspects of behavior. Figure 4 provides a visual summary of our conceptualization of major power behavior. As suggested above, the distinction between the cooperative and conflictive realm is relevant, as states engaging in major power-like behavior

must be able to use both forms of behavior in order to shape international politics. Therefore, we begin by first seeking indications of foreign policy initiative and independence separately within the realm of cooperative and conflictive foreign policy behaviors. To measure behavior, we rely on international events data, which codify daily interactions of states, as indicated by the IDEA events data (Bond et al. 2003).

We begin by recording annual counts of the cooperative and conflictive events initiated by each state. We then identify unusual levels of behavior by rescaling annual counts of initiated events into percentiles, forming two 0-1 scales: one for conflictive events and one for cooperative events. However, in addition to engaging in unusual amounts of conflictive and cooperative foreign policy behavior, we also require that a major power should be able to act relatively independent from other major powers. To this end, we devise a measure of foreign policy independence (FPI) that acts as a penalty on foreign policy behavior that closely matches the behavior of the system leader.

Foreign policy similarity is a measure of the extent to which a state's foreign policy profile is similar to that of another power. We draw on the network concept of structural equivalence (Wasserman and Faust 1994) and measure the extent to which states behave in similar ways towards similar targets. Rather than take a count of events, which we do above, we weight all foreign policy behaviors using the Goldstein scale (Goldstein 1991) which attaches a 0-10 ranking of the intensity of conflictive and cooperative events. We aggregate these scores annually following the methods suggested by Dixon (1983), to create annual weighted score to summarize the central tendency of foreign policy behavior initiated by one state relative to a target. Using these two profiles of cooperative and conflictive behavior, we then measure the correlation between these separate foreign policy profiles for each state and those of the system

leader (the United States)<sup>11</sup>. This process produces a correlation coefficient, ranging from -1 to 1, with higher values representing a greater degree of similarity between the annual foreign policy profiles of two states.

We weight cooperative and conflictive behavior using our indicator of foreign policy independence by subtracting the FPI indicator from 1. When there is no correlation between a state's foreign policy behavior and the system leader's, the state receives no penalty to its behavioral rankings. In contrast, when a state exhibits foreign policy behavior increasingly similar to the system leader, its willingness to be an independent force in the international system may be questioned. As that FPI coefficient increases, it serves to diminish the overall impact of a state's behavior on its overall major power behavior ranking. As summarized in Figure 4, the FPI indicators are combined with the cooperative and conflictive behavior of each state through multiplication, before the cooperative and conflictive components of major power behavior are aggregated together using the arithmetic mean to form our overall measure of major power behavior.

### **Attribution of Major Power Status in International Relations**

This effort differs from our previous work in that here we seek to establish whether and how behavioral and capability traits influence the attribution of major power status. Before we can achieve this goal, though, we search for validity in our measures by cross referencing them with the major power typology identified by Corbetta, Volgy, Grant, and Baird (2008), who differentiate between status consistent major power, overachieving status inconsistent major powers, and underachieving status inconsistent major powers. Although our data covers a 17 year period, we aggregate to the country level for the entire time period, measuring both the central tendency and standard deviation of the three measures over this 17 year period. We

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<sup>11</sup> These calculations were implemented in UCInet version 6.528(Borgatti, Everett, and Freeman 2002)

acknowledge that looking at the entirety of the post-Cold War period is not nearly as precise as the 5-year windows used by Corbetta, Volgy, Grant, and Baird (2008; 2010), but note that, in classifying major power status for the entire era, our interest is both in the precise estimates of the status, behavior, and capabilities as well as in their fluctuations over the era. In this manner, we can look at both the consistency of their intersection, as well as the individual stability of those characteristics over time.

Figure 5 illustrates states' average level of attributed major power status for the post-Cold War era. It compares the central tendency of attributed status (on the y-axis) to its standard deviation (on the x-axis). For our purposes, we are most interested in those states falling in the upper-left quadrant of this graph—those consistently receiving elevated levels of attributed status. Unsurprisingly, the relationship between the means and standard deviations of attributed status is curvilinear and heteroskedastic. States receiving both high and low levels of status appear to do so consistently, while those receiving moderate levels of status experience much greater variability. This pattern appears to lend validity to this indicator of attributed status.

Figure 6 refocuses attention towards the upper-left quadrant of figure 5, including only those states receiving a value of .8 or higher on the status attribution indicator. Of immediate notice is that a series of clusters seem to appear. As the system leader, the United States resides alone with a status of 1. Next, with status of approximately .95 or higher is the cluster of the status inconsistent major powers identified by Corbetta, Volgy, Grant, and Baird (2008, 2010). While Germany's status is slightly lower than the other members of this cluster, its standard deviation clearly places it among this cluster rather than the next, which consists of Egypt, India, and Saudi Arabia. These states, most likely representing regional powers, experience greater variability in their attributed status than the status inconsistent powers. Indeed, glancing at their

scores for both capabilities and behavior explains why (see Table 2). Relative to the status inconsistent major powers, and although their behavior appears similar, Egypt, India, and Saudi Arabia all appear to experience either diminished or inconsistent capabilities (India and especially Egypt), or inadequate behavior (Saudi Arabia).

A third cluster appears to consist of Italy, Turkey, North Korea, and possibly Belgium. Belgium may be an interesting case, as it plays host too many intergovernmental organizations, most notably various organs of both the United Nations and the European Union. From our data, it is not possible always to differentiate between state visits to the Belgian government or these organizations, possibly inflating its score for community-based status attribution or attributing to its greater variance. Yet Belgium's capabilities and behavior appear to be in sync with those of North Korea, Turkey, and Italy. Together, these states may represent a third group of regional powers, either in ascension or in decline. North Korea is certainly attempting to augment its position in the international system, while the clustering of Turkey with Italy may be indicative of its long standing desire to join the European Union.

## **Determining Status Ascription**

Not only are a state's capabilities and behavior two of the components of its major power status, but they are also a theoretical determinant of the third component of its major power status: status ascription. We theorized that both the ascribed status from the community and the influence of the system leader are substantially determined by a state's military and economic capabilities as well as its conflictive and cooperative behavior. All of which leads us to several expectations that will help to test the validity of our conceptual construction of the constituent parts of major power status. We expect that major power capabilities, as measured in Figure 3

and major power behavior, as measured in Figure 4 will highly significant determinants of ascribed status, as measured in Figure 2. Moreover, we expect these determinants to also be highly significant determinants of the separate types of status ascription, community based and system leader based, as noted in Figure 2. We use OLS regression to test these expectations, and the results from our analysis are presented in models 1, 2, and 3, in Table 3.

In model 1, we see that both behavior and capabilities are very strong and significant predictors of total attributed status (the aggregation of community and system leader status). Perhaps, the most important feature of model 1 is that with only two determinants, it is explaining over 76% of the variation in total ascribed status of states for the period 1990 to 2007. This result alone provides strong validity for our earlier theoretical arguments as well as our overall conceptualization and measurement of the components of major power status. While explaining that amount of variance is impressive in and of itself, it is also important to interpret the coefficients in a substantively meaningful manner. According to model 1, if a state were to increase its major power behavior by one standard deviation, it could expect to see an approximate increase in total ascribed status of 0.16, moving from the being a 0.80 in ascribed status, to 0.96, clearly receiving the status of a major power. While, this would admittedly be a huge increase in behavior, it demonstrates the substantive impact behavior has on total ascribed status.

Model 2, which tests the impact of capabilities and behavior on community status attribution, is remarkably similar to Model 1. Again, our model is explaining over 76% of the variance of community status ascription, and major power behavior and capabilities are both strong, highly significant determinants. Model 3, investigates the effect of unusual capabilities and behavior on system leader attribution. Here, we find interesting discrepancies from Models

1 and 2. While the coefficients are again highly significant, their size is much smaller, and the model itself, is only explaining a little over 29% of the variance in leadership status ascription, as compared to over 76% for the previous models. Still, there is variance in the first two models that we are not accounting for; the theoretical determinants of this absent variance will be examined in more detail in the discussion section of the paper.

Even though we argue that conceptually there are three constituent parts to major power status, we would be remiss if we did not examine the theoretical components that make up each constituent part's effect on status, with the theoretical components of major power capabilities and major power behavior consisting of military and economic capabilities, and conflictive and cooperative behavior, respectively. Table 3 presents three models that are the disaggregated versions of the models presented in Table 2. In Model 4, total attributed status is the dependent variable, and for the most part the results are what we would expect. The model explains over 77% of the variance of total attributed status, and all of the theoretical determinants are strong and significant predictors, with the exception of military capabilities. While, the fact that military capabilities on their own are not a significant predictor of total status attribution is a surprise, perhaps it is not as large a surprise as first thought. This result may simply be demonstrating that, as been previously argued, that in the post-Cold War system, military capabilities are simply not as important as economic capabilities and other dynamics, at least when it comes to status attribution (Goertz 2009). This does seem to be the case as military capabilities is a strong, positive and highly significant predictor of total attributed status until economic capabilities are included into the model and then military capabilities lose significance.

As is the case with the aggregated indicators, the disaggregated measures of capabilities and behavior predict community status attribution quite well. Model 5 appears is very similar to

Model 4. The only remarkable difference is that, as we move to community status attribution, the sign of the coefficient for military capabilities has flipped, while still insignificant. However, once again until economic capabilities variable is added to the model, military capabilities are a strong, positive and significant predictor of community-attributed status.

In the final model, Model 6, we see a different relationship between the theoretical determinants and system leader recognition emerge, as compared to total and community status attribution. Both military and economic capabilities are important determinants of system leader recognition, while only cooperative behavior appears to earn status from the system leader. However, similarly to military capabilities in the previous models, conflictive behavior is a positive and significant determinant of leadership status attribution, until cooperative behavior is included into the model.

The disaggregation of the original three models demonstrates that: 1) depending on the form of status attribution under consideration, certain theoretical components of behavior and capabilities have a stronger impact on differing aspects of status attribution; and, 2) because the determinants that are insignificant in the full disaggregated models are positive and highly significant when their corresponding theoretical component is removed from the model, the simpler aggregated Models 1, 2, and 3 are arguably the most appropriate. They are the most appropriate theoretically, as well as in terms of model quality due to their large explanatory power, while being incredibly parsimonious. Moreover, the Schwarz criterion is smaller for the aggregated models compared to their disaggregated counterparts. This is not to say that the disaggregated models lack value. Their value is demonstrated by their apparent support of the argument that economic capabilities are more prescient in the post-Cold War era. The

information provided by the both sets of models should proved incredibly valuable in terms of theory testing, both existing and new, once the entire post WWII period has been coded.

## **Conclusions**

Although it has never formally surfaced in the literature, a complaint frequently heard among international relations scholars is that existing measures of major power status are simply "place holders" for specific country names. That is, in any empirical model, one would obtain the same results by replacing a major power variable with the proper names of the few states that belong to the major power club. The implication of this critique is that proper country names explain little theoretically and substantively. Along similar lines, international politics researchers have been criticized for using, at the same time, indicators of both major power status and capabilities in their empirical models (Ray 2003). The rationale behind this critique is that major power status is almost exclusively determined by the possession of material capabilities.

We concur with these criticisms to the extent that they highlight the inadequacy of existing measures of major power status. We depart, however, from these critiques in our belief that major power status matters in international relations research, and that the number of and ranking among major power states is a predictor of systemic dynamics and state-level interactions. Thus, the present research and our previous efforts have been aimed at providing a more exhaustive theoretical definition of major power status and a richer operationalization of the concept. We cover territory well-known to international relations scholars in tapping into the popular opportunity and willingness framework, and in suggesting that major power status requires both opportunity (the material capabilities needed to act as a major power) and

willingness (the desire to behave like a major power state). We cover, instead, new ground in our suggestion that status is something more than behavior and capabilities. Social Identity Theory suggests a third dimension to social status -ascription- and it indicates that ascription may come from the few who already have status (in group attribution), likely influenced by the strongest of the in-group (system leader) and/or from the larger social group (community attribution).

On the basis of this tri-dimensional conceptualization of major power status, we have identified in our previous work three categories of major power states: those who consistently display capabilities, behavior, and attribution; those who receive attribution while lacking either sufficient capabilities or unusual behaviors; and those who fail to receive attribution of status while displaying both the opportunity and the willingness to act as major powers. Because the three dimensions of major power status are intrinsically connected, this paper has been directed to investigating the extent to which status attribution depends on capabilities and behavior. In order to achieve this goal, we have attempted to develop a systematic procedure for measuring status, capabilities, and behavior that would eschew the existing ad hoc criteria for the identification of major power states. In particular, we wanted to avoid the traditional "we-know-a-major-power-when-we-see-one" approach, which leads to simplistically binary measurements of the major power concept.

The only instance in which we have felt confident assigning major power status *ex ante* is the uncontroversial case of the United States, which unquestionably has dominated the international system since the end of World War II. However, this expedient has allowed us to develop continuous scales for the multi-faceted attributes of the concept of major power status. And while we have had to make some unavoidable, arbitrary decisions in the measurement

process, in this way we have been able to provide a more fine-grained rank-ordering of states along the constitutive dimensions of major power status. As shown in the empirical section of the paper, these measurements have both remarkable face validity and considerable predictive power. In their aggregate or disaggregate forms, our measure of states' unusual material capabilities and behavior effectively predict the ascription of major power status.

Two findings in particular stand out. First, contrary to widespread belief, military capabilities alone do not predict major power status ascription. This finding provides empirical support for numerous analyses suggesting that post-Cold War international politics have changed considerably, and that economic dynamics are now more important than traditional military, geopolitical interests. Second, while still effective at predicting status ascription, material capabilities and behavior are better at explaining community attribution than system leader attribution. We suggest two potential explanations for the latter finding. First, the dynamics by which status is attributed differ markedly between the small group of existing major powers and the rest of the international community. Medium and small powers may be indeed looking only at material capabilities and behavior in recognizing a major power state as having status. However, it is possible that the existing major states may be looking at additional "signs," such as acceptance of certain norms of international behavior, standing under international law, participation and bargaining power in international regimes, and a certain degree of satisfaction with the systemic status quo. Such an explanation is consistent with the distinctions between status consistent and status inconsistent major powers we have identified in previous work (Volgy, Corbetta, Grant, and Baird 2008, 2010). A second possible explanation is that the system leader—the United States in this case—has attributed more status to those states that have acted to assist it with pursuit of policy objectives in the post-Cold War era. Note for example that

it attributes more status to states engaging in cooperative rather than conflictual behavior at a time when it has faced considerable opposition -often in the form of "soft balancing"- by other aspiring members of the major power club. Both potential explanations will require more examination in future work

Nonetheless, we believe that this exercise has considerable theoretical and empirical import. A visible contribution is that it allows us to circumvent the discrepancies, outlined in the introduction, between the polarity of the international system and the number of major powers as measured in existing data sets. It also allows us to capture more subtle differences among the major power states and movements up and down the major power ladder. Finally, it may lead international relations scholars to think more thoroughly about such widespread practices as the use of coarse major power measure as criteria for political relevance, and about the fact that current measures of major power status seem to significantly predict any kind of international phenomena without the ability to discriminate among them. Our future work is indeed directed at comparing the capacity of our measure of major power status to predict a wide range of international phenomena with the predictive power of existing measures.

Table 1: Material Capabilities (CINC scores) and Post Cold War COW Major Powers

1990		1995		2000	
<b>United States</b>	<b>.141</b>	<b>United States</b>	<b>.145</b>	<b>United States</b>	<b>.150</b>
<b>Russia</b>	<b>.128</b>	<b>China</b>	<b>.125</b>	<b>China</b>	<b>.131</b>
<b>China</b>	<b>.108</b>	India	.065	India	.068
India	.060	<b>Russia</b>	<b>.064</b>	<b>Japan</b>	<b>.053</b>
Japan	.050	<b>Japan</b>	<b>.054</b>	<b>Russia</b>	<b>.053</b>
West Germany	.030	<b>Germany</b>	<b>.031</b>	<b>Germany</b>	<b>.028</b>
East Germany	.027	Brazil	.026	Brazil	.026
<b>United Kingdom</b>	.025	North Korea	.024	North Korea	.024
Brazil	.023	<b>United Kingdom</b>	<b>.024</b>	<b>United Kingdom</b>	<b>.024</b>
<b>France</b>	.020	<b>France</b>	<b>.023</b>	<b>France</b>	<b>.021</b>

Note: Countries in bold are denoted Major Powers by the Correlates of War Project.

Figure 1: A typology of major power status

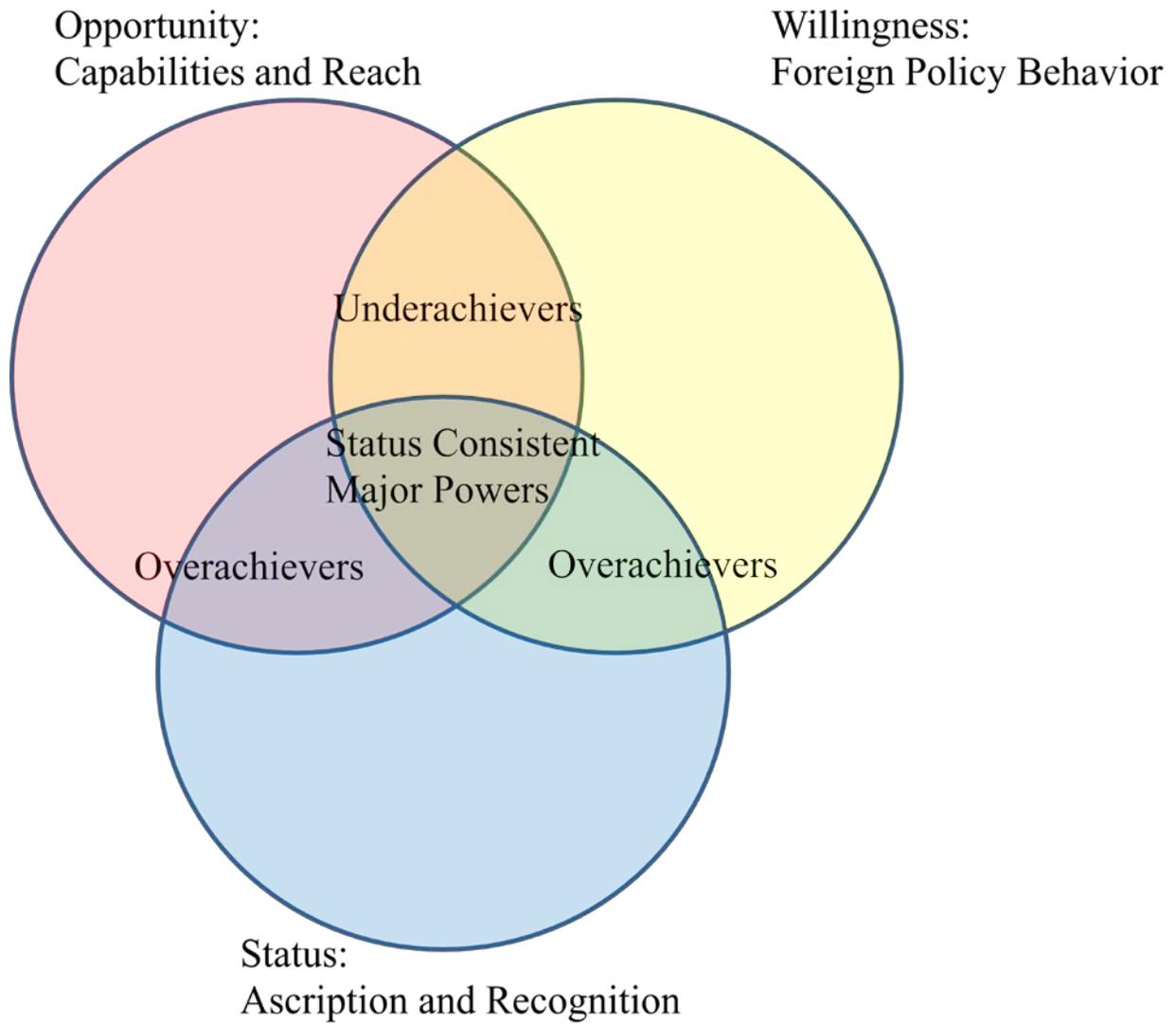


Figure 2: Status Attribution

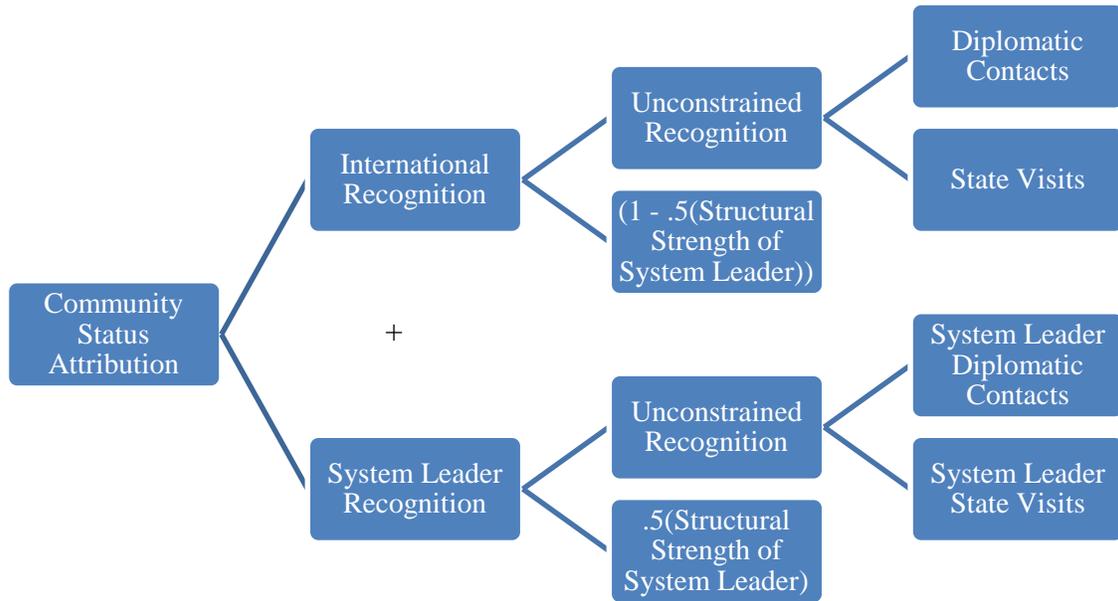


Figure 3: Major Power Capabilities

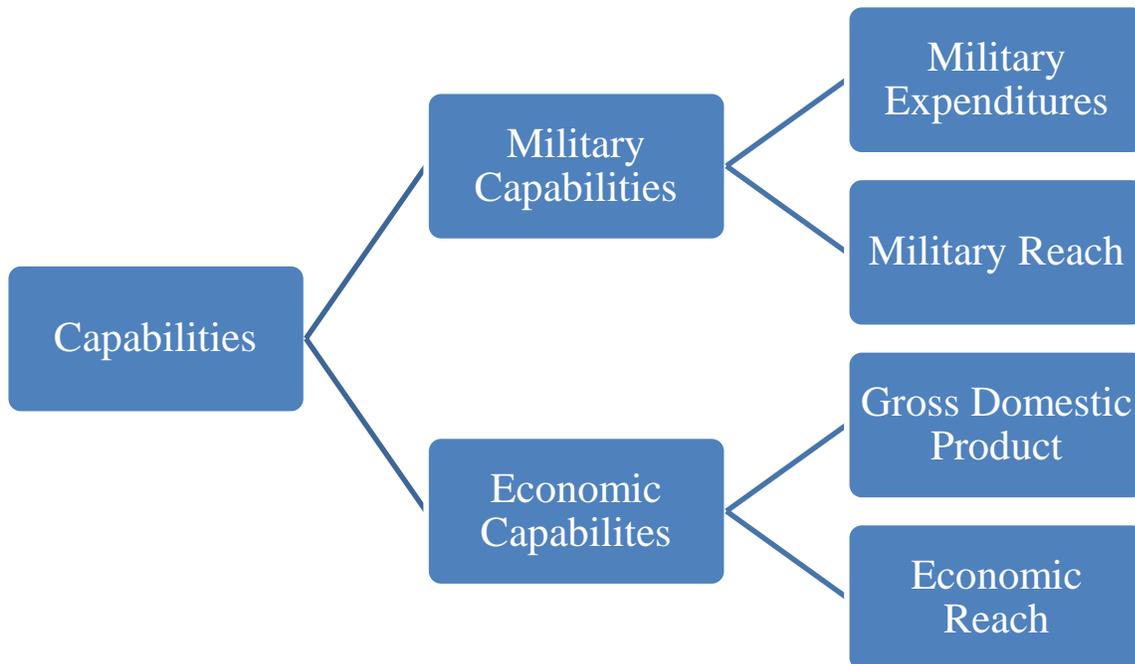


Figure 4: Major Power Behavior

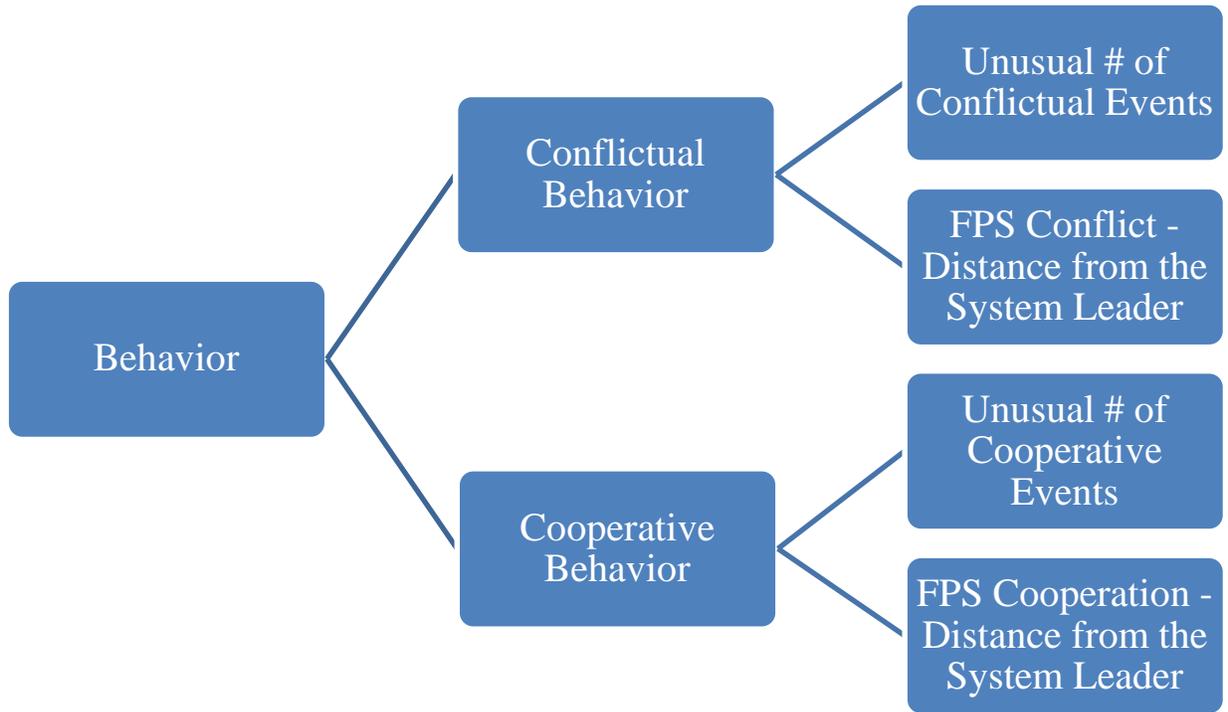


Figure 5: Major Power Status, 1990—2007

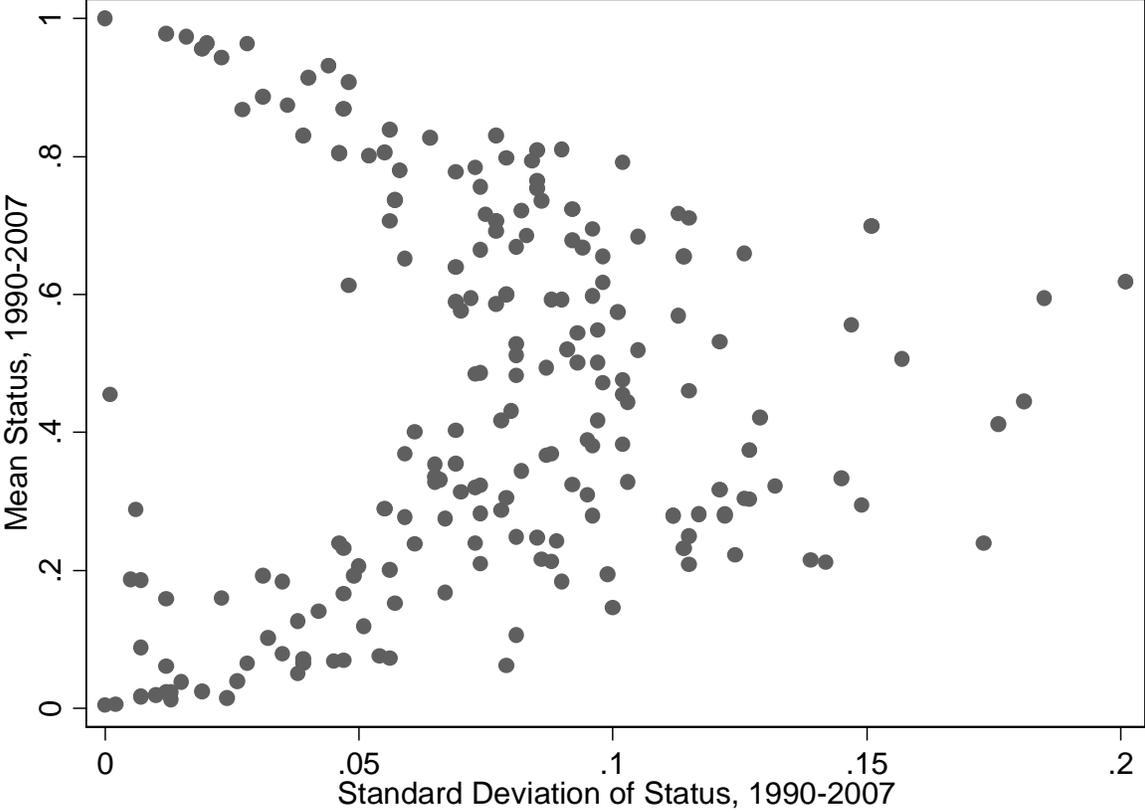


Figure 6: Elevated Major Power Status, 1990—2007

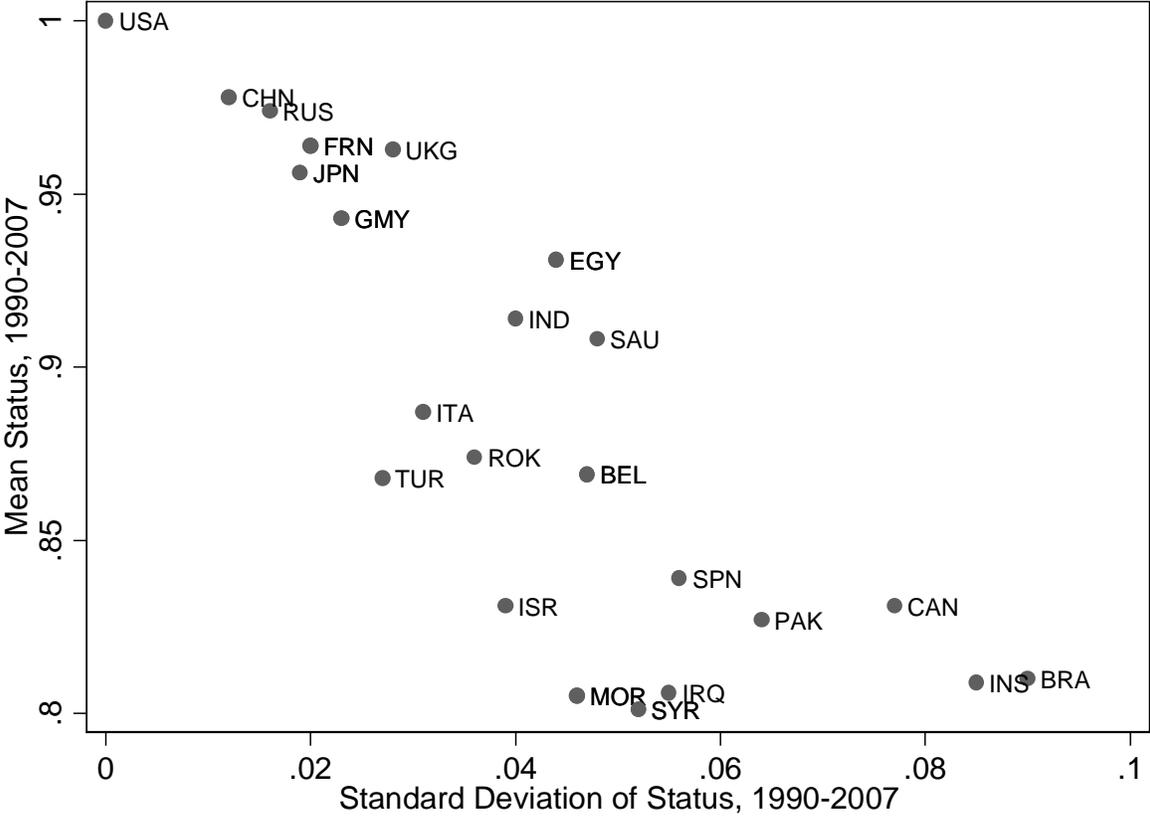


Table 2: Major Power Status, Capabilities, and Behavior, 1990—2007

	Status	Capabilities	Behavior
United States (SCMP)	1 (0)	.997 (.002)	1 (.0)
China (SIO)	.978 (.012)	.890 .044	.814 .048
Russia (SIO)	.974 (.016)	.841 (.096)	.799 (.074)
France (SIU)	.964 (.020)	.963 (.007)	.794 (.044)
United Kingdom (SIU)	.963 (.028)	.977 (.004)	.769 (.039)
Japan (SIU)	.956 (.019)	.975 (.008)	.787 (.035)
Germany (SIU)	.943 (.023)	.949 (.059)	.791 (.054)
Egypt	.931 (.044)	.631 (.017)	.772 (.046)
India	.914 (.040)	.813 (.019)	.788 (.049)
Saudi Arabia	.908 (.048)	.881 (.004)	.733 (.041)
Italy	.887 (.031)	.938 (.010)	.762 (.057)
North Korea	.874 (.036)	.851 (.017)	.799 (.038)
Belgium	.869 (.047)	.873 (.014)	.721 (.072)
Turkey	.868 (.027)	.812 (.021)	.748 (.046)

Note: Entries are mean scores for the 1990—2007 period. Standard deviations are in parentheses.

Table 3: Major Power Status Ascription, 1990—2007

	Model 1	Model 2	Model 3
	Ascribed Status	Community Status	Leader Status
MP Behavior	.600*** (.0405)	.571*** (.0388)	.0292*** (.0082)
MP Capabilities	.323*** (.0386)	.267*** (.0369)	.0557*** (.0073)
Constant	.0694*** (.0106)	.0318*** (.0092)	.0379*** (.0031)
N	3133	3133	3115
R <sup>2</sup>	.764	.762	.292

Standard errors in parentheses, clustered by country.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Table 4: Major Power Status Ascription, 1990—2007

	Model 4	Model 5	Model 6
	Ascribed Status	Community Status	Leader Status
MP Conflictual Behavior	.158*** (.0337)	.157*** (.0319)	.0012 (.0072)
MP Cooperative Behavior	.375*** (.0386)	.351*** (.0357)	.024** (.0089)
MP Military Capabilities	.0083 (.0302)	-.009 (.028)	.0173* (.0076)
MP Economic Capabilities	.392*** (.0403)	.348*** (.0363)	.043*** (.0096)
Constant	.0443*** (.0102)	.008 (.0090)	.036*** (.0033)
N	3115	3115	3115
R <sup>2</sup>	.778	.777	.296

Standard errors in parentheses, clustered by country.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

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