Nuclear Weapons and National Prestige

Barry O'Neill

Department of Political Science

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ABSTRACT: Some nations have sought nuclear weapons for the sake of national prestige, but this concept has been neglected in international relations. One reason is the lack of a clear definition. This paper defines prestige in a group as each member believing *that the rest believe* that the party has a certain desirable quality, where these beliefs confer influence in the group. It shows that nuclear weapons are "public events" in a certain sense and thus can be natural bearers of prestige, but that social development achievements can sometimes be reframed to be public events and bear prestige. A game model of showing one's prowess and modernity for the sake of prestige has two equilibria – one where the party displays its skill whenever it can, but another surprising one where the party sometimes abstains from a display. The world community has ways to promote the safer equilibrium.

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1. Introduction

National leaders regularly claim that prestige is important, but among international relations theorists the concept has almost disappeared. One problem is that its meaning is unclear, and without that it cannot have a special role in explanation. Here I propose a definition of prestige and derive its consequences for the problem of nuclear proliferation. The paper surveys how historical studies and political analyses use the word (Section 2), then proposes a definition (Section 3). The definition puts prestige at the second level of beliefs: a party holds prestige in a group when each member believes *that the rest believe* that the party has a certain desirable quality, and when these beliefs confer influence in the group. Based on the definition, the paper discusses why prestige matters (Section 4), how to acquire it (Section 5), and finally it summarizes the consequences for preventing proliferation (Section 6).

The analysis derives two new conclusions about the subject. The first explains why building nuclear weapons is a natural way to gain prestige. Since prestige involves higher-level beliefs, technological achievements bear it more readily if they are "public events," in the sense of not only being known but being known to be known. Acquiring nuclear weapons can be a natural public event because it has a sharp, clear border – there is really no such thing as a seminuclear weapon. However achievements for social progress tend to have boundaries that are fuzzy. The paper suggests ways to turn social achievements into public events so they more naturally confer prestige.

The second conclusion is connected to the fact that, contrary to the usual way of talking, prestige is not really a commodity in the hands of the bearer, but a construction of the whole community. A game model treats a party who has a choice of showing publicly that has a

quality to some degree, or holding back from presenting the evidence. There are two equilibria; the first is an expectable one where the party's demonstration enhances its prestige, but the second equilibrium is unexpected: a party who demonstrates its quality can sometimes lower its prestige, and so should hold back. If the international community can institute the latter regime, fewer states will seek the bomb. The rationale behind the equilibrium is that an observer who had a positive view of the country will conclude that it is conducting its demonstration because it has failed to impress the other observers and so will adjust downwards. The argument has nothing to do with any norm against nuclear acquisition where a violator is seen as a poor world citizen. Here a country that builds a bomb harms its reputation for technical prowess, the very goal that the weapons were meant to achieve. The analysis leads to suggestions for policies promoting the non-proliferation equilibrium.

The definition shows that prestige is important within a strategic approach to international relations. Although prestige includes emotions and affective attitudes, it is more than that, and even writers who take a rationalist/strategic approach must consider it.

The definition is not aimed at uncovering what the word "really means" – it is a proposal. No precise account can reproduce all the senses of a word in natural language, and in any case that is not an worthwhile goal. The criterion for a formal definition is that it should be clear, it should more or less fit with an extant usage of the word, and it should lead to productive theories.

2. The sources of prestige

Prestige has been a recurrent theme when states acquired the bomb. To Charles de Gaulle, the issue of French nuclear weapons involved not just military strategy but "Will France remain France?" Mao stated that China built its weapons in part for international status. Australia's little-known nuclear quest during the 1960s was seen as motivated by the military's wanting to stand proud beside their colleagues in the United States and Britain. Indian leaders expected that their 1974 explosion would enhance their country's prestige just as that had helped China and France, and many of them predicted more of the same benefits from the 1998 tests. According to many analysts, Saddam Hussein initiated an Iraqi program to gain the prestige that would make him a regional leader and diminish American influence. North Korea and Iran also hold these goals to a considerable extent. Prestige is not the only motive for these weapons, and for certain states it seems to have had no role at all, but it has often been quite important. It led India to test its weapons even though that has probably decreased the country's security overall.

This behavior repeats an old pattern. During the 1400s, a central weapon was the artillery bombard, a wide-mouthed cannon that fired stones against a castle's walls. Some European powers wanted a bombard of awe-inspiring size, with France building the *Dule Grillet*

¹ Kohl 1971, quoted by Sagan 1996/1997, 79. Thayer 1993 documents the prestige connections of the British and French programs.

² Johnston 1995/1996, 8.

³ Walsh 1997.

⁴Chandrasekhara Rao 1974, quoted by Treverton 2000, 15.

⁵ See for example Schindler 2000.

and Scotland the *Mons Meg*, which could hurl a 330-pound ball for two miles. They were impressive but impractical, as their bulk made them vulnerable to capture in a retreat. A century later, each large sea power insisted on at least one supersized warship, heavily armed and ornately decorated. Scotland had the *Great Michael*, England the *Harry Grâce à Dieu*, France the *Grand François*, Sweden had the *Elefant*, and Portugal the *São João*. Prestige insisted on size, the military historian J.R. Hale commented, but he judged that the money would have been better spent on several smaller ships. At the end of the 19th century Germany took this attitude to dreadnaughts, hoping to be seen as an equal of Britain in the world's eyes. Currently the "aircraft carrier club" has nine members, Brazil, France, India, Italy, Russia, Spain, Thailand, the United Kingdom and the United States, but some of these countries have only one carrier which addresses no realistic security concern and because of the expense, is not kept at an operational status. Historians have seen prestige as a reason that European states sought colonies and foreign bases, that France declared war on Prussia in 1870, and that Mussolini invaded Ethiopia. In 1953 the Central Intelligence Agency produced a lengthy survey of US

⁶ Smith and Brown, 1989.

⁷ 1975, 504.

⁸ Art 1973, 36-39.

⁹ Lilach, 2002, assembles evidence that prestige is at work.

¹⁰ E.g., Cohen 1976, Bell 1996.

¹¹ Howard 1948.

¹² Mori 1978.

prestige, country-by-country. Paul Nitze, an architect of American Cold War strategy, wrote "[t]oday it would appear that the most important tool of foreign policy is prestige," and went on to expand on the concept. Internal American documents used prestige to justify pressing on in Korea and Vietnam, with Secretary of State Henry Kissinger asserting in his memoirs that "[n]o serious policymaker could allow himself to succumb to the fashionable debunking of 'prestige', or 'honor' or 'credibility'." More recently members of the US Congress have cited it as a reason for or against intervening in Haiti, Somalia, Bosnia and Kosovo.

With national leaders and historians insisting that prestige matters, one would expect to find it well dissected in the international relations literature, or at least find an explanation for its absence. In the 1940s and 1950s Morgenthau and others raised it as central in international politics, ¹⁶ and a few recent authors have seen it as a missing element in current theory ¹⁷ or have treated related concepts like status or reputation. ¹⁸ Within the whole security literature, however, prestige is seldom mentioned. In Morgenthau's view it is ignored partly because it is intangible and partly because it became linked to an outmoded, pompous style of diplomacy.

¹³ 1960, 15.

¹⁴ See for example Kim 1996, and Milliken 1996.

¹⁵ 1979, 228.

¹⁶ Some examples were Nicholson 1937, Morgenthau 1948, Herz 1951, and Niebuhr 1959.

¹⁷ For example, McGinn 1972, Gilpin 1981, Kim 1996, Lavoy 1993, 1997, Thayer 1993, Ishibashi 1998, Sylvan, Graff and Pugliese 1998, Markey 1999, 2000 and [author] 1999a.

¹⁸ Examples are Luard 1986, Eyre and Suchman 1993, and Sagan 1996/1997.

Another reason may be the lack of a clear definition. Lavoy notes that a nuclear program not explainable by security or technological motives often gets thrown into the bin of prestige.¹⁹ Applied so widely, the concept becomes theoretically useless. The purpose of this paper is to define prestige and draw out the definition's immediate consequences.

A database of historical attributions of prestige was assembled. The computerized version of *Historical Abstracts* was searched up to the year 2002 for "prestige" applied to a state in an international context with an identification of the source of the prestige. Both gains and losses in prestige were included, as were instances where states simply expected a gain or loss from some event. The reason was to guide the definition and judge its adequacy. The purpose was not to compile estimates of frequencies or to test statistical hypotheses – the list involves too many judgments and biases for that -- but to ensure that the definition is not overly tied to selected cases, and to let one judge in a general way the kinds of events that confer prestige. The paper will later connect some of these categories to the definition.²⁰ There were 249 causes identified, and they involved the following categories.

In about 70 cases prestige depended on military possessions and actions, especially

¹⁹ 1997, 71.

²⁰ The complete list is available from the author. *Historical Abstracts* assembles abstracts from academic sources in many languages, excluding American history. It was supplemented by an informal search of the JSTOR database of academic articles, using search phrases like "national prestige," or "France's prestige." Some of the latter citations are noted in this section, but not included in the counts. The counts are rounded to avoid an impression of precision. In some instances a single abstract generated more than one source for prestige.

successes or failures in war. The size of forces and the possession of particular weapons were constant themes, especially those indigenously built -- Sternberg discusses Israel's Lavi fighter aircraft.²¹ The possession of a large navy was often mentioned, with an emphasis on foreign naval bases and naval visits.²² About 25 more cases involved *possessing foreign territor,y* such as colonies or sections of Antarctica claimed by South American states.

About 40 determinants of prestige involved *taking moral, responsible actions*, in particular, helping foreign parties in need, such as Russia's role as a protector of Christendom beyond its borders, China's construction of railways in Africa, or Argentina's championing of labor at the International Labor Organization. Foreign aid conferred prestige, as did acting as a mediator in a foreign conflict, or respecting another state's sovereignty, but prestige was lost by pursuing unjust wars.

About 35 sources of prestige involved *being deferred to, supported, or not being defied,* such as standing up to an adversary, having one's citizens treated well in foreign places, achieving a diplomatic success that forwards one's interests, extracting compensation from another state for a harm, or simply possessing allies. About 15 further cases cited *independence or assertiveness* -- insisting on one's sovereignty in the face of a large power, sending forces to a military engagement (without reference to ultimate success), or, on the negative side, shrinking from a conflict involving important interests. About 20 more cases involved simple *recognition by other countries,* such as acceptance into international organizations such as the League of Nations or the European Economic Community, being chosen to host an important meeting,

²¹ Steinberg 1979.

²² See especially Lilach 2002.

attendance at an exclusive conference, exchange of diplomatic visits, or signing a treaty implicitly recognizing one's importance. In 10 more cases simple *foreign involvement* counted – just being on the scene. Trading with the New World brought prestige to European powers, and in recent times exporting arms has counted for this category.

Scientific, technological, cultural and sports achievements yielded prestige in about 30 cases. Technological examples were possessing airlines or airships, nuclear power, space exploration, or, on the negative side, the prestige cost of Chernobyl. May discusses the Concorde supersonic airliner, which was perceived early on as prestigious but economically unjustified, ²³ and Adler sees Brazil's interest in nuclear energy as a symbolic response to Argentina's nuclear weapons program. ²⁴ Culture and science were exemplified about 10 times in this group, including the founding of Hebrew University, or conducting foreign scientific or exploratory expeditions. ²⁵ Four abstracts referred to the elaborate architecture in a state's capital city. Sports examples emphasized world competitions such as the Olympics, in contrast with achievements at only national events.

Finally, about 20 cases involved *economic strength, internal order, civil liberties and the rule of law,* including Italy's revaluing the lira for prestige reasons, or Britain's placing the sterling on the gold standard. France was seen as losing prestige for the Dreyfus Affair, as was the United States for Watergate.

²³ 1979

²⁴ 1987.

²⁵ Hansen 1996, and Stewart 1998, for example, discuss mountaineering.

3. What is prestige?

This section proposes a definition, or really two related definitions, since research on historical examples made it clear that the concept divided into two subtypes, here called *specific* and *reflexive* prestige.

Defining "specific prestige"

Specific prestige involves prestige for a certain desirable trait, an identifiable innate quality. States pursue prestige for a various traits, such as democratic ideals or athletic skill, but for nuclear weapons in particular the traits are typically technical prowess, or, more broadly, progress and modernity of the kinds that qualify a state for full-fledged membership in the world system. A 1961 US State Department memo on the consequences of a Chinese test feared that many Asians would raise their estimate of Chinese military power and would see communism as a better way to organize the resources of developing states. Similarly, according to Dr. A.P.J. Abdul Kalam, the head of India's Department of Defense Research and Development, the 1998 tests showed that "India has got the size and weight to do it." Dr. R. Chidambaram, the head of India's Atomic Energy Commission, pointed out that the fissile material used in all five tests was completely indigenous.

According to the definition, prestige involves beliefs about others' beliefs about the trait,

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²⁸ Bangalore Deccan Herald. May 18 1998.

²⁶ On the concept of modernity and system membership, see Meyer 1999.

²⁷ McGhee 1961.

that is, beliefs at the second level. At the "zero'th" level is the true situation, the objective fact about the subject's quality. At the first level there is "esteem" or "respect" or "admiration," where the members generally believe X has the trait. Prestige is located at the second level. If reputation is defined as a general belief in one's quality, then prestige is a reputation for having a reputation. Also, it confers power in the group.

Party X has *specific prestige* for a trait in a group if

- (a) the group members generally believe that they believe that X has the trait;
- (b) they generally believe that they see the trait as desirable; and
- (c) on account of (a) and (b), X gains power in the group.

Direct consequences of the definition

The definition's implications should fit with our natural ideas about prestige, and if they do, this helps to confirm its adequacy. The first and most important element to justify is putting prestige at the second level of beliefs. This implies that to be non-trivial prestige requires two or more observers, a fact that fits with our way of talking. After a private interaction someone might tell the other "you just went down in my esteem," but it would be odd to say, "you just lost prestige with me." This element also separates it from related concepts such as social face or social norms, since a pair of people interacting alone could follow norms of equity, such as reciprocity or politeness.

Defining prestige as beliefs about beliefs fits with the idea that it is a publicly recognized fact. Members of a group assume that the others are mutually aware of a party's prestige.

Alternatively, imagine a large country with a powerful military surrounded by small neighbors. It interacts with them pairwise and intimidates them into accepting its way. When a small state complies it is paying no attention to what the others are thinking or doing in regard to the hegemon. If prestige were simply a general belief in the large state's power, this situation would have to count as prestige. However intuition says that it is not, that these are disconnected acts of pure coercion. Similarly, by the definition prestige is not involved since compliance comes from beliefs that are only first-order -- each small state's knowledge of the large one's military resources.

By the definition one can have reputation without prestige or prestige without reputation, and this is in fact a meaningful distinction. Everyone in the group may think you are talented, but if they do not realize that they all hold this opinion, you have reputation without prestige. Students at a certain university might feel they are getting a poor education, but they all hold back from saying this out loud and each continues to think that the rest think highly of it. The university will then have high prestige but a low reputation. These situations are not uncommon when there is pressure to suppress one's true opinion, and they generate interesting consequences when the poor assessment rises to the second level, and prestige falls down to match reputation. Lohmann's account of the swelling public demonstrations against the communist East German government can be interpreted as the regime's low reputation among the populace finally pulling down its prestige as well, when the demonstrations made it clear to everyone just how unpopular the regime was.²⁹

Certain implications follow from condition (c), that prestige yields power in the group.

²⁹ 1992

Someone can have a reputation for being happy and the group can be aware of that reputation, but we would not say the person has prestige for happiness, since second-order beliefs about happiness do not confer power. Also, a prerequisite of having power is the ability to form intentions and make decisions towards goals. A soldier who dies in war is said to gain "glory" but not "prestige." Further, prestige cannot apply to objects -- the Grand Canyon may be grand, but it does not enjoy prestige because it cannot wield power. States hold prestige, however, because they can form intentions in the collective sense, as analyzed by some writers on the philosophy of action.³⁰

One puzzle is that prestige is sometimes attributed to inanimate objects, as when a neighborhood, an occupation or an automobile is said to hold it, and anthropologists speak of prestige gifts or prestige languages. However the context implicitly specifies a group of people, such as those living in the neighborhood or owning the automobile or speaking the language, and the claim is really that it is this group that has prestige. A linguistic sign that the object is only a mediator is that the car or neighborhood can be called "prestigious," whereas one cannot apply that adjective to a person.

The "desirable" quality in condition (b) may be one that is normatively positive in the group, like wisdom or leadership, or one simply desired by each member, like military strength. According to (c) prestige must yield "power." This word is often associated with getting one's way in spite of others' resistance – we talk of power "over" people, but here it is meant more broadly than that, simply as the ability to get one's way. Someone with prestige for rose-

³⁰ See, for example, Tuomela 1995.

growing will have his opinions sought out and his techniques copied. The other growers imitate him willingly.³¹

Some writers have seen prestige as contradictory. Nuclear weapons both raise and lower it, the arguments goes, since some observers will respect a proliferator more and others less, so it could not be a serious motive for building them. The resolution is that by the definition specific prestige involves both the particular reputation being sought and the reference group to be impressed. One reaction to the India's nuclear tests was that a country with such a rich culture had no need to seek prestige in that way. However India wanted prestige for qualities like technical advancement, and its cultural tradition was of no help for that. Similarly, during the 1960s Canada placed US nuclear weapons on its aircraft and missiles, and while this may have raised its prestige within NATO's military, it lowered it among non-aligned countries. For India, two different qualities were at issue, and Canada was facing two different reference groups, which presented a dilemma but not a contradiction.

Defining "reflexive prestige"

Some historical episodes reveal another mechanism behind prestige. In the prelude to World War I, an Austrian government minister announced that if the country remained passive

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³¹ Some writers would call this "influence," but this word has its own difficulties, as sometimes it is used without implying intentionality. For an analysis of power fitting the present conception, see Morriss 2002.

³² [author] 1999a.

after the assassination at Sarajevo, the country's "prestige would come to an end." If Austria allows itself to be treated this way now, he was implying, it will be treated poorly in the future. This is different than the argument that unless Austria convinces the world that everyone recognizes that it has a certain specific quality, it will be treated poorly. There is no reference to any inner trait – the issue is Austria's behavior.

In his chapter on prestige Morgenthau describes a similar example.³⁴ In 1805 Napoleon and Pope Pius VII were to meet on the road to Nemours and travel together to Paris. The Emperor arranged that the Pope, in his white shoes, would have to walk across the dirt to get to the carriage, and also contrived that the Pope would sit at his left. According to the Duke of Rovigo, whose memoirs Morgenthau used for his account, ". . . this first step decided without negotiation upon the etiquette to be observed during the whole time that the Pope was to remain at Paris." (The climax was the famous coronation ceremony, where Napoleon took the crown from the Pope's hands and put it on his own head.) Morgenthau cites this as involving prestige, but as in the Austrian case it does not involve any specific inner quality. Influence is determined by the precedent of past influence, or successful assertiveness or demand for deference. Prestige becomes circular, with power conferring prestige which confers more power. The formal definition is:

A party X has reflexive prestige in a group if

(a) the group members believe that the group members generally believe that X has power in the group, and

³³ Quoted by Sylvan, Pugliese and Graff 1998.

³⁴ 1948, 73.

(b) on account of (a), X gains power in the group.

The earlier definition included the idea that the trait is desirable, but that condition is unnecessary here, since the trait is power and one can assume that the members want it. With reflexive prestige, the role of the specific trait is played by power itself, and it is roughly accurate to say that it is prestige for having prestige, hence the name. Both are subtypes of one concept.³⁵

Comparison with past definitions and with related concepts

Past authors tended either to not define the word, or define it in ambiguous terms, often proceeding to discuss it in ways unrelated to the definition. For the sociologist Talcott Parsons, prestige was "the relative esteem in which an individual is held in an ordered system of differentiated evaluations," but how can one interpret this? Esteem is always relative and always involves differentiated evaluations, so after redundancies are eliminated he seems to be equating prestige with esteem, and we must wonder why he did not say that directly. His definition ignores the public nature of prestige, that someone who is esteemed by many people but only secretly, does not hold prestige.

The international relations literature usually cites Morgenthau: prestige is "reputation for

³⁵ Only one occurrence in the historical database clearly violated the present definitions: Visram, 1989, told of Indian troops recuperating in Britain during World War I, whose letters home were censored for any complaints to protect British "prestige." In the system proposed here, private letters are an odd context to apply the word.

power." He stipulated that "power" meant not power over inanimate objects, but power over people, wielded by one mind over another, where others are complying because one has changed their incentives. He might then have said "prestige is reputation for psychological power." This seems somewhat like this paper's reflexive prestige, but his term "reputation" needs clarification. If it refers to a first-order belief that is not adequate, as discussed above.³⁷

A definition of prestige should distinguish it from nearby concepts.³⁸ The closest relative is *moral authority*, which can be seen as a particular kind of prestige, that acquired for morally good acts, and yielding a particular kind of influence, a special voice on moral issues. *Status* is a better word than prestige within a defined hierarchical system with explicit rules, as in an organization with ranks and titles. The related concept of *legitimacy* can be defined as the

³⁶ 1951. Wegener 1992 gives a recent sociological treatment.

Past definitions agreed that prestige involved esteem and power but tended to place it at the first level of beliefs. An account that anticipated Morgenthau's was Hawtrey's 1930: "[t]he reputation for strength is what we call prestige," but Nicholson, 1937, reversed this: "power based on reputation." Other international relations definitions were by Herz 1951: "the esteem or credit accorded to a man by others"; McGinn 1972: "the reservoir of favorable opinion accorded to an individual by members of a particular group"; Gilpin, 1981: "the reputation for power ... the credibility of a state's power and its willingness to deter or compel other states"; and Sylvan, Graff and Pugliese 1998, who bring in identity: "the recognition of a certain proficiency at precisely those types of interactions most valued [because they form the basis of] the group."

³⁸ Most of these are treated by [author] 1999a.

group's belief of first and higher orders that a party has a right to authority by virtue of the party's institutional role. It assumes a formal group structure like "status" but shares the moral element of "moral authority." Another concept, degree of *face*, as in "saving" or "losing" face, is an index of deference behavior, a description of the equilibrium of the game of who defers to who, involving the first and second-order belief in the group that the members will defer to the party in interactions. It is close to reflexive prestige but stresses direct interactions involving the possessor, rather than power over what someone does towards third parties. Finally, there is *personal honor*, whose elements vary by culture, but generally involve the individual's goals including a willingness to defend the group and a desire to ensure that the group sees the individual as honorable. Unlike prestige, face and status, this trait is the person's privately known motivation and goal, not the group's response to the person. The complementary concept of *social honor* is the group's estimate of someone's personal honor.

4. Why prestige matters

In a trivial way prestige matters by definition because it yields power, so a better question is why power should come from second-order (as opposed to first-order) beliefs. There are two general reasons: specific prestige yields power when others use it as an indirect indicator for one's quality; and either specific or reflexive prestige can be valuable for its own sake.

In the first case an observer who wants to assess a "subject's" quality knows that others

hold important parts of the evidence, and so forms judgments about others' opinions. The subject will then want a general belief among the observers that these opinions are high, that is, will want specific prestige. For students choosing a management or law school, for example, the direct evidence on quality is diffuse, and in the last decade attention has centered on school "rankings" published in various newsmagazines and reports. The rankings of business schools are based largely on the responses of recruiters, alumni and executives that indicate whether these parties believe the school is good.³⁹ Since the school is trying to attract applicants it wants the readers to believe that the experts' believe in its quality. That is, it wants prestige. However, the goal is not prestige per se – the readers first-order beliefs are what matter. If others think a school is good, I can be confident of a good education. The focus on prestige is common whenever the trait is complex and multi-featured and the evidence is diffused. Academic departments are drawn to the "star" system, recruiting a professor whose move will be talked about in the field and beyond it. The university wants prestige among the many parties that influence its future, and most of these cannot access the broad evidence of quality. To understand why prestige matters in these situations one can look at others when it does not. It would be odd and off the point to say that someone "enjoys prestige" for being a professional tennis player. There is no need to consider others' opinions when one has the direct measure of games won.

In the second mechanism prestige matters on its own, rather than as an index of firstorder beliefs. Here second-order beliefs generate power involves situations when observers' actions towards the prestige-holder depend on each others' choices. In the phenomenon of

³⁹ See Fombrun 1996.

bandwagoning in alliance formation, the more states that are expected to support one side, the more likely that further states will join. Those choosing a side will ask themselves: Do others believe that state A or B is the more powerful? If so, this second-order belief may generate allies for state A even if there is wide private recognition that B is more powerful. This phenomenon occurs when there is a problem of the group coordinating on a party to its benefit. Those in an academic discipline will want to read the same papers as others are reading, and talk about the same issues, so they will use second-order beliefs as a guide. A university with prestige will attract professors who can expect their papers to be read more widely. When the problem is coordination, one wants a reputation for having a reputation for strength, and this is more important than the truth.

⁴⁰ Walt 1987

5. How to acquire prestige

Specific prestige can be generated in several ways. The first model, or "scenario," involves each party verifying the quality privately for themselves, then inferring from their experience that others probably have a certain opinion. Alternatively, the evidence can be presented in a public way, where everyone knows that everyone else is observing the same thing (Scenario 2, below). This section shows that the latter case is more effective in generating prestige, discussing just what "public" means, what kinds of evidence tend to be public, and draws lessons for nuclear proliferation. Finally, a third scenario examines the special case when evidence is made public through the subject's deliberate choice to reveal it, and reaches the counterintuitive conclusion that the subject should sometimes hold back from revealing it.

Defining "degree" of specific prestige

The definition above treated specific prestige as dichotomous, something that one has or not, but here we want to talk about matters of degree. A preliminary step for the scenarios is to extend the concept of specific prestige. What factors increase or decrease prestige? The natural approach to make the concept continuous is to focus on the elements in the definition that are matters of degree. There are many of these: the strength of second-order beliefs about trait, or the perceived strength of the first-order beliefs of this, or the degree of desirability of the trait, or the degree to which the group's beliefs give the party power, et. al. The common usage of "degree" of prestige probably takes account of all of these, but this section will consider only the first, the strength of the second-order beliefs, so that the degree of prestige will depend on how

high is everyone's estimate of everyone else's estimate of the party's quality. Some of the conclusions would surely stand even with a more complex definitions.

A party's *degree of reputation* can be defined as the average taken over the group of the estimates of the quality, and the *degree of prestige* as the average over the group of each observer's estimate of the degree of reputation. In Figure 1 the observed party holds the trait to an objective degree of 5, but the thinking eyeballs estimate it inaccurately at 7 and 4. Thus its reputation is the average, 5.5. Moving to the next level of beliefs, each estimates the other's estimate (each being somewhat inaccurate about what the other thinks.) The shaded eye believes the light one has an estimate of 3, and the light one thinks the shaded one's estimate is 5. Each is right about its own estimate, following the principle that we know what we ourselves believe. Prestige is the average of the four second-order estimates: (7 + 3 + 5 + 4)/4 = 4.75.

FIGURE 1 HERE

The numbers in Figure 1 are arbitrary, with no account of how each person estimates the quality or the other's estimate. The three scenarios below use a systematic mechanism for generating numbers like these, often with misestimates, by treating one's interactions with the subject as random draws from its "quality urn."

Gaining specific prestige from private evidence of one's quality

Two observers (the minimum number for prestige) interact pairwise and privately with the subject in a way that lets them assess the latter's quality. Based on their own direct experience they estimate each other's experience and hence the subject's prestige.

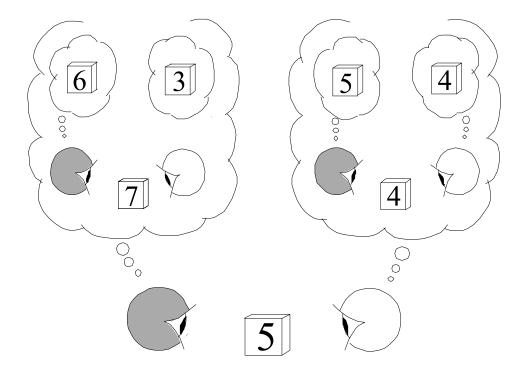


Figure 1: A numerical example showing quality, reputation and prestige.

Scenario 1: A subject (S) has an urn with two tokens, each either red (r) or blue (b). Blue tokens are desirable, and S is called *Weak* if it has r-r, *Medium* if r-b, and *Strong* if b-b. At the start two observers (O₁ and O₂) believe that the three possibilities are equally likely. Each O draws one token, views it without showing it to the other, then replaces it in the urn. (It will not matter here whether S knows the urn's contents or sees the colors drawn.)

The sampling can be interpreted as the observers' direct private interactions with S in which they gain some evidence about S's strength. Standard probability calculations give S's reputation and prestige as a function of the colors drawn by the O's. Suppose, for example, that both observers draw blue tokens. To determine S's reputation: each O holds zero probability that S is r-r, a $^{1}/_{3}$ chance that S is r-b, and a $^{2}/_{3}$ chance of b-b. 41 (It makes intuitive sense that a blue draw should render the b-b urn likely, since the urn makes a blue draw more likely.) The reputation of S for a given O is then the probability-weighted average of the three possible strengths: $0 (0) + ^{1}/_{3} (1) + ^{2}/_{3} (2) = 1^{2}/_{3}$. The subject's reputation will be the average of the two estimates. Here each observer's estimate is the same because both drew blue, so the reputation will be $1^{2}/_{3}$ blue tokens. Finding S's prestige takes a further calculation, with each observer assigning probabilities to what the other observer might have drawn and would consequently be thinking about S. The reputation and prestige for all possible patterns of draws are:

⁴¹ For example, P(urn is r-b| O draws b) = P(draws b| r-b) P(r-b)/[P(draws b| r-b) P(r-b) + P(draws b| b-b)] = $.5 \times 1/3 / (.5 \times 1/3 + 1 \times 1/3) = 1/3$.

	reputation	prest	ige
both O's draw red:	.333	.444	
one O draws red, one blue:	1.000	1.000	
both O's draw blue:	1.667	1.555	

On the average a subject will have one blue token and thus strength 1. As in many mechanisms of forming opinions in a group, this model yields prestige lying between reputation and the average strength. The extra noise introduced by the extra step, where an observer infers not just the urn but what the other drew and might be thinking, makes each more cautious about estimating prestige. The next scenario shows that this "regression to the mean" is partly mitigated when the evidence is presented publicly.

Gaining specific prestige from public evidence of one's quality

The important distinction is between a *known* event and a *publicly known* (or "public") event. For a known event, each group member knows it has happened. For a publicly known event, each group member knows it has happened *and* knows the others know that, and so on, for all higher levels of belief. Each of us may hear some news individually without being sure that others have heard it. If the news is announced at a meeting where we see each other there and listening, it becomes publicly known. Public knowledge of an event enhances prestige, because it operates the second level of beliefs where prestige is located. A modification of Scenario 1 shows this.

Scenario 2: Each O draws a private sample, as in scenario 1. Then an all-seeing intelligence who knows what is in S's urn awards S a prize if S has at least one blue token (i.e., if the urn is r-b or b-b.) The prize is a public event for the two observers, i.e., they watch each other watching the award.

Suppose that both O's draw a blue token. Before the award they will hold the values calculated in Scenario 1, for a reputation of 1.667 and a prestige of 1.555. How does the award change S's reputation and prestige? It has no effect on reputation since the award tells the O's that S has a blue token, something they already knew. Accordingly S's reputation stays at 1.667. However S's prestige rises from 1.555 to 1.611. It seems puzzling that non-news should induce the O's to change anything. The reason is that prestige involves not just one's knowledge about S but about the other O's knowledge. Before the award, for all each O knew, the other might have drawn red and be holding open the possibility that S was r-r. The award tells an O that the other knows that S is at least better than r-r. In fact both observers know the other is excluding this worst possibility, so the group's estimate of its own estimate of S's quality rises. If each were told only privately about the prize and thought the other was ignorant of it, neither prestige or reputation would change; S gains prestige because the award is a publicly known event. 42

What makes for a public event?

⁴² Geanokoplos 1994 discusses this phenomenon in a number of popular puzzles around the concept of common knowledge.

What makes an achievement publicly known? There are several conditions that promote it, and nuclear weapons and other large-scale technological projects generally satisfy them but events of social progress do not.

First, the event should have a *clearly-defined boundary* separating achievement from non-achievement. Orbiting an earth satellite, sending a mission to the moon, or building a supersonic airliner are prestigious because there is a clear dichotomy between doing them and not. The boundaries in these examples come from facts of nature – the laws of gravitation imply that a mission to the moon is unlikely to go only part of the way, and the laws of fluid mechanics make it unlikely that aircraft have a maximum speed just around the speed of sound. It can be shown that fuzziness of a boundary moves prestige more than reputation, towards the average. Another way of generating a clear boundary is to achieve the highest value on a measurable scale. Countries are aware of who has the fastest train (France) or the tallest building (Malaysia). The second highest or fastest may be close behind, but being number one what counts – the boundary between first and second is a socially constructed one, regardless of the numerical values. Amount of foreign aid is a fairly simple scale, and certain groups of countries are well aware of who is the greatest giver, both absolutely and relative to GNP. In high-energy physics research, accelerators can be scaled by the electron volts of energy transferred to a particle and so these have become vehicles for prestige. Irvine and Martin note that this area has sometimes accounted for 40% or more of states' expenditures on basic natural science, even though it became clear by the 1960s that the spending could not be justified by practical applications for nuclear energy. In 1967 the Soviet Union's Serpukhov accelerator became the most powerful in the world, and the country made sure to complete it in time for the fiftieth

anniversary of the Revolution.⁴³ These behaviors are explainable by the connection with prestige.⁴⁴

The boundary between first and second place can be arranged by agreement, by *setting up judges* as in an Olympic skating contest. The Nobel Prize has gained prominence because of the growing complexity of science. It collapses numerous considerations of quality into a committee's decision. Sometimes the results are used to generate a single scale as when countries announce their total of gold medals. Another socially-constructed boundary involves being the *first to achieve something*. The first jet airliner (Canada), the first earth satellite (USSR), and the first supersonic airliner (Britain and France) conferred prestige.

A second criterion for a public event is that *the parties expect it to grab each others'* attention. People must not only notice it themselves but expect that others will notice it. To exceed the threshold of attention, one large project counts more than many small ones.

Concerning the Aswan Dam, Rycroft and Szyliowicz write that for President Nasser, its "monumental size and scope were as much an attraction as was its technical performance." Related helpful factors are that the event should *matter to others' interests*, and that it should be *revealed suddenly*. Third, *manifest visibility* helps -- if people can see each other seeing one's

⁴³ 1985.

The argument here for visible measurable scales is quite consistent with the earlier one that prestige is less relevant for a measurable skill like tennis. In the former case it is prestige *from* certain evidence; in the latter, *for* a certain quality.

⁴⁵ 1980, 57.

achievement. Skolnikoff refers to countries' attraction to "visible technological feats," ⁴⁶ and Lilach states that aircraft carriers count more for prestige than submarines because they are more conspicuous, ⁴⁷ but this is not quite accurate. It is not just that they are visible, but that their visibility is visible. Knowledge of one's possession of a submarine may be widespread, but if an aircraft carrier pulls into a foreign port, the important parties there know that each other have seen it. ⁴⁸ The historical database shows that events in an international setting are important, that Olympic victories are more significant than records set in national competitions, and also that naval visits count. A modern airline that flies to other countries does more for prestige than a purely domestic one. ⁴⁹ The database indicated that prestige came from architecture in particular within one's capital, rather than in other cities where foreign diplomats would less often go.

A third factor taps the definition's connection of prestige and power. To confer prestige the event should be *related to power, either functionally or symbolically*. Sputnik involved the technology of ICBMs, and possessing colonies is seen as both a result and a cause of military power and it contains the symbolic element of controlling territory. Exploration has an obvious analogy with accumulating territory, so the climbing of Everest in 1953 (more often called the "conquest" of Everest) was seen as symbolically revealing the values by which Britain saw itself as gaining imperial power -- boldness, perseverance, and ability to gain the trust and cooperation

⁴⁶ 1967, 212.

⁴⁷ 2002

⁴⁸ Chwe 2001 discusses this element in the context of ceremonies

⁴⁹ Dierikx 1991.

of indigenous peoples.⁵⁰ An editorial in the London *Times* associated it with Sir Francis Drake's voyage in the Golden Hind.

Gaining prestige from social progress rather than nuclear weapons

Nuclear weapons are natural bearers of prestige, in part because they are clearly bordered – an explosion is either nuclear or not. They grab attention. Nuclear tests are often surprises, kept secret beforehand to avoid world pressure to stop them or embarrassment in case they fail. They make sudden headlines and controversy, so people are aware that others have gotten the news. It is ironical that just because the world worries about their spread they are better carriers of prestige. As evidence to support specific prestige they are related to the kinds of national skills that confer power.

One dovish Indian editorialist wrote that his country had conducted its nuclear explosion and now it was time for a "developmental explosion." However social development events generally do not explode; they tend to proceed gradually. A decrease in infant mortality of 1 percent does not make simultaneous headlines, and so does not ensure that everyone knows that everyone else knows it. Also, these events are usually not sharply bordered. A reported increase in a country's "quality of life" or "literacy rate" is hard to exploit for prestige since the hearer is uncertain about what constitutes a better quality of life, and even more uncertain about what other hearers will understand by the phrase. In the lucky case that a developmental advance is sharply bordered, sudden, and of concern to the external world, it should be fully exploited. An example is the eradication of smallpox, and some countries publicly cite the year they achieved

⁵⁰ Stewart 1998, 170.

this goal. A country's first democratic election also satisfies the criteria.

If a social advance does not have these features naturally, sometimes they can be added to it. One way is to publicly announce a contest or a challenge. Nikita Khrushchev claimed that Soviet GNP would overtake the United States by 1980. In 1957 he challenged the United States to a guided missile targeting competition to be held at some deserted flying range with categories for various ranges of missiles. Although this dealt with a military event and was perhaps a bluff, it aimed to take private knowledge and make it public and indicates one way that challenges and contests can also be applied to developmental progress. The connection of prestige with power suggests that one should focus on economic events that at least have a collateral potential to suggest international power, rather than try to convert purely cultural achievements into prestige.

Awards are the most straightforward way to add clear borders to developmental achievements, a good example being the Aga Khan Award for architecture in the Islamic world. Several winners are chosen every three years, and the regular practice is to mix awards for elite structures with those for projects for the poor, perhaps to avoid associating winning with backwardness. In 2001 they included an elegant hotel in Malaysia and an arts council building in Lahore, but also architectural designs for the homeless in Rajasthan, India.

Gaining specific prestige by not displaying one's quality

⁵¹ Anonymous 1957.

In the previous scenario, the subject won an award conferred from above, but building a nuclear weapon is different, since there one makes a choice to prove one's own quality. The next scenario, suggested by a model of Feltovich, Harbaugh and To,⁵² makes the important point that trying too hard for reputation and prestige can cost one in those very commodities. The analogy is a country deciding whether to build a weapon to show that it has some minimum technological skill.

Scenario 3: As in the past scenarios, the Subject's urn can be r-r, r-b or b-b, and each of two Observers draws a token from it. The subject, who knows the urn's contents and also what was drawn, then has a move: if S has a blue token, it can choose either to show it to the O's or to show nothing. The display is a public event in that each O knows the other sees it. The goal of S is to maximize the average of the O's estimates of its strength. A further assumption is that S pays a very small cost to show a token, so that if the reputational consequences of doing it or not were absolutely equal, S would not show the token.

In the first two scenarios the subject was passive, with the observers simply drawing their tokens and updating their beliefs, but here S makes a strategic choice. This introduces a circularity in the parties' thinking: S's decision to show a blue or not depends on how S expects the O's will interpret that move; likewise how the O's interpret the move and alter their estimates depend on how they see S's logic behind it. This scenario is then like a formal game, and

⁵² 2002.

analyzing it will involve finding a Nash equilibrium, which is a set of beliefs and plans for action that are consistent in the sense that no one would modify their own beliefs or plans if they knew the others'. The pure strategy (non-probabilistic) equilibria can be found by looking at all cases and eliminating those that fail this consistency test. Exactly two pass it:

- 1. Simple signaling equilibrium: If S has a blue token, S shows it.
- 2. *Countersignaling equilibrium:* If S has a blue token, it shows it only when some observer drew a red. (If both drew blue, S does not show it.)

The first equilibrium seems natural; S demonstrates its quality if it is able to. A Strong S (b-b) or a Medium S (r-b) S show a blue. The second equilibrium is less intuitive: a Strong or Medium S who had only blue tokens drawn shows nothing. In fact, at the countersignaling equilibrium if such a Subject displayed a blue token it would lose reputation. The Observers would have otherwise judged it as possibly Medium but more likely Strong, but showing a blue leads them to conclude that the other drew a red, so S must be Medium. The countersignaling equilibrium seems to go against past analyses of strategic information transmission, which imply that whatever strength you have, you should reveal it because refusing to do that will be interpreted in the worst way.⁵³ If a policeman stops me, should I tell him that my license is in my pocket, and just to convince him of that truth, I decline to produce it? The name countersignaling comes from this fact, that the equilibrium reverses the normal logic, but how is

⁵³ See for example Milgrom 1982, Milgrom and Roberts 1986.

this sensible behavior? It has this rationale: if both Observers draw blues and S shows a blue, each Observer can reason, "From my draw, I decided that S was possibly r-b but probably b-b. But in showing me a blue token, S knows that it is not telling me anything new, so this must be for the other's sake -- S must want to prove something to the other Observer, who must have drawn r. So S must be r-b." Each Observer repeats this soliloquy and concludes that S is Medium. Therefore an S who responds to a draw of two blues by showing its blue token loses prestige and reputation. The subject must always consider what each observer thinks about what the other observer is thinking about it. The countersignaling equilibrium is thus supported by considerations of prestige.⁵⁴

A good game model should reflect some worldly phenomenon, and countersignaling appears often when one looks for it. Suppose you are a politician with a good reputation, and an enemy has accused you of corruption. You possess evidence that the accusation is wrong, evidence which is not completely decisive but is significant. Should you present it publicly, or should you do what politicians often do, say that the accusation "does not dignify a response"? At the countersignaling equilibrium you would do the latter. To produce your evidence would suggest to an observer already on your side that the others have private reasons to doubt you, and thus its estimate of your honesty was too high.

It is important to understand what countersignaling is not saying. It is not saying that a Strong player has already impressed people, so showing a blue token is not worth the cost. The

⁵⁴ Orzach, Overgaard and Tauman 2002, reach a somewhat similar conclusion for choosing between an intensive or restrained advertising campaign.

cost of showing blue is arbitrarily small and was included only to eliminate some uninteresting equilibria. One could drop it or even have the subject get a small payoff from showing a blue, and the countersignaling equilibrium would still be there. Countersignaling is also different from a notion of Morgenthau's, who cautioned against the "policy of bluff," seeking more prestige than one deserves. He was certainly right that it can backfire, but that is not the point here. A Strong subject who violates the equilibrium by showing a blue token is not bluffing – it really is Strong. Perhaps the idea closest to countersignaling is Nicholson's "prestige through self-restraint," his example being Britain's policy of being generous to its colonies, relative to other European imperialist states.⁵⁵

It is important to note the simple fact that the game has more than one equilibrium. Therefore the outcome is indeterminate on "rationality" grounds alone. A proliferator's behavior is set not only by its interests and resources, but by history, customs and culture and other factors. These operate through its expectations about the rest of the world's expectations, and this gives the world community leverage to change the situation. Which of the two equilibria holds depends on all parties' expectations, so if the world wants less proliferation it should promote countersignaling. (In the model a token is then shown $^{1}/_{4}$ of the time, versus $^{2}/_{3}$ for the simple signaling equilibrium.)

Which regime is currently being followed? Some countries would build nuclear weapons in both worlds so it is hard to tell by overt moves alone, and a further complication is that there may have been a shift from one equilibrium to the other. However more detailed evidence might reveal a difference, such as just who is seeking or foreswearing the weapons. Under

⁵⁵ 1937, 32.

countersignaling, the non-nuclear group will include the least technically advanced countries, the ones who cannot do it, and the most technically advanced ones, whose skill is not in doubt. A conjecture is that after World War II the international community started at the simple signaling equilibrium, then moved to countersignaling where technically advanced countries started to reject the weapons. In fact there seems to have been a change after the first two decades – the slower pace of proliferation was quite contrary to the predictions of experts. The shift was spurred by various changes, especially the growth of a norm against nuclear use. ⁵⁶

There are many small actions that would move countries towards countersignaling. A 1965 State Department telegram suggested that the phrase "nuclear power" should no longer be used as a synonym for nuclear weapons state, since civilian reactors also constitute nuclear power, and applying that phrase only to military technology encourages proliferation. This is still good advice. Another equating of nuclear weapons with power is the United Nations Security Council, whose five permanent members have included only nuclear powers. ⁵⁷ Enlarging the group to include non-nuclear states would help. Aside from formal institutions, it is important how a country's diplomats are treated face to face. Underneath the rationales of Indian politicians for their test series, one finds a theme of rejection of their ideas and their

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⁵⁶ See Tannenwald 1999. The fact that countries like Britain and France have retained their weapons does not rule out a countersignaling regime, since having shown their technical ability, the choice of keeping or abandoning the weapons is another question.

⁵⁷ Rostow 1965.

deserved status in diplomatic interactions.⁵⁸ This treatment fortifies the simple signaling equilibrium by suggesting that one's prestige is low until one has tested a weapon.^{59, 60}

Even under the countersignaling equilibrium some countries of middle technology will want to show their technological skill and modernity, such as it is. A anti-proliferation response would be to promote the expectation that other manifestations than weaponry are better evidence of those qualities. Although now the focus has changed to technical and military approaches, up to the 1960s, after the first round of proliferation, the approach was more motivational. The 1961 State Department memo anticipating Chinese tests quoted above⁶¹ proposed a covertly-organized campaign to promote the view that developing nuclear weapons was technically unimpressive. According to declassified documents, US policymakers tried to encourage technical and nuclear-related substitute programs to gain prestige. Scientific exchanges and sponsorship of conferences on nuclear power were discussed for India,⁶² as well as scientific help on space programs and the peaceful uses of nuclear energy.⁶³ A State Department document

⁵⁸ Amitav Ghosh, *New Yorker*. 187-197, November 1998.

⁵⁹ There is analogy here with "systemic" approaches in personal counseling: the notion that a family member's harmful behavior can be corrected only by looking at the behavior of others around the person, or the notion that answers to teenage tobacco use, violence or drugs lie in changing the attitudes and behavior of adults.

⁶¹ McGhee 1961.

⁶² Lavoy 1993.

⁶³ US State Department 1965.

suggested that Japan be encouraged to build a nuclear merchant fleet.⁶⁴ To counter Chinese prestige gains over India from its test, the United States considered conveying its intelligence information to India to allow it to announce the details of the Chinese explosion.⁶⁵ Within the game model this corresponds to reducing the evidentiary link between a nuclear demonstration and one's actual technological strength. A further policy, which President Clinton may have followed after the Indian and Pakistani tests, is to avoid public statements that the country's motive was prestige, since pointing to the connection reinforces the simple signaling equilibrium.

Gaining reflexive prestige from precedent and symbols

Prestige means power, but the process of assigning power often presents a group with a coordination problem. Members want to act together in choosing a leader or allotting power, partly because the group will benefit from unity and also because no member wants to be following one leader when the rest are following another. Whether someone has power in the group can become a self-fulfilling prophecy: if everyone is aware of a general expectation favoring a certain party, that person may be chosen on that basis alone, without an objective reason. Expecting the others to choose the individual is grounds enough for each person to go along. The coordination game has multiple equilibria then, and the choice among them may be determined by an apparently arbitrary factor. One mechanism of selecting the equilibrium is a

⁶⁴US State Department 1964.

⁶⁵ Lavoy 1997.

public precedent of deference, of the kind Morgenthau discusses concerning Napoleon, and which is represented by many items of the list -- those involving having allies, not being defied, being on the scene and invited to participate or even host important events.

Another kind of public event that selects an equilibrium and confers reflexive prestige is the possession of a "prestige symbol." This is a cue for others to coordinate on allocating power, that is related to power in a symbolic way. It should be a scarce commodity, since coordination is undercut if too many parties have it. Many examples cited above of large-scale technical projects function both as evidence establishing specific prestige and as symbols for reflexive prestige. A typical prestige symbol counts as a "symbol" in that it is related to a larger class of events through the mechanism of analogy. The larger class is what the symbol represents, its "meaning." Building the Berlin Wall, that divides East and West Berlin, was both a part of and symbolized the whole communist division of Europe. A crowd pulling down a statue of a dictator in a capital city and dragging it off are part of, and symbolic of the leader's fall from power. The analogy is determined by a mapping between a part and the whole. What parts are chosen to be symbols? Often the part is a prototypical event of the larger class, one that has the expected set of properties, in the sense that a robin is a prototypical bird. Sometimes the symbol is an ideal event, or a stereotype, one that comes to mind by convention in this sense a robin is a prototypical and stereotypical bird. Especially in the case of prestige symbols a third mechanism appears -- the symbol is an ideal, a member of the class that has its distinguishing properties to the greatest degree, as when thinks of whales by choosing the largest whales. Prestige symbols tend to be the latter, to be ideals, such as the fastest jet, or the largest dam. Nuclear weapons fit this pattern. They are the not stereotypical weapon -- a gun would fill that role better -- but if the

essence of weaponry is to destroy, they are at the extreme.⁶⁶

6. Conclusion: prestige and proliferation

Current studies of proliferation tend to focus on technical or realpolitik approaches, like physically blocking the spread of the weapons by controlling nuclear materials or components, or deterring states from getting them, or inducing states to give them up. This approach has become dominant over the last several decades, and few studies now treat a proliferator's attraction to the weapons in the first place. This paper argues that prestige is generally important in strategic analyses, in particular for understanding proliferation, and that an analysis of its dynamics reveal how the community of states can reduce that attraction.

Prestige is strategically important, but recognizing that alone may not bring one to recognize the larger community's role. One reason is the way we usually think about it, the conceptual metaphor we use to understand about its workings. A conceptual metaphor is a way of thinking and talking about abstractions, by translating a constellation of concepts into another domain that is less abstract.⁶⁷ Money becomes a liquid, for example, so it can "flow," or assets can be "frozen," or it can be "poured down the drain." The importance of a problem is mapped into physical size. Metaphors help us think about complicated facts, but they can be misleading. The biological metaphor behind the "proliferation" and "spread" of nuclear weapons may encourage us to think of it as some amotivational phenomenon, and to treat it by the equivalent

⁶⁶ See [author] (1999a) for a discussion of different types of symbolism. Prestige symbols count as "focal" symbols in that system.

⁶⁷ Lakoff 1987.

of quarantines – one could not halt a spreading disease by dissuasion. The standard metaphor for prestige turns it into a commodity, so that one can "acquire," "hold," "bear" or "confer" it.

The metaphor sometimes becomes more particular and prestige becomes money, and can be "saved," "invested," or "squandered."

The money or commodity metaphor shifts the focus to the errant state, but this is the party whose behavior is hardest to control. From the definition and the models, it is clear that prestige functions differently than a commodity. For example, someone can have prestige without knowing it. In fact the prestige of nuclear weapons is in everyone's hands, and this is brought out very clearly by the finding that the game of prestige acquisition (Scenario 3) has two equilibria. Since both are full-fledged solutions, considerations of strategy alone are not enough to set behavior, which are set instead by the expectations of the whole group. The world community has means to disassociate nuclear weapons from prestige, e.g., by not equating the weapons with modernity or power, either in vocabulary or in who gets included in the higher

⁶⁸ See Goertz 1994, and especially Mutimer, 2000, who documents some consequences of this way of thinking.

⁶⁹ This is especially true in American speech. Examples of the commodity and money metaphors come from the 1990-1998 debates of the U.S. House and Senate, contained in the Thomas database: out of 199 usages of the word in the foreign policy context, prestige was "on the line" 18 times; "committed" 16 times; "invested" 8 times; "squandered" or "wasted" 7 times; "risked" or "at risk" 11 times; "staked" or "at stake" 7 times, and "contributed" to a cause twice.

Legislative records from Britain, Australia and India less often speak of prestige as money.

levels of diplomacy. The paper reviewed various other tactics that can be used to promote the safer of the two equilibria.

Nuclear weapons are natural bearers because the dynamics of a nuclear explosion are dichotomous, because the world worries about them, and because they are sometimes sudden and surprising news that grab attention. Also they are natural as symbols of power. A theme of the paper is how to connect prestige to social development rather than weaponry. A general rule is to turn them into public events in the defined technical sense – emphasize achievements on measurable scales, accomplish international "firsts," or set up awards. However the list of historical attributions of prestige shows many other sources of prestige: economic, social or governance achievements, especially when these reflect the strength and competence of one's country.

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