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Estimating the DPRK's Nuclear Intentions
and Capacities:
A Comparative Foreign Policy Approach

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Abstract: This paper develops a novel assessment of the nuclear program of the Democratic People's Republic of Korea (DPRK), commonly known as North Korea. Using a theory-driven, comparative foreign policy approach, the paper undermines two common assumptions about the DPRK nuclear threat: first, that its nuclear intentions are a rational response to the external environment; and second, that this heavily industrialized state with long nuclear experience must have developed enough technical capacity by now to go nuclear whenever it pleases. In their place, the paper puts forth the general theoretical hypotheses that (a) the decision to go nuclear can rarely if ever be based on rational cost-benefit analysis, but instead typically reflects deep-seated national identity conceptions, and (b) the capacity to go nuclear depends not only on raw levels of industrialization and nuclear technology, but also on the organizational acumen of the political regime. In the case of the DPRK, these hypotheses suggest that while it is deeply committed to the goal of acquiring an operational nuclear deterrent, it may find it very difficult to successfully implement that wish. Finally, the paper provides preliminary evidence—not much more is possible in this case—to suggest that these hypotheses may well be correct in the case of the DPRK.

Keywords: Comparative foreign policy; DPRK (North Korea); national identity conceptions; neo-patrimonialism; nuclear proliferation; regime type and state structure; threat assessment.

Introduction¹

What are the strategic intentions and technical capacities of the nuclear program of the Democratic People's Republic of Korea (DPRK), also known as North Korea? Notwithstanding the strident debates over how to deal with the DPRK nuclear issue, in fact no one can claim to know the answers to these basic questions. Indeed, even to the extent rough mainstream consensus answers have emerged, the evidence supporting them is very thin. But the cloud of ignorance that hangs over the DPRK nuclear debate contains a silver lining. The absence of solid information about the case actually can free us to focus on the theoretical assumptions that usually remain implicit in proliferation threat assessments. The result of this exercise is an alternative assessment of the DPRK case that defies the standard formulae. Moreover, the return to theoretical basics promises to improve our understanding not only of this case, but of other current cases of proliferation concern as well. For the sad truth is that even for countries on which plentiful information has been available, the record of strategic threat assessment is abysmal.²

The paper is organized as follows. The next section briefly reviews the literature on DPRK strategic intentions and capacities. It finds that even the best, most theoretically self-conscious work on the case suffers from questionable assumptions about the general dynamics of nuclear proliferation. In particular, first, the typical assumption that the DPRK's nuclear intentions can be viewed as a rational response to the unfriendly post-Cold War external environment can be called into question—not on the grounds that the DPRK is uniquely irrational, but instead because the basic choice to go or not to go nuclear is a revolutionary one that rarely if ever lends itself to rational, cost-benefit analysis. Bomb desires are better understood as the product of non-rational emotions, and in particular, of the fear and pride that grips “oppositional nationalists.”

¹Thanks to the EAI Fellows Program on Peace, Governance, and Development in East Asia, supported by the Henry Luce Foundation, for their generous research and travel support.

² Jeffrey Richelson, *Spying on the Bomb: American Nuclear Intelligence from Nazi Germany to Iran and North Korea* (New York: W. W. Norton, 2006). See also Torrey C. Froscher, “Anticipating Nuclear Proliferation: Insights from the Past,” *Nonproliferation Review* Vol. 13, No. 3 (November 2006), pp. 467-477.

The paper provides evidence that the DPRK leadership is and has always been oppositional nationalist, and preliminary evidence that its desire for the bomb dates back many decades. Second, the typical assumption that the technical challenges of building the bomb are mere nuisances for heavily (albeit inefficiently) industrialized states like the DPRK can also be called into question—not on the grounds that it may not yet have acquired certain key pieces of technology, but instead because its regime type is prone to extreme organizational and managerial ineptitude. The DPRK fits snugly into a class of regimes that from a neo-Weberian perspective can be labeled “neo-patrimonial” or “sultanistic.” The comparative politics literature indicates that even when such regimes gain access to the latest technology, their management pathologies are so pronounced that their “big science” projects routinely run aground. The paper provides preliminary evidence that the DPRK may indeed not be up to the nuclear research and development challenge. Finally, the conclusion of the paper briefly tackles the question of how the United States should handle this very different DPRK than the one usually portrayed.

Existing Perspectives on the DPRK Nuclear Program

While the assessment of states’ nuclear intentions and capacities is always difficult, the closed nature of the DPRK makes it a particularly hard target. There is simply very little material for the typical journalistic/area studies “ground-up” approach to work with. Thus, not surprisingly, conclusions about the level and nature of the threat vary widely from analyst to analyst.

In terms of the regime’s strategic intentions, prominent analyses run the gamut from extremely “hard-line” to extremely “soft-line.”³ Hard-liners contend that the DPRK continues to harbor the same goals that it set for itself when it launched the Korean War in 1950: ejection of US forces from the Korean peninsula by force if necessary, reunification under Pyongyang’s leadership, and extension of the “Korean-style socialist” system to the South. As a means of attaining these grandiose strategic objectives, the

³ For an overview of the literature, see Andrew Scobell, “North Korea’s Nuclear Intentions,” in James M. Lister, ed., *Challenges Posed by the DPRK for the Alliance and the Region* (Washington, DC: Korea Economic Institute, 2005), pp. 78-95. Scobell well summarizes the important contributions of Stephen Bradner, Victor Cha, Bruce Cumings, Selig Harrison, Ralph Hassig and Kongdan Oh, and David Kang.

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regime seeks to acquire a nuclear weapons arsenal. The hardest of hard-liners believe that the DPRK wants nuclear weapons for warfighting purposes; more moderate voices suggest that it views them as a means of conducting coercive diplomacy. By contrast, soft-liners contend that the DPRK has long since given up on its Korean War aims and is instead engaged in a desperate quest for regime survival. As a means of attaining this much more limited objective, the regime seeks to build up its nuclear program as a bargaining chip. The softest of soft-liners believe that the regime actually does not desire nuclear weapons at all and would jump at the chance to trade its nuclear facilities away for a more cooperative relationship with the US; more moderate voices suggest that the regime wants at least an opaque nuclear deterrent as an ultimate guarantee against a possible American invasion.

Analyses of the DPRK's nuclear capacities also show considerable variation, from the "optimistic" position that the development of a working nuclear arsenal may still be some years away, to the "pessimistic" position that the regime probably already had a handful of "bombs in the basement" as early as 1992. Unlike the debate over the regime's strategic intentions, however, most of this debate has focused on what technical progress the country may or may not have achieved to date, and in particular on the size of its fissile material stockpiles. Such estimates have swung wildly back and forth in response to the latest publicly released intelligence reports—e.g., the 2002 revelation that the regime had a serious uranium enrichment capacity caused a bout of pessimism, while the 2007 revelation that it might not have had one after all is presently causing a surge of optimism. But there has been little debate on the more fundamental question of the regime's ultimate ability to develop an operational nuclear deterrent, due to its heavy industrialization and long experience with nuclear technology.⁴

Wild swings in assessments of the DPRK's nuclear attainments have been noticeably less marked for analysts with a clear set of beliefs about the regime's ultimate nuclear intentions. For instance, hard-liners have tended to view the country's nuclear

⁴ For instance, the non-partisan Congressional Research Service's series of reports on the DPRK nuclear issue clearly reflect the assumption that a nuclear arsenal is well within its reach. See Larry Niksch, "North Korea's Nuclear Weapons Program," Congressional Research Service Report to Congress, updated October 5, 2006, available at <http://fpc.state.gov/documents/organization/74904.pdf>; Sharon A. Squassoni, "North Korea's Nuclear Weapons: How Soon an Arsenal?" Congressional Research Service Report to Congress, updated August 1, 2005, available at <http://fpc.state.gov/documents/organization/55786.pdf>.

arsenal as a *fait accompli*, while soft-liners have tended to argue that it may not yet be ready to put the finishing touches.⁵ But even though wild swings in assessments are unfortunate, this ideological “cure” is worse than the disease. And more generally, the debate’s mixing of assessments of nuclear intentions with assessments of nuclear capacities—a mistake that is hardly unique to analyses of the DPRK—is another major stumbling block to analytical progress.

Victor Cha and David Kang’s *Nuclear North Korea: A Debate on Engagement Strategies* represents a major step beyond the cacophony.⁶ Cha and Kang argue that the regime’s opacity rules out the typical journalistic/area studies information-heavy approach to the analysis of its intentions and capacities. Rather, the only way to place some reasonable bounds on the debate is to consider the DPRK case under the lens of general social science theory.⁷ Of course, as they note, the DPRK is unique in many ways, but we know so little about its internal workings that it does not make sense to trade in our knowledge of the general patterns of state behavior in favor of rank speculation. So the question becomes, what are those general patterns of international behavior to which we would expect the DPRK to conform? On this score Cha and Kang differ. Cha applies realist power transition theory, spiced with a dose of prospect theory, to warn that the DPRK is liable to lash out at the US despite its weakened state. Kang, by contrast, applies deterrence theory, spiced with a dose of neo-liberal international political economy, to suggest that the DPRK is desperate to reach an accommodation with the US if only we would let it. Interestingly, despite their theoretical differences, their bottom line policy recommendations are relatively parallel: to pursue a credible policy of diplomatic engagement with Pyongyang.

Cha and Kang’s sober, theory-driven approach is clearly the way to reverse the DPRK nuclear debate’s typical lopsided ratio of heat to light. However, the range of

⁵ Consider, for instance, the gap between the nuclear capacity assessments made by the “hard-line” Nicholas Eberstadt (e.g., “North Korea’s Nuclear Ambitions,” *Time Asia*, January 25, 2007, available at http://www.aei.org/publications/filter.all.pubID.25520/pub_detail.asp) and the “soft-line” Selig S. Harrison, “Did North Korea Cheat?” *Foreign Affairs*, Vol. 84, No. 1 (January-February 2005), pp. 99-110.

⁶ Victor D. Cha and David C. Kang, *Nuclear North Korea: A Debate on Engagement Strategies* (New York: Columbia University Press, 2003).

⁷ This is part of a more general trend in East Asian studies. For a review and critique, see Stephan Haggard, “The Balance of Power, Globalization, and Democracy: International Relations Theory in Northeast Asia,” *Journal of East Asian Studies* Vol. 4, No. 1 (January-April 2004), pp. 1-38.

social science theory that is potentially applicable to this case is much more diverse than the IR “realist” versus “liberal” debate that the Cha and Kang debate roughly mirrors. In particular, there is ample reason to question two core assumptions that Cha and Kang *both* make explicitly, and that many other, less theoretically systematic analysts make implicitly. The first of those core assumptions is that the DPRK’s nuclear intentions are a rational response to the external environment. This is a critical assumption in both Cha and Kang’s arguments, for if the external environment has little impact on Pyongyang’s choices, their respective cases for engagement are significantly undermined. The second of those core assumptions is that the DPRK, as a heavily industrialized state with a longstanding interest in nuclear technology, must have accumulated enough technical capacity by now to be able to achieve an operational nuclear deterrent in the near-term. This is also a critical assumption in both Cha and Kang’s arguments, for if Pyongyang’s nuclear threat is relatively empty, again their respective cases for engagement are significantly undermined. Cha and Kang are atypically strident in defending these assumptions; they suggest that to question either of them is to fall into the trap of assuming that the DPRK leadership is simply “crazy.”⁸ But they are wrong.

Neither of these assumptions is a slam dunk from the perspective of comparative foreign policy analysis. Unlike IR realism or liberalism, comparative foreign policy analysis is not a discrete theoretical paradigm, but rather a broad approach to foreign policy that is close in both spirit and method to the political science subdiscipline of comparative politics, and that in particular stresses the impact of institutional and mental structures on political choice.⁹ In the next two sections of the paper, I use a comparative foreign policy approach to build a new and decidedly different understanding of the DPRK’s nuclear intentions and capacities.

Assessing the DPRK’s Nuclear Intentions

⁸ Cha and Kang, *Nuclear North Korea*, p. 3.

⁹ The seminal text, recently republished with commentary from contemporary comparative foreign policy scholars, is Richard Snyder, H. W. Bruck and Burton Sapin, *Foreign Policy Decision-Making (Revisited)* (New York: Palgrave Macmillan, 2002).

Like many analysts, Cha and Kang both believe that to seek a nuclear arsenal is a rational response to the DPRK's difficult international position. This interpretation is in line with traditional theories of nuclear proliferation.¹⁰ But in fact, the conventional assumption that decisions to go nuclear are, or even can be, the product of a rational cost-benefit calculation is hard to sustain. For in light of the revolutionary nature of the nuclear choice, the fact is that it is essentially impossible to measure or prepare in advance for the long-term fallout of the decision to go nuclear. Since the consequences of the decision to go nuclear are quite simply incalculable, logically that decision cannot be the product of a rational calculation. Therefore, in order to explain nuclear weapons intentions, we need to rely on an alternative theoretical paradigm than the typical rationalist cost-benefit approach.¹¹

As illustration of these points, consider the debate over the bomb that took place in India in the wake of China's October 1964 entry into the nuclear club. Only two years before, in 1962, India had been badly beaten by China in a bloody border war in the Himalayas.¹² As the two Asian giants' border disputes continued to fester, the rivalry took on a new dimension in the mid-1960s with the growing alliance relationship between China and Pakistan, India's longtime nemesis. In 1965, encouraged by its new Chinese ties, Pakistan launched a war to eject India from the disputed province of Kashmir. China offered solid diplomatic and material support during the war and even issued a military ultimatum against India after events had turned sour for its ally.¹³ Meanwhile, due to its policy of non-alignment India was self-restricted from seeking a serious nuclear guarantee from one or the other superpower. In short, if ever there was a case for going nuclear, mid-1960s India had one. And although many Indians were still mired in deep poverty, the state had in fact developed an exceptionally strong nuclear program including a fuel reprocessing plant. American officials became convinced that

¹⁰ For a brief review, see Jacques E. C. Hymans, "Theories of Nuclear Proliferation: The State of the Field," *The Nonproliferation Review*, Vol. 13, No. 3 (November 2006), pp. 455-465.

¹¹ For further elaboration see Jacques E. C. Hymans, *The Psychology of Nuclear Proliferation: Identity, Emotions, and Foreign Policy* (Cambridge, UK: Cambridge University Press, 2006), esp. chs. 1-2.

¹² For an account of the 1962 conflict and the broader bilateral rivalry, see John W. Garver, *Protracted Conflict: Sino-Indian Rivalry in the Twentieth Century* (Seattle: University of Washington Press, 2001).

¹³ Garver, *Protracted Conflict*; see also Klaus H. Pringsheim, "China's Role in the Indo-Pakistani Conflict," *The China Quarterly* No. 24 (October 1965), pp. 170-175.

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India would be the next nuclear domino to fall.¹⁴ Yet upon careful consideration of the matter, Indian elites became increasingly unsure that to go nuclear was the right call. The scholar Stephen P. Cohen has compiled a list of *thirty-four* separate arguments for and against the Indian bomb that were part of the public debate at the time (for a sample of these arguments, see next page).

¹⁴ Froscher, "Anticipating Nuclear Proliferation," pp. 470-71. The "Indian domino" did fall, in a way, when the country conducted its "peaceful nuclear explosion" of 1974. But the Chinese test of 1964 was a secondary cause of the 1974 PNE; the chief cause was the complicated India-Pakistan-US trilateral diplomacy after the 1971 Indo-Pakistan war. For more on this story, see Hymans, *The Psychology of Nuclear Proliferation*, pp. 181-188.

Table 1: Mid-1960s arguments for and against an Indian bomb¹⁵

Issue-Area	Pro-Bomb Spin	Anti-Bomb Spin
<i>Military-Strategic</i>	<ul style="list-style-type: none"> • Bomb will deter attack • Bomb can be used tactically • Bomb makes up for conventional military deficits 	<ul style="list-style-type: none"> • Bomb will invite attack • Any use of bomb risks escalation • Bomb is logistical nightmare and too big for most targets
<i>Diplomatic-Reputational</i>	<ul style="list-style-type: none"> • Bomb will raise national prestige • Others are going nuclear • We can easily break our commitment to a peaceful nuclear program 	<ul style="list-style-type: none"> • Abstaining will raise national prestige • Others will only go nuclear if we do • Others will be alienated if we go back on our word
<i>Economic</i>	<ul style="list-style-type: none"> • Bombs are cheap • Bomb will give us more power in trade and aid talks 	<ul style="list-style-type: none"> • Bombs are dear • Bomb will invite economic sanctions
<i>Domestic-Institutional</i>	<ul style="list-style-type: none"> • The people are demanding it • The military and scientists want it 	<ul style="list-style-type: none"> • The people are not demanding it • Principle of civilian control of foreign and defense policy
<i>Ethical-Normative</i>	<ul style="list-style-type: none"> • Bomb would be a statement of independence from imperialists • We must avenge the deaths of our soldiers • Nehru built the basis for the bomb 	<ul style="list-style-type: none"> • Bomb would be an admission that we are no better than the imperialists • Taking vengeance only produces new suffering • Nehru opposed the bomb in principle

In light of the reigning confusion about the value of going nuclear, Indian Prime Minister Lal Bahadur Shastri decided not to make any final decision on the matter. This *decision not to decide* was essentially the only “rational choice” available to him. And in the end,

¹⁵ Stephen P. Cohen private archive, Brookings Institution, Washington, DC.

the question of India's nuclear status remained hanging until Prime Minister Atal Behari Vajpayee arrived in power over three decades later, in 1998.

The difficulties of anticipating the likely consequences of the DPRK's crossing the nuclear weapons threshold today are no less great than they were for the case of mid-1960s India. To recall just one of the numerous questions raised in the Indian debate: would a small DPRK nuclear arsenal deter its adversaries or not, or indeed might it instead provoke a preventive attack by them? Most of the policy debate today assumes the former is correct, but classical deterrence theory actually argues for the latter contention. According to classical deterrence theory, only once the DPRK develops a *secure second strike capability* should it begin to feel confident in the deterrent power of its nuclear arsenal.¹⁶ In light of the massive US nuclear arsenal, the idea that Pyongyang could ever achieve such a capability is frankly ludicrous. But is classical deterrence theory right? Is a secure second strike capability really necessary, or might Pyongyang reasonably expect a few unreliable nuclear devices to provide “existential deterrence”?¹⁷ The answer is anybody's guess.¹⁸

So, when state leaders are facing essentially incalculable foreign policy decisions, how do they choose? The classic foreign policy analysis answer to this question is that they look *inward* for guidance.¹⁹ In particular, they can find the direction they need from their “national identity conception” (NIC)—in other words, their basic sense of what the nation naturally stands for and of how high it naturally stands, in comparison to others in the international arena. Relying on the NIC allows the leader to clear away the complexity of the real world in favor of the clarity of the national narrative; and when the

¹⁶ Thomas C. Schelling, *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1960).

¹⁷ For the concept of “existential deterrence,” see McGeorge Bundy, *Danger and Survival: Choices about the Bomb in the First Fifty Years* (New York: Random House, 1988).

¹⁸ One vote for the relevance of classical deterrence theory is cast by President Pervez Musharraf of nuclear-armed Pakistan. He recounts in his memoir that Deputy Secretary of State Richard Armitage threatened to bomb his country “back to the Stone Age” if it did not cooperate in the war against the Taliban and Osama bin Laden. Musharraf found the threat very credible. Pervez Musharraf, *In the Line of Fire: A Memoir* (New York: The Free Press, 2006). Note that Armitage has denied that he used that precise language but has not denied the sternness of the message he delivered to Pakistan.

¹⁹ For a more thorough treatment of this link, see Ole Holsti, “Foreign Policy Formation Viewed Cognitively,” in Robert Axelrod, ed., *Structure of Decision* (Princeton: Princeton University Press, 1976).

national narrative is an *oppositional nationalist* one, to go nuclear is simply the natural choice.²⁰

Oppositional nationalists believe that their nation's core interests and values are naturally in stark opposition to those of its key comparison others; this is the “oppositional” side of their NIC. They also believe their nation both can and should hold its head high in its dealings with its key comparison others; this is the “nationalist” side of their NIC. Oppositional NICs give rise to the emotion of fear, and nationalist NICs give rise to the emotion of pride, in dealings with the key comparison others. This combination of identity-driven fear and pride is a uniquely explosive psychological cocktail. First, fear produces a desire for markers of security. This desire for security should be interpreted not only in material, but also in emotional terms. The leader who reaches for the bomb, as for any protective amulet, is doing so at least as much to control his fears as to decrease the actual dangers.²¹ Second, pride produces a desire for markers of autonomy and power—and of these, nuclear weapons are again of course the gold standard. The bomb is a symbol of the nation's unlimited potential, of its scientific, technical and organizational prowess, and, often, of its tenacity in the face of strong international condemnation.²² Finally, not only do fear and pride increase the perceived value of nuclear weapons; they also short-circuit the normal processes of reasoned deliberation that leaders rely on to make choices. In short, the emotional decision to go nuclear is a decision without a calculation.²³

The fear and pride-driven desire for a marker of security, autonomy and power, producing the uncalculated decision to go nuclear, was very much in evidence in the Indian nuclear decision of 1998, for instance. Whether or not having the bomb has turned out to be a plus for India—and the debates still rage on this point—there is no denying that the newly elected Indian prime minister Vajpayee thrust his country across the nuclear weapons threshold without any of the careful planning that we expect states to

²⁰ For the full elaboration of this framework, see Hymans, *The Psychology of Nuclear Proliferation*, ch. 2.

²¹ Jean Delumeau, *Rassurer et protéger: le sentiment de sécurité dans l'Occident d'autrefois* (Paris: Fayard, 1989).

²² The specific symbolism of nuclear weapons is explored in Robert Jervis, *The Meaning of the Nuclear Revolution* (Ithaca: Cornell University Press, 1989).

²³ For more on the notion of decisions without calculations, see Stephen P. Rosen, *War and Human Nature* (Princeton: Princeton University Press, 2005).

undertake in advance of major decisions.²⁴ Why did Vajpayee decide to go nuclear mere days after coming into power, at a time when a high-level panel that his own government was asking to look into the matter had hardly begun its work? Because for oppositional nationalists like Vajpayee, going nuclear is not the product of a cool calculation, but is rather the result of a deep-seated psychological need.

Note that the argument made here about the importance of the leader's NIC for decisions to go nuclear does not suggest that the NIC drives all political choices. There is a pronounced tendency in the literature on the DPRK to try to summarize its policies according to one or another "package of intentions."²⁵ For instance, analysts ask, is the DPRK still "ambitious", or is it "moderating"? The implicit assumption of such broad-brush labels is that actions the regime may take in one policy area—say, economic reform—speak volumes about its intentions in another area—say, nuclear proliferation. But that assumption is mistaken.²⁶ Leaders' NICs matter a great deal for decisions to go nuclear, because the problem of information in that case is uniquely large. Other decisions that Kim Jong Il might make, for instance to admit World Food Programme aid monitors or to start a special economic zone, might be much more amenable to normal cost-benefit analysis. Therefore, just as we should not consider the regime's nuclear choices as a rational response to the strategic environment, we should also not try to view its other choices as a non-rational matter of self-expression. The nuclear choice is *sui generis*.

Measuring the Kim Family Dynasty's National Identity Conceptions

The theory outlined above leads us clearly to an empirical question: can either or both of the DPRK's top leaders—first Kim Il Sung until his death in 1994, and thereafter

²⁴ See Hymans, *The Psychology of Nuclear Proliferation*, esp. pp. 195-203.

²⁵ Scobell, "North Korea's Strategic Intentions," p. 26.

²⁶ In terms of the specific examples used above, it is often suggested that there is an organic connection between economic opening and nuclear restraint. But this hypothesis is disproven by the case of India since 1998, which despite continuing international dependency has been able to combine economic opening with a nuclear buildup. See Dinshaw Mistry, "A Theoretical and Empirical Assessment of India as an Emerging Power," *India Review* Vol. 3, No. 1 (January 2004), pp. 64-87.

his son Kim Jong Il²⁷—be characterized as oppositional nationalists? If so, one could bet that they would have set nuclear weapons acquisition as a strategic objective. And, given the extreme centralization of power in the DPRK, we need not doubt that the leader's choice on this matter is the law.²⁸ I have applied my standard, mixed qualitative-quantitative methodology of descriptive inference of NICs to this case.²⁹

The first step in the method is to look at the existing literature on DPRK NICs. Scholars who rely on traditional interpretivist methodology often come to quite different conclusions about how to describe a leader's NIC. Thankfully, such fundamental clashes in interpretation are actually not very pronounced in serious analyses of the DPRK leadership.³⁰ Rather, there is a widespread consensus that the DPRK's father-son dynasts, Kim Il Sung and then Kim Jong Il, have long held what I term an oppositional nationalist NIC, directed against the outside world in general. For instance, Kathryn Weathersby concludes from her study of recently unearthed documents from the archives of Pyongyang's former Communist allies, "The experience of having survived sustained bombing by US planes for nearly three years created the dangerous, if paradoxical, combination of a profound sense of threat and a faith in the country's ability to prevail in a future military conflict."³¹ What Weathersby terms the paradoxical combination of "sense of threat" and "faith in the country's ability to prevail" maps precisely on to what I have defined as the NIC of oppositional nationalism.³²

²⁷ Note that the eras of the father and the son are not clearly distinguishable. Kim Jong Il began taking over much of the day-to-day business of the state as early as 1980; by the early 1990s nuclear crisis, it was clear that he, not his father, was calling most of the shots. Indeed, in his interview with Jimmy Carter on the nuclear issue in 1994, Kim Il Sung appeared almost as unfamiliar with his country's negotiating stance as Carter was with that of the Clinton administration. See Don Oberdorfer, *The Two Koreas: A Contemporary History* (Reading, Mass.: Addison-Wesley, 1997), p. 328.

²⁸ I will return to the question of the state structure of the DPRK regime in the next section.

²⁹ For a full description of the methodology, see Hymans, *The Psychology of Nuclear Proliferation*, ch. 3.

³⁰ Note that my survey of the literature has been limited to English language analyses.

³¹ Kathryn Weathersby, "The Enigma of the North Korean Regime: Back to the Future?" in James M. Lister, ed., *Challenges Posed by the DPRK for the Alliance and the Region* (Washington, DC: Korea Economic Institute, 2005), p. 46. Note that Weathersby argues that Kim Il Sung's belief in the country's ability to prevail in a new Korean War began to break down in the 1980s.

³² Where there has been considerable debate is over the question of whether or not the Kims' oppositional nationalism is *justified*; but this is essentially a normative matter that need not detain us here. For as Herbert Kelman has pointed out, the "psychological" is not necessarily the opposite of the "real." Herbert Kelman, "Social-Psychological Dimensions of International Conflict," in *Peacemaking in International Conflict: Methods and Techniques*, eds. I. William Zartman and J. Lewis Rasmussen (Washington, D.C.: United States Institute of Peace Press, 1997).

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The full elaboration of the Kims' oppositional nationalist NIC is to be found in the regime's traditional official ideology of *Juche* (*ch'uche*), which has been loosely translated as "self-reliance" or "Korea first" and is antonymous with *sadaejui*, meaning serving or relying upon a foreign power.³³ (Ironically, *Juche* derives in no small measure from the oppositional nationalist *kokutai* idea of the country's former Japanese colonizers.³⁴) While the core of the *Juche* ideology is this oppositional nationalist standoff between Korea and foreign others, it also entails a highly elaborated internal dimension: an organicist vision of the Korean nation as a self-contained, racially pure body with the leader as its head. This, too, draws heavily from the early 20th century Japanese model.³⁵ Since the mid-1990s, the regime's ritual genuflection to the ideology of *Juche* has declined, and in its place a new state ideology, known as *Songun* or "military first." Some analysts have suggested that this new ideology is more flexible than the old one.³⁶ Whether or not this is the case, from the perspective of the theory being advanced here the point is not particularly crucial. If leaders' nuclear weapons desires indeed arise out of non-rational emotions that in turn stem from oppositional nationalist NICs, then the details of the ideological systems that they elaborate on top of their basic identity conception are of secondary importance.

As previously noted, NICs are built in relation to a key comparison other. The traditional interpretivist literature again displays a rough consensus about the DPRK's key comparison other. The literature stresses that although the US currently serves as the regime's current top bogeyman, this latter-day "hermit kingdom" defines itself in opposition to an entire range of others beyond the Korean peninsula: against the US of course, but also against Japan, China, the Soviet Union/Russia, and everyone else. There is much evidence of the breadth and depth of the regime's commitment to rejecting foreign influence of every sort and from every provenance. For instance, take its major,

³³ Bruce Cumings, *Korea's Place in the Sun: A Modern History* (New York: W. W. Norton, 1997), p. 403; Scobell, "North Korea's Strategic Intentions," p. 14.

³⁴ Cumings, *Korea's Place in the Sun*, p. 403; for more elaboration, see Sheila Miyoshi Jager, "Women, Resistance, and the Divided Nation: Women and the Romantic Rhetoric of Korean Reunification," *The Journal of Asian Studies*, Vol. 55, No. 1 (February 1996), esp. pp. 4-5.

³⁵ For more elaboration, see Cumings, *Korea's Place in the Sun*, pp. 398-414; Jager, "Women, Resistance, and the Divided Nation."

³⁶ Alexander V. Vorontsov, "North Korea's Military-First Policy: A Curse or a Blessing," Nautilus Institute Policy Forum Online 06-45A (June 8, 2006), available at <http://www.nautilus.org/fora/security/0645Vorontsov.html>.

very early “Koreanizing” reform of the written language, which extirpated all traces of the historic Chinese as well as Japanese influence.³⁷ The regime has also taken great pains to revive memories of the medieval Goguryo (Koguryō) Kingdom, which from its stronghold in northern Korea extended far into Manchuria before succumbing to an alliance of Imperial China and the southern Korea-based Shilla kingdom in 668 AD.³⁸ Moreover, this supposedly “Communist” regime even long ago stopped genuflecting to Karl Marx, apparently because of his foreign nationality. The regime now refers vaguely (but proudly) to its economic and political system as “Korea-style” or “our-style” socialism.³⁹ In sum, the standard interpretation of the DPRK leadership’s NIC is that it is one of us-against-the-world.

This consensus interpretation of the DPRK leadership as oppositional nationalist vis-à-vis the entire outside world is reinforced by a content analysis I performed on the regime’s major yearly statements at the New Year for the years 1975 to 2007, 33 years in total.⁴⁰ The New Year’s statements, which serve as a kind of DPRK “state of the union” address, were delivered orally by Kim Il Sung himself until his death in 1994; since then, they have been published without a byline in the country’s major newspapers. Though Kim Jong Il is not credited as the author of these editorials, it is well known that they emanate directly from him. For Kim Il Sung’s addresses, I relied on English translations that were produced since 1975 by the Foreign Broadcast Information Service *Asia and Pacific Daily Report*; for the joint editorials, I relied on English translations produced by the DPRK itself and available online.

The first question the quantitative evidence can help us answer what state or states constitute the DPRK leaders’ key comparison other. In line with the consensus interpretation in the literature, the quantitative content analysis suggests that rather than

³⁷ Samuel S. Kim, “Research on Korean Communism: Promise versus Performance,” *World Politics* Vol. 32, No. 2 (January 1980), pp. 303-304.

³⁸ This is an inheritance from earlier Korean racial nationalist historiography, which also has influenced contemporary South Korean views. The implication of this historiography, alarming to China, is that Manchuria is naturally part of Korea. See Andre Schmid, “Rediscovering Manchuria: Sin Ch’aeho and the Politics of Territorial History in Korea,” *Journal of Asian Studies*, Vol 56, No. 1 (February 1997), pp. 26-46.

³⁹ Ralph Hassig and Kongdan Oh, *North Korea through the Looking Glass* (Washington, DC: Brookings Institution Press, 2000).

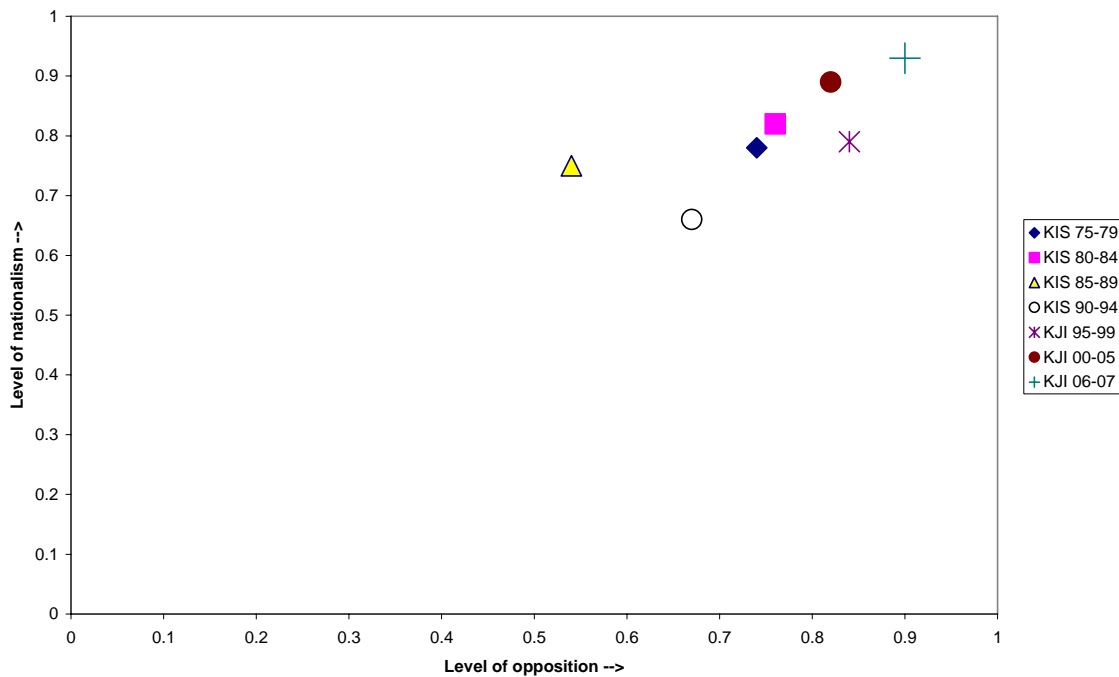
⁴⁰ The technical appendix to this paper offers a brief introduction to the coding rules. For complete coding rules, see Hymans, *The Psychology of Nuclear Proliferation*, esp. Appendix.

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focusing their national self-comparison on one or another foreign country, both Kims have used a broad-brush approach that distinguishes Korea from the rest of the world—i.e. from “generic foreign others” in my terminology. Considering the entire period 1975-2007, references to generic foreign others—in particular, to external “enemies,” to things “foreign,” and also more implicitly through invocation of the “*Juche*” and “*Songun*” ideas—account for 640 out of a grand total of 2109 external references in the data set (30% of the total). The second most external references in the data set are to the Republic of Korea (South Korea)—415 references (20% of the total). But a qualitative reading of the texts produces the unmistakable impression that South Korea, while obviously an important concern for the DPRK, is *not* a key comparison other. This is because as a country, South Korea is home to the same Korean race that the Kims claim to represent, and because as a regime, it is dismissed as a mere puppet of the “imperialists”—as their fig leaf for continued colonial rule. Third, when the Kims peer out at the world, clearly the “imperialists” loom largest in their minds. Among the imperialists, the US certainly is a major focus (284 references, 13% of the total). Additionally, references to the “imperialists” in general are quite plentiful (172 references, 8% of the total). Japan is also referred to relatively often (69 references, 3% of the total), but the silence about the DPRK’s “comrades” China and Russia is deafening.

In sum, the Kims clearly have consistently defined their nation, Korea (not just “North Korea”), in relation to the rest of the world, with a particular focus on the imperialist great powers, rather than to some particular foreign country such as the US or Japan. The next question is, how have the leaders understood the nature of Korea’s relationship with the outside world? The answer is simple: through the lens of oppositional nationalism. The following chart graphically illustrates the leadership’s oppositional nationalism vis-à-vis generic foreign others. I have broken up the results into five-year periods in order to search for any cross-temporal variation, especially between Kim Il Sung (“KIS”) and his son Kim Jong Il (“KJI”).

Figure 1: Quantitative content analysis of North Korean new year's statements



As is quite apparent from the above graph, the quantitative analysis of the New Year’s statements clusters in the top right hand quadrant—indicating a solid oppositional nationalism vis-à-vis the generic foreign others. Moreover, since Kim Jong Il took power there has been a statistically significant increase in both opposition and nationalism over Kim Il Sung’s relatively mild version of the late 1980s and early 1990s (for more detail, see the Technical Appendix). But in any event, when compared to the scores this method has registered for the NICs of leaders of other countries, the overall message of the chart is stasis rather than change.⁴¹

In short, North Korea’s supreme leaders—first Kim Il Sung, and then his son Kim Jong Il—have for decades reiterated an NIC of oppositional nationalism that is directed against generic foreign others. Of course, it is conceivable that the Kims have merely been making use of oppositional nationalism for its propaganda value, while their actual decisionmaking has been based on an entirely different set of ideas. In this regard, it is particularly important to note that since the New Year’s editorials of Kim Jong Il are not

⁴¹ For parallel analyses of the NICs of leaders of Argentina, Australia, France, and India, see Hymans, *The Psychology of Nuclear Proliferation*, ch. 3.

signed by him, they should be taken less seriously as an indicator of his thought than the New Year's speeches that Kim Il Sung used to make. However, recall that the quantitative analysis here is simply reinforcing an already existing rough consensus in the literature—including literature, like the work of Weathersby cited above, that draws not on public propaganda but on the Kims' private discussions with their Communist allies. Moreover, the systematic analysis of propaganda has been shown to be potentially highly informative about regimes' deep-seated beliefs and psychological needs, if it is carried out in the right way.⁴² So, it makes sense for this study to proceed on the assumption that North Korea's leadership has always held and still holds an oppositional nationalist NIC. This identity, according to the theory previously outlined, should lead to a strong desire not just for a nuclear weapons program, but for an actual, operational nuclear weapons arsenal.

North Korea's nuclear objective

Does this conclusion make sense in light of what we know about the historical record? This paper is not the place to rehearse the debates over the long and turbulent history of the DPRK nuclear program. The bottom line is that there is a great deal about North Korean nuclear history that we simply do not know.⁴³ However, it does bear stating that the scanty evidence we do have reinforces the national identity-based hypothesis developed above, while casting serious doubt on some of the typical alternatives.

Most analysts have viewed the DPRK's nuclear weapons drive as a response, for one reason or another, to its new and much more parlous international position after the end of the Cold War. This is to be expected, given the conventional theories of the causes of proliferation. For instance, Kang offers a straight balance of power account: "Although during the Cold War the North was the aggressor, this shift in power [in the

⁴² Alexander L. George, *Propaganda Analysis: A Study of Inferences Made from Nazi Propaganda in World War II* (Evanston, Ill.: Row, Peterson, 1959).

⁴³ See Jacques E. C. Hymans, Seung-Young Kim and Henning Riecke, "To Go or Not to Go: South and North Korea's Nuclear Decisions in Comparative Context," co-authored with Seung-Young Kim and Henning Riecke, *Journal of East Asian Studies* Vol. 1, No. 1 (February 2001), pp. 91-154. First published in Korean in *Gyegan Sasang*, Vol. 12, No. 2 (Summer 2000), pp. 194-258.

early 1990s] put it on the defensive. It was only when the balance began to turn against the North that it began to pursue a nuclear weapons program.”⁴⁴ If Kang were right, this would frankly falsify the national identity-based hypothesis outlined above. But he is not right. In fact, historical research being carried out on the DPRK in Soviet and Hungarian archives shows conclusively that Pyongyang had an avid interest in nuclear weapons already *by the early 1960s*.⁴⁵ Of course, we have long had several credible reports that this was the case.⁴⁶ But the recently unearthed Soviet and Hungarian evidence is much more convincing because of its official and secret character. As early as 1962, DPRK Foreign Minister Pak Song Chol was telling the Soviet ambassador in Pyongyang, “Who can impose such a [nonproliferation] treaty on countries that do not have nuclear weapons, but are perhaps successfully working in that direction?”⁴⁷ And by 1976, remarkably enough, North Korean diplomats were even claiming to their Hungarian counterparts that the DPRK already had “nuclear warheads and carrier missiles, which are targeted at the big cities of South Korea and Japan...and they had manufactured them by themselves.”⁴⁸ Of course, such statements were little more than bluff and bluster; in terms of its technical capacity, the DPRK was in no position to acquire nuclear weapons in the 1970s. Nevertheless, both the Soviets and Hungarians concluded by the mid-1970s that the DPRK’s bluster was indeed very revealing about its intentions—that, in short, the DPRK was seeking nuclear weapons for a combination of security and prestige-related reasons.⁴⁹ Therefore, they generally rebuffed its attempts to gain the expertise and equipment necessary for the purpose, although Soviet-Chinese competition for leadership

⁴⁴ Cha and Kang, *Nuclear North Korea*, p. 45. Though he is less explicit about dates than Kang, Cha also argues that the period 1989-94 was a key turning point in causing the DPRK regime to go “double or nothing” (p. 30).

⁴⁵ The latest product of this effort of the Cold War International History Project is Balazs Szalontai and Sergey Radchenko, “North Korea’s Efforts to Acquire Nuclear Technology and Nuclear Weapons: Evidence from Russian and Hungarian Archives,” *CWIHP Working Paper No. 53* (August 2006).

⁴⁶ For instance, Don Oberdorfer writes of a 1964 DPRK approach to China in the wake of China’s nuclear test, as well as other clear statements of nuclear weapons intent to the Chinese and East Germans in the 1970s and 1980s. Oberdorfer, *The Two Koreas*, p. 253.

⁴⁷ Soviet Foreign Ministry memorandum, 24 August 1962, translated and reprinted in Szalontai and Radchenko, “North Korea’s Efforts,” p. 33.

⁴⁸ Hungarian Foreign Ministry memorandum, 16 February 1976, translated and reprinted in Szalontai and Radchenko, “North Korea’s Efforts,” p. 55.

⁴⁹ Szalontai and Radchenko, “North Korea’s Efforts,” p. 10.

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in the socialist bloc sometimes led them to act against their interest in nonproliferation.⁵⁰ The fact that the DPRK's supposed *friends*, with close diplomatic relations and extensive programs of bilateral economic and technical cooperation, would have viewed its motives so darkly makes that assessment very hard to dispute.

In sum, while the DPRK's nuclear history is undoubtedly a complicated one, on the basis of the evidence from the former Eastern bloc the notion that the DPRK suddenly discovered the attractions of the bomb in the early 1990s seems quite naïve. Therefore, standard proliferation hypotheses that would see Pyongyang's desire for the bomb as a response to the country's "diplomatic isolation," "inferior power position," "desperation to recoup its former glory," "potentially imminent collapse," etc. are greatly weakened by this evidence. Meanwhile, the hypothesis that the country's nuclear weapons desires stem from a more constant, internal imperative, e.g. oppositional nationalism, emerges greatly strengthened. Of course, this is not to rule out the possibility that the country may have redoubled its nuclear efforts in light of the negative trends that began to pummel it in the late 1980s. But that is a different argument.

Assessing the DPRK's Nuclear Capacities

The DPRK has long wanted nuclear weapons; but can it get them? The country has long been heavily industrialized, but its rise toward a dangerous level of nuclear capacity apparently dates from the late 1980s. Soon after Pyongyang ratified a long-overdue NPT safeguards agreement in 1992, International Atomic Energy Agency (IAEA) inspectors discovered serious omissions in its reports on the extent of its nuclear program, and in particular efforts to separate plutonium from spent fuel rods in its 5-megawatt (electric) "research" reactor that were carried out in 1990 and 1991.⁵¹ The IAEA's discoveries produced the first North Korean nuclear crisis. The crisis cooled down, at least on the surface, when the US-DPRK Agreed Framework froze the country's reactors in exchange for promises of aid and diplomatic normalization in 1994.⁵² But

⁵⁰ Szalontai and Radchenko, "North Korea's Efforts," pp. 2, 25.

⁵¹ The DPRK's report to the IAEA did state that there had been a 1989 effort, which the IAEA confirmed.

⁵² In the Agreed Framework, the US promised energy aid, nuclear technology transfer, and eventual diplomatic normalization in exchange for a DPRK reactor freeze and, more generally, compliance with its

ever since that time, it has been an article of faith for many analysts, and not least the CIA, that the DPRK is capable of crossing the nuclear threshold at any time it chooses.⁵³ Therefore, the fact that it had *not* made an overt attempt to do so until its test of October 2006 has been widely taken as an indicator of its self-restraint. Kang pithily summarizes the case: “If North Korea really wanted to develop nuclear weapons, it would have done so long ago.”⁵⁴

But this conventional assumption that the DPRK has long since attained sufficient capacity to quickly construct an operational nuclear weapons arsenal is actually a worst-case scenario whose accuracy open to question. Estimates of the DPRK’s contemporary nuclear weapons capacity generally follow the typical assessment shorthand that boils the problem down to estimating the actual and future size of its plutonium stockpile.⁵⁵ But although the acquisition of fissile material is surely important for nuclear weapons capacity, it is just the beginning of the problem. After all, what we colloquially refer to as nuclear “bombs” are actually complex weapons systems involving an incredibly diverse array of advanced technologies.⁵⁶ These various technical pieces must not only each be present in sufficient *quantities*; they must also be of extremely high *quality*, and they must also be intricately *integrated* together with the other pieces of the puzzle—and, indeed, with yet another complex set of technologies associated with nuclear delivery systems. Knowing the size of a state’s plutonium stockpile—and we do not even know

international non-proliferation commitments. For a blow-by-blow description of the negotiations that led to the agreement, see Joel S. Wit, Daniel B. Poneman and Robert L. Gallucci’s *Going Critical: The First North Korean Nuclear Crisis* (Washington, DC: Brookings Institution Press, 2004).

⁵³ Richelson, *Spying on the Bomb*, pp. 522-524. The State Department was somewhat more circumspect about this judgment.

⁵⁴ Cha and Kang, *Nuclear North Korea*, p. 145.

⁵⁵ The DPRK plutonium stockpile has been the subject of numerous estimates, notably in a series of reports by David Albright and the Institute for Science and International Security. The three latest such estimates are from February 2007, June 2006, and September 2005, available at <http://www.isis-online.org/publications/dprk/index.html>.

⁵⁶ The DPRK has of course long been aware of these requirements, as demonstrated by the incessant requests it made to its socialist comrades for advanced training in “microelectronics, optical electronics, laser technology, cybernetics, the technique of chemical and physical analysis, nuclear physics, photogrammetry, non-ferrous metallurgy, and so on” throughout the 1970s and 1980s (see Report, Embassy of Hungary in North Korea to the Hungarian Foreign Ministry, 30 April 1981, translated and reprinted in Szalontai and Radchenko, “North Korea’s Efforts,” pp. 69-70). But awareness is one thing; mastery is another—and indeed, as noted earlier, due to fears about the DPRK’s nuclear intentions its Cold War allies typically turned down such requests.

that in the DPRK case—does not help us very much to estimate its rate of progress along these other, equally important dimensions of the nuclear capacity problem.

Of course, social scientists can add little to the expertise of technical analysts on the question of the state of a given country's nuclear technology. But they have much to contribute on the question of a country's ability to manage the large organization that is required both to construct and to bring all the technological pieces together.⁵⁷ After all, “big science” is also big politics. As the US WMD Commission (The Silberman-Robb Commission) writes, “Equation of procurement with capability is a fundamental analytical error—simply because a state can buy the parts does not mean it can put them together and make them work.”⁵⁸ In short, to assess the DPRK's nuclear capacity, we need to have a better understanding of the managerial and organizational competence of the regime; and the comparative politics literature can greatly help us here.

As Aristotle taught long ago, the fundamental step for any analysis of politics is to distinguish between (in the words of Leo Strauss) “the qualitatively different regimes, or kinds of regimes, and the qualitatively different purposes constituting and legitimating them.”⁵⁹ More prosaically, in terms of the current question under discussion, we must first understand the state's regime type—in other words, its fundamental structural characteristics—in order to flesh out a hypothesis about its likely organizational strengths and weaknesses.

In the case of the DPRK, despite the typical journalistic focus on its “weirdness”—a canard that Cha and Kang rightly puncture—the regime built by the Kims actually fits snugly into the category of “neo-patrimonialism.” Characterized by clientelism and personalist “big-man” rule, neo-patrimonial regimes are the polar

⁵⁷ Attention to the consequences of state organizational pathologies on proliferation is, of course, very much in evidence in the work of Scott Sagan and other “proliferation pessimists.” That research agenda has, however, largely focused on the deleterious consequences of poorly run organizations for the practice of deterrence by new nuclear nations, rather than on the deleterious consequences of poorly run organizations for nuclear aspirants' effort to build the bomb in the first place. This paper attempts to correct that oversight. For Sagan's point of view, see Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: A Debate Renewed* (New York: W.W. Norton, 2002).

⁵⁸ See Commission on the Intelligence Communities of the United States Regarding Weapons of Mass Destruction, Report to the President, March 31, 2005, available at <http://www.wmd.gov/report/>, ch. 2.

⁵⁹ Aaron Robert Lobel, “Anticipating the Collapse? Political Judgment and the Debate over Assessments of the Soviet Union, 1975-91,” unpublished Ph.D. dissertation, Harvard University, 2001. Lobel's dissertation is a marvelous application of Aristotelian thinking to the problem of intelligence assessment of hard targets.

opposites of Max Weber’s “legal-rational” ideal-type.⁶⁰ Indeed, the eminent scholars of authoritarian regimes Juan Linz and Houchang Chehabi do not hesitate to categorize the DPRK as an *extreme* case of neo-patrimonialism, or in other words, as a “sultanistic” regime.⁶¹ In sultanistic regimes literally no one other than the top leader has any secure political standing and the state is run as a family business. This definition indeed sounds like a thumbnail description of the DPRK.⁶²

The consequences of the identification of the DPRK as a neo-patrimonial or even sultanistic regime for the analysis of its capacity to rationally organize a nuclear weapons program are clear. Neo-patrimonial rulers’ fundamental political illegitimacy inexorably turns them into bad bosses. In particular, their response to the three classic management tasks of motivation, coordination and delegation is to lean heavily on bribery and blackmail, divide-and-conquer, and micromanagement.⁶³ Despite—or perhaps because of—their importance in the eyes of the top leader, nuclear programs are unlikely to be spared from these typical flaws of neo-patrimonial management. Therefore, we can anticipate that such regimes will (a) alienate or even eliminate their best scientists, promote political hacks, and generally engage in routine, counterproductive churning of personnel; (b) make suboptimal, shifting, and even bizarre technical choices, while undermining efforts to develop a long-term, coherent action plan and indeed setting various wings of the effort at odds with each other; and (c) exhaust the program and its resources through repeated “crash” efforts and distracting side projects.⁶⁴

⁶⁰ For a discussion, see Christopher S. Clapham, *Third World Politics: An Introduction* (Madison, WI: University of Wisconsin Press, 1985).

⁶¹ Houchang E. Chehabi and Juan J. Linz, eds, *Sultanistic Regimes* (Baltimore: The Johns Hopkins University Press, 1998), p. 9.

⁶² For a longer analysis of the DPRK regime’s political structure, see Andrew Scobell, *Kim Jong Il and North Korea: The Leader and the System* (Carlisle, PA: Strategic Studies Institute, US Army War College, 2006). Stephan Haggard and Marcus Noland second the notion of the regime’s extreme personalism even when it comes to economic policy. Haggard and Noland, *Famine in North Korea: Markets, Aid, and Reform* (New York: Columbia University Press, 2007), p. 227. For a great deal of detail, see Bradley K. Martin, *Under the Loving Care of the Fatherly Leader: North Korea and the Kim Dynasty* (New York: Thomas Dunne Books (St. Martin’s Griffin), 2006).

⁶³ For more on the basic tasks of management, see Paul Milgrom and John Roberts, *Economics, Organization and Management* (Englewood Cliffs, NJ: Prentice Hall, 1992).

⁶⁴ I have developed this argument more fully in Jacques E. C. Hymans, “Breaking Up (The Atom) Is Hard to Do: Nuclear Weapons Capacity as a Function of State Structure,” manuscript currently under peer review.

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An analysis of comparison cases underscores the value of these hypotheses. The neo-patrimonial regime type is not a guaranteed death sentence for a state leadership's nuclear weapons ambitions—a notable case of success is the nuclear program of Maoist China, though even it often tempted fate. But the modal story here is clearly one of failure, and often dismal failure.⁶⁵ For instance, there is the case of Libya's inability to make literally any progress toward the bomb despite extensive help from the A. Q. Khan proliferation network.⁶⁶ Moreover, the debriefings of Iraqi officials since 2003 have steadily undermined the earlier beliefs that the Iraqi nuclear program had been on the verge of success at the time of the first Gulf War—let alone the totally false claims about the “reconstitution” of its program during the 1990s.⁶⁷ But perhaps the most relevant historical parallel to the DPRK is the case of Nicolae Ceausescu's Romania, which was also a clearly sultanistic regime, headed by an unmistakably oppositional nationalist tyrant, and which boasted a heavily industrialized socialist command economy.⁶⁸ Romania also had a nuclear weapons program during the 1970s and 1980s, and indeed like the DPRK it conducted secret plutonium extraction efforts which the IAEA only discovered in the early 1990s, in this case after the regime had collapsed.⁶⁹ So the comparison seems an especially apt one.

Though our record of Romania's nuclear history remains incomplete, we know enough to conclude that its program did not get very far down the road toward nuclear weapons. And, highly relevant to our understanding of the DPRK case, it would appear that the main problem was not access to technology, but management. (Indeed, the West was actually falling over itself to give Romania advanced nuclear technology at the time, in the vain hope of weaning the country away from the socialist camp). The organization of Romania's nuclear research and development was dysfunctional at every level. At the

⁶⁵ For an elaboration of the unique features that led to the success of the Chinese program, see Evan Feigenbaum, *China's Techno-Warriors: National Security and Strategic Competition from the Nuclear to the Information Age* (Stanford: Stanford University Press, 2003).

⁶⁶ The WMD Commission Report refers to Libya as an “inept bungler, the court jester among the band of nations seeking biological or nuclear capabilities” (ch. 2).

⁶⁷ Kevin Woods, James Lacey, and Williamson Murray, “Saddam's Delusions: The View from the Inside,” *Foreign Affairs* Vol. 85, No. 3 (May-June 2006), pp. 2-26.

⁶⁸ For the Romania analogy, see Chehabi and Linz, *Sultanistic Regimes*, pp. 9, 35; Haggard and Noland, *Famine in North Korea*, p. 211.

⁶⁹ Agence France Presse, “Romania Produced Plutonium under Ceausescu: IAEA Sources,” June 17, 1992 (accessed on Lexis-Nexis).

top of the ladder stood none other than Ceausescu's wife Elena, who devoted much of her energies as the country's science policy czarina to destroying Romania's academy of sciences in favor of new institutes manned by political hacks willing to promote her candidacy for the Nobel Prize in Chemistry.⁷⁰ At the bottom of the ladder, masses of forced laborers were mobilized to construct the planned series of Canadian-designed CANDU nuclear power plants. This was a strategy that the on-site Canadian engineer later suggested would have been more appropriate to a potato harvest than to high-technology construction.⁷¹ And in the middle, the hapless project managers made great efforts to hide the growing mess from their political masters with tactics that would have made Potemkin blush. For instance, desperate to suggest to their leadership that progress was being made, they brought over Donald Anderson of the power company Ontario Hydro for the ostensible mission of starting up the first CANDU reactor. Anderson complied but soon realized that his presence was valued mainly to keep up false appearances. After a tour of the facility confirmed his "worst fears," he informed his hosts in Bucharest that "this station was not going to operate for many years and that was reality." When he gave them this news, Anderson could not fail to notice their "nervous glances up at what I presume were the hidden television monitors" (Anderson, 2006).⁷² By the time Ceausescu was executed on Christmas Day 1989, thanks to his incompetent administration his decade-plus quest for the bomb had hardly left the starting gate.

There is no logical requirement that the DPRK must be repeating the Romanian nuclear experience. But in light of the basic similarities between the two regimes, this possibility must be taken seriously. Indeed, the little we know about the quality of the DPRK's nuclear output is not very flattering to it. Most importantly, it is becoming ever clearer that the DPRK's October 9, 2006 nuclear test was a fizzle. Most estimates of the test yield are in the 0.5-1 kt range.⁷³ That does not compare well to the roughly 15 kt

⁷⁰ Robert Koenig, "Science Emerges from the 'Dark Age' of the Ceausescus," *Science* Vol. 280, No. 5371, p. 1829.

⁷¹ "A CANDU Fiasco in Romania," Canadian Broadcasting Corporation television report available at archives.cbc.ca/IDC-1-75-104-907/science_technology/candu/clip9. Note that due to a tiff over money and the Ceausescu regime's penchant for secrecy, the Canadians were largely sidelined from the project not long after it began.

⁷² Donald Anderson, email communication with the author, May 8, 2006.

⁷³ See Richard L. Garwin and Frank N. Von Hippel, "A Technical Analysis of North Korea's October 9 Nuclear Test," *Arms Control Today*, available at

yield of the Hiroshima bomb or the 20 kt yield of the Nagasaki bomb. Indeed, this was the *first time in history* that a country had failed to produce a multi-kiloton explosion on its first attempt. As Jungmin Kang and Peter Hayes ironize, “The DPRK has now demonstrated that it does not yet have a nuclear capacity that enables it to threaten nuclear Armageddon against anyone but itself.”⁷⁴ CIA Director Michael Hayden apparently has also concluded that the test was a failure and therefore “does not recognize North Korea as a nuclear weapons state,” according to a report in South Korea’s respected *JoongAng Ilbo* newspaper.⁷⁵ So from a deterrence perspective, the regime is today in a much worse position than before it tested. This cannot be what it intended. Of course, Romania never got even close to testing a nuclear device, so in that limited sense the DPRK has surpassed its fallen comrade. But still, the October fizzle severely undermines the credibility of worst-case scenarios about the progress of the DPRK nuclear program.

Can the regime recover from its October own-goal? Of course this possibility cannot be excluded; but, again, the degree to which it recovers will depend on its organizational capacity to learn from its mistakes. And not only the October test fizzle, but more generally the disastrous experience of a half-century of DPRK economic development efforts do not give much confidence that the regime knows how to adjust.⁷⁶ Moreover, even if it were able to conduct a successful test in the future, it would then face the high hurdle of achieving full weaponization and integration with strategic delivery systems—which also have been showing a distinct tendency to malfunction of late.⁷⁷ In sum, the widespread assumption that North Korea is capable of going nuclear at any time of its choosing is not well supported by the theory and history of neo-patrimonial nuclear programs, or by the mounting, albeit circumstantial evidence about its own program.

http://www.armscontrol.org/act/2006_11/NKTestAnalysis.asp ; Jungmin Kang and Peter Hayes, “Technical Analysis of the DPRK Nuclear Test,” Policy Forum Online 06-89A (October 20, 2006), available at <http://www.nautilus.org/fora/security/0689HayesKang.html> .

⁷⁴ Kang and Hayes, “Technical Analysis of the DPRK Nuclear Test.”

⁷⁵ Reuters, “CIA Says North Korea Nuclear Test Failed,” March 28, 2007 (accessed on Lexis-Nexis).

⁷⁶ On the regime’s basic economic woes, see Haggard and Noland, *Famine in North Korea*, esp. ch. 8. Haggard and Noland rightly note that the reasons for these woes may be political and institutional more than intellectual, but whatever their source they seem incredibly durable.

⁷⁷ Thomas E. Ricks and Anthony Faiola, “Experts Say Missile Failure Highlights Ineptness,” *Washington Post*, July 6, 2006, p. A16.

Conclusion: From Analysis to Prescription

This paper has developed a novel assessment of the DPRK nuclear program on the basis of a comparative foreign policy approach. The typical journalistic/area studies “ground-up” approach certainly has its place, but its utility in this case is much diminished because the regime is so secretive and opaque. The innovative attempt of Victor Cha and David Kang to promote an IR theory-driven approach pointed the way forward, but this paper has pushed beyond Cha and Kang by questioning two common assumptions about proliferation that they make explicitly and many other analysts of the DPRK make implicitly: first, the assumption that the DPRK’s nuclear intentions are a rational response to the external environment; and second, the assumption that that the DPRK, a highly industrialized state with ample nuclear experience, must have developed enough technical capacity by now to be able to build an operational nuclear deterrent in the near-term. This paper has undermined both of those assumptions. In their place, it has put forth the hypotheses that the DPRK’s nuclear intentions are a product of its leadership’s oppositional nationalist identity conception, while its nuclear capacities are likely constrained by the organizational and managerial shortcomings of this sultanistic regime. In short, my hypotheses are that the DPRK dearly wants the bomb but may not be able to get it. And the paper has provided preliminary evidence—not much more is possible in this case—to suggest that these hypotheses may well have some empirical bite.

The analysis so far has been resolutely strategic and long-term in its orientation. It has not entered into speculation about the causes of the myriad twists and turns in the DPRK’s nuclear diplomacy, including its willingness to freeze its reactors for several years under the Agreed Framework, or its headlong drive toward the bomb that it launched after being liberated from the Agreed Framework in 2002. Of course, such tactical questions are very important from a policy standpoint. It certainly matters, for instance, that the DPRK’s first nuclear test occurred in 2006 and not in 1996. And to some extent, these tactical questions themselves may be amenable to a structural analysis. For instance, for a mix of institutional and psychological reasons neo-patrimonial regimes

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very often display extremely mercurial policy tendencies.⁷⁸ Further theoretical development may help to render the famed unpredictability of the DPRK's diplomacy a little less so. But, given the regime's decided lack of transparency, even the best theory will never offer anything more than educated guesses about Pyongyang's likely short- to medium-run behavior. It is inevitable that the DPRK will continue to surprise us. Nevertheless, admitting our ignorance need not paralyze us into inaction.

When considering policy options, we need to place the DPRK nuclear issue in its broader regional context. Even if the DPRK's nuclear program is actually much more successful than this paper has guessed, the greatest danger Pyongyang poses to East Asian peace and security lies not in what it itself might do. Rather, the greatest danger is that the festering nuclear crisis could play a role akin to the one the Balkan crises played in Europe in the run-up to 1914—exacerbating preexisting regional rivalries and ultimately fomenting a great power war.⁷⁹

How can we contain these risks? Paradoxically, Pyongyang's off-the-charts obstreperousness of late has helped the major states in the region to begin to develop a sense of common interest that had previously been sorely lacking. For instance, the October 2006 nuclear test turned out in fact to be perfectly timed to help Japanese Prime Minister Shinzo Abe and Chinese President Hu Jintao place their two countries' relations on a more productive path. The US has done well to encourage these trends. But in the long run, regional stability cannot be built on the basis of isolating the DPRK because on the one hand it is too small, and because on the other hand several of its neighbors perceive deep and abiding interests in engagement quite apart from the nuclear issue.

It is in the preferences of these other regional actors, notably the ROK and China, that I find the most persuasive reason for the US to pursue a policy of engagement with the DPRK. This paper has doused cold water on the hope that either carrots or sticks will allow us to shape the regime's nuclear behavior to our liking, but even so, the US has a clear interest in recognizing and furthering the interests of these other, much more significant states on whom we ourselves rely. Since *they* want engagement, in the interest of regional cohesion we should engage. For if the region's powers can attain a

⁷⁸ See Rosen, *War and Human Nature*, esp. p. 156.

⁷⁹ Aaron L. Friedberg, "Ripe for Rivalry: Prospects for Peace in a Multipolar Asia," *International Security*, Vol. 18, No. 3 (Winter 1993/94), pp. 5-33.

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reasonable level of mutual trust and understanding, then whatever the DPRK chooses to do, the peace of Northeast Asia will hold.

TECHNICAL APPENDIX

The coding procedures can be summarized as follows. First, in order to find the key comparison other(s), I counted paragraph by paragraph the number of references to one or another external actor (human communities that are not based primarily inside our borders). The more paragraphs in which an external actor is referred to, the more claim it has to be a key comparison other.⁸⁰ Second, in order to gauge the level of “opposition,” I compared the total number of paragraphs making reference to key comparison others to the total number of paragraphs making reference to wider communities that include both Korea and the key comparison other. It is a well-known finding of social psychological research that an oppositional identity is hard to maintain if “we” and “they” are also understood to be connected under a strong transcendent identity that covers us both.⁸¹ Third, in order to gauge the level of “nationalism,” I compared the total number of paragraphs that only contained references to key comparison others, versus paragraphs that *also* referred to a wider community in which we play a part (whether or not that wider community includes the key comparison other). A tendency to confront the key comparison other head-on reflects proud nationalism, while a tendency to use a wider community as a screen to avoid that head-to-head comparison reflects a less prideful national identity.⁸²

⁸⁰ Note, however, that qualitative interpretation must also be taken into account in making this judgment. Indeed, it is inescapable that qualitative choices will drive the quantitative results. These issues are explored in Hymans, *The Psychology of Nuclear Proliferation*, ch. 3.

⁸¹ Quantitatively, this relationship is expressed as follows: (# of references to the key comparison other)/(# of references to key comparison other + # of references to wider communities in which we and they play a part). For heuristic purposes, one can think of a score greater than 0.5 as reflecting an “oppositional” identity.

⁸² Quantitatively, this relationship is expressed as follows: (# of “naked” references to key comparison other)/(# of “naked” references to key comparison other + # of “screened” references to key comparison other). For heuristic purposes, one can think of a score greater than 0.5 as reflecting a “nationalist” national identity.

1. Counts of references to external others
(KIS=Kim Il Sung; KJI=Kim Jong Il.)

Count of Other	KIS 1975-79	KIS 1980-84	KIS 1985-89	KIS 1990-94	KJI 1995-99	KJI 2000-05	KJI 2006-07	Grand Total
Generic foreign others	55	65	77	125	113	149	56	640
SK regime	31	24	118	107	61	60	14	415
US	34	25	69	62	40	40	14	284
World community	19	20	66	62	22	33	6	228
Imperialist club	2	5	30	38	35	57	5	172
Communist community	8	6	30	21	6		0	71
Japan	12	6	16	8	9	16	2	69
Progressive community	9	7	17	7	10	2	1	53
Progressive others	7	8	11	11	1	2	0	40
Communist others	4	2	11	8	4	2	0	31
3rd world community	4	2	13	7	1	0	0	27
3rd world others	5	4	10	6	2	0	0	27
Asia community	1	0	4	3	4	1	0	13
USSR	0	0	7	0	1	0	0	8

Note: No other “Other” received more than 2 references in the data set.

2. Levels of opposition and nationalism and confidence intervals

Leader and Period	# Generic foreign other refs	Level of opposition	95% ci lower bound	95% ci upper bound	Level of nationalism	95% ci lower bound	95% ci upper bound
KIS 75-79	55	0.743243	0.64371	0.842776	0.781818	0.672665	0.890971
KIS 80-84	65	0.764706	0.674528	0.854884	0.815385	0.721062	0.909707
KIS 85-89	77	0.538462	0.456753	0.62017	0.753247	0.65695	0.849543
KIS 90-94	125	0.668449	0.600974	0.735924	0.656	0.572722	0.739278
KJI 95-99	113	0.837037	0.774734	0.89934	0.787611	0.712199	0.863022
KJI 00-05	149	0.818681	0.762706	0.874657	0.885906	0.834857	0.936955
KJI 06-07	56	0.903226	0.829633	0.976819	0.928571	0.861118	0.996025