

Caught Red-Handed

How States Wield Proof to
Coerce Wrongdoers

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In August 1977, the Soviet Union caught South Africa red-handed. Soviet satellites observed the South Africans drilling deep shafts for an underground nuclear test in the Kalahari Desert. The Soviets decided to notify the United States, and U.S. intelligence verified the evidence.¹ Yet, the two superpowers diverged on whether to publicly reveal proof of South Africa's secret nuclear activities. U.S. policy-makers wished to engage the South Africans directly and "without public fanfare."² In contrast, the Soviet Union decided to announce to the world that South Africa was on the verge of testing a nuclear device.³ In the absence of such publicity, Soviet leaders distrusted the United States to pressure South Africa not to conduct a test. Now that South Africa's wrongdoing was out in the open, the United States feared being labeled a hypocrite if it did not follow through on its commitment to stop nuclear proliferation. The United States acted to restrain South Africa. Thus, the Soviet government engaged in indirect coercion: By catalyzing the United States through the public revelation of proof, the Soviet Union targeted South Africa to change its behavior.

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1. "Draft Letter to B. Cardledge on Conversation with U.S. Deputy Undersecretary of State Joseph Nye on South African Nuclear Intentions," September 1977, History and Public Policy Program Digital Archive (hereafter HAPP), UK National Archives, FCO45-2131, contributed by Anna-Mart van Wyk, <https://digitalarchive.wilsoncenter.org/document/116626>.

2. "Telegram from the Department of State to the Embassies in South Africa, France, and the United Kingdom," August 19, 1977, *Foreign Relations of the United States (FRUS) 1977-1980*, Vol. 16: *Southern Africa* (Washington, D.C.: Government Printing Office [GPO], 2016), pp. 914-915, <https://history.state.gov/historicaldocuments/frus1977-80v16/d295>.

3. "TASS Issues Statement on Nuclear Weapons in S. Africa," Moscow Telegrafnoye agentstvo Sovetskogo Soyuz (TASS) International Service, August 8, 1977, Foreign Broadcast Information Service (FBIS) Daily Reports, NewsBank database.

States frequently uncover proof of others' norm violations. In 1989, the United States discovered that the Soviet Union was secretly manufacturing hundreds of tons of anthrax, smallpox, and the plague, even though it had signed the Biological Weapons Convention. Throughout the 2000s, the United States and Israel acquired intelligence regarding the military dimensions of Iran's nuclear program.⁴ In 2013, the United States collected intelligence on Syrian dictator Bashar al-Assad's use of chemical weapons.⁵ How do states who make these discoveries use such proof?

In this article, we explain how states that catch others red-handed and that judge the wrongdoing to run counter to their interests wield a form of coercive power over the culprit, one that existing theories of coercion underappreciate. Discoverers with more leverage than others over a culprit have incentives to conceal the guilty party's wrongdoing. Concealment strengthens the coercer's bargaining position, improving the chances of successful coercion. On the other hand, states that possess secret proof of guilt but doubt their ability to coerce the guilty party are more likely to publicize that proof or privately share it with other states or institutions.

States do not simply conceal the guilt of their friends and reveal the misdeeds of their enemies. Nor do they primarily cover up wrongdoing to guard the sanctity of norms against further violations or to protect intelligence sources and methods. Rather, states deploy secret proof to confront wrongdoers by coercing culprits either directly or indirectly.

We detail two reasons why discoverers can more effectively coerce wrongdoers when they stay quiet about wrongdoers' norm violations.⁶ Targets of coercion fear acquiring a reputation among third parties and domestic constituents for backing down. They seek to save face. Thus, when coercers withhold from public view what they know of the guilty party's wrongdoing, they are more likely to achieve their aims. In the case of South Africa, President Jimmy

4. Many of these discoveries are summarized in "Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions in the Islamic Republic of Iran" (Vienna: International Atomic Energy Agency (IAEA) Board of Governors, November 8, 2011), <https://www.iaea.org/sites/default/files/gov2011-65.pdf>.

5. "Government Assessment of the Syrian Government's Use of Chemical Weapons on August 21, 2013" (Washington, D.C.: White House, Office of the Press Secretary, August 30, 2013), <https://obamawhitehouse.archives.gov/the-press-office/2013/08/30/government-assessment-syrian-government-s-use-chemical-weapons-august-21>.

6. Scholars have long studied the efficacy of coercive strategies, such as demonstrating resolve through costly signaling, audience costs, reputation, or brinkmanship. We build on this literature by deriving mechanisms for how face-saving contributes to coercion. For an overview, see Robert J. Art and Kelly M. Greenhill, "Coercion: An Analytical Overview," in Kelly M. Greenhill and Peter Krause, eds., *Coercion: The Power to Hurt in International Politics* (Oxford: Oxford University Press, 2018).

Carter recognized this. He wrote in the margins of a memo from his national security adviser, Zbigniew Brzezinski, that his priority was to stop South Africa from testing a nuclear device: “If they have to lie about what their plans were, let them do so—Let them save face. J.C.”⁷ Moreover, holding proof of guilt in abeyance enables coercers to blackmail wrongdoers by threatening to go public. In 1989, U.S. leaders issued a secret *démarche* to the Soviets about their germ warfare program. A Soviet scientist recalls the U.S. strategy: “covert pressure would force us [the Soviets] out of the biological warfare business.”⁸ It worked.

We also explain why some coercers publicize proof of wrongdoing and forgo the benefits of secrecy.⁹ If a discoverer distrusts the intentions of states with more leverage, it will reveal evidence publicly, catalyzing others to act. Publicizing proof weaponizes the prospect that other states will pay reputation and hypocrisy costs if they do not follow through on punishing the violation of a shared norm.

That some states prefer publicity and others concealment in the same situation poses a puzzle for existing work on secrecy and deniability,¹⁰ much of which implies that all states will agree on the benefits of deniability in international relations, whether to control escalation or to issue threats and assurances.¹¹ By highlighting how actors with less leverage can publicize proof of wrongdoing to coerce offenders, we help resolve this puzzle. In 1977, lacking the means to coerce South Africa directly and fearing that the United States

7. “Memorandum from the President’s Assistant for National Security Affairs (Brzezinski) to President Carter,” undated, *FRUS, 1977–1980*, Vol. 16, p. 922, <https://history.state.gov/historicaldocuments/frus1977-80v16/d301>.

8. Ken Alibek and Stephen Handelman, *Biohazard: The Chilling True Story of the Largest Covert Biological Weapons Program in the World—Told from Inside by the Man Who Ran It* (New York: Random House, 1999), p. 152.

9. In this respect, we explain states’ decisions to engage in direct coercion in the first place, which is less common in coercion literature that focuses on outcomes.

10. Allison Carnegie and Austin Carson, “The Spotlight’s Harsh Glare: Rethinking Publicity and International Order,” *International Organization*, Vol. 72, No. 3 (Summer 2018), pp. 627–657, doi.org/10.1017/S0020818318000176; Allison Carnegie and Austin Carson, *Secrets in Global Governance: Disclosure Dilemmas and the Challenge of International Cooperation* (Cambridge: Cambridge University Press, 2020); and Roseanne W. McManus and Keren Yarhi-Milo, “The Logic of ‘Off-stage’ Signaling: Domestic Politics, Regime Type, and Major Power-Protégé Relations,” *International Organization*, Vol. 71, No. 4 (Fall 2017), pp. 701–733, doi.org/10.1017/S0020818317000297.

11. On escalation control, see Austin Carson, *Secret Wars: Covert Conflict in International Politics* (Princeton, N.J.: Princeton University Press, 2018); on threats and assurances, see Austin Carson and Keren Yarhi-Milo, “Covert Communication: The Intelligibility and Credibility of Signaling in Secret,” *Security Studies*, Vol. 26, No. 1 (2017), pp. 124–156, doi.org/10.1080/09636412.2017.1243921; Keren Yarhi-Milo, “Tying Hands behind Closed Doors: The Logic and Practice of Secret Reassurance,” *Security Studies*, Vol. 22, No. 3 (2013), pp. 405–435, doi.org/10.1080/09636412.2013.816126; and Reid B. C. Pauly, “‘Stop or I’ll Shoot, Comply and I Won’t’: Coercive Assurance in International Politics,” Ph.D. dissertation, Massachusetts Institute of Technology, 2019.

would not act otherwise, the Soviet Union chose to reveal South Africa's test site. In 2018, just as U.S. Secretary of State Mike Pompeo was arriving in Ankara, Turkey released tape-recorded details of the murder of journalist Jamal Khashoggi in an Istanbul consulate. Turkey disclosed the proof to pressure the United States to act against the guilty party, Saudi Arabia.¹²

In the nuclear nonproliferation literature, scholars have identified secrecy as a tool to both prevent cascading proliferation and preserve a norm against weapons acquisition.¹³ But we contend that before using secrecy to mitigate the consequences of nonproliferation failure, counterproliferators use it to attempt to coerce states into abandoning nuclear weapons programs. Moreover, through archival process tracing, we revise a conventional wisdom that sees nonproliferation coordination between the Cold War superpowers as a genuinely cooperative endeavor in a rare domain of shared interests.¹⁴ We find that the Soviet Union and the United States occasionally catalyzed each other to uphold their nonproliferation commitments by revealing proof of secret proliferation.

A scope condition of our theory is that the discoverer must deem the secret norm violation it uncovers to run counter to its interests and therefore seek to stop it. Our theory does not account for cases in which a state discovers a norm violation that advances its interests.

To demonstrate our theory and mechanisms regarding when states conceal or reveal proof of guilt, we examine four cases in which states uncover convincing evidence of secret nuclear weapons programs. These programs violated international norms. The discoverers in each of these cases concluded that these norm violations threatened their interests. Our theory is comprised of two independent variables, with the discoverer's relative leverage over the wrongdoer playing the most important role. Thus, we pair for comparison two cases of a discoverer with high leverage (United States-Taiwan and United States-Libya) and two cases of a discoverer with less leverage (Soviet Union-South Africa and United States-North Korea).

These cases provide broad support for our theory and its mechanisms. U.S.

12. David D. Kirkpatrick and Carlotta Gall, "Audio Offers Gruesome Details of Jamal Khashoggi Killing, Turkish Official Says," *New York Times*, October 17, 2018, <https://www.nytimes.com/2018/10/17/world/europe/turkey-saudi-khashoggi-dismember.html>.

13. On preventing proliferation cascades, see Nicholas L. Miller, *Stopping the Bomb: The Sources and Effectiveness of US Nonproliferation Policy* (Ithaca, N.Y.: Cornell University Press, 2018); and Or Rabinowitz and Nicholas L. Miller, "Keeping the Bombs in the Basement: U.S. Nonproliferation Policy toward Israel, South Africa, and Pakistan," *International Security*, Vol. 40, No. 1 (Summer 2015), pp. 47–86, doi.org/10.1162/ISEC_a_00207. On protecting norms, see Carnegie and Carson, "The Spotlight's Harsh Glare."

14. Andrew J. Coe and Jane Vaynman, "Collusion and the Nuclear Nonproliferation Regime," *Journal of Politics*, Vol. 77, No. 4 (October 2015), pp. 983–997, doi.org/10.1086/682080.

policymakers preferred discretion in order to wield proof as a weapon of coercion against Taiwan and also against Libya. The U.S. approach succeeded. In the South Africa case, the Soviets went public with accusations of an imminent nuclear test in 1977 in a successful bid to pressure those with leverage over South Africa to act. Detecting North Korean wrongdoing in the 1980s, the United States privately shared its evidence with the Soviet Union because it assessed that the Soviet Union, which possessed more leverage, was likely to act on U.S. proof to restrain North Korea.

The article proceeds as follows. First, we define wrongdoing and illustrate the three possible ways that discoverers might or might not share proof of it. Second, we present our theory for how states use such proof and then offer three alternative explanations. Third, we probe the predictions we derive using our four paired cases. In the conclusion, we review our findings and consider broader theoretical and practical implications.

Proof of Wrongdoing and Three Ways States Use It

We define wrongdoing as having two characteristics. First, the guilty party must attempt to keep the activity in question secret. When states act in the open, the power of discoverers' proof of guilt disappears. India's 1974 successful nuclear test, for example, was an eminently public *fait accompli* and therefore does not fall within the category of wrongdoing we consider here. Second, wrongdoing must violate an international norm. We conceive of norms broadly to encompass a shared standard of appropriate behavior.¹⁵ They are often codified as jurisdictional commitments—treaties, the charters of multilateral institutions, international law—and backed by the rhetoric of state leaders. Most normative regimes conceived of by scholars of international order would count in our definition (e.g., state sovereignty, diplomatic immunity, nuclear nonproliferation, prohibition on the use of weapons of mass destruction, and protections against human rights abuses).¹⁶ The Soviet Union's secret biological weapons program in the 1970s and 1980s qualifies as wrongdoing because it violated the 1972 Biological Weapons Convention, which the Soviets themselves had signed. Note, however, that some covert activity does not violate an international norm. Espionage, for instance, occurs in secret but there is some expectation in international politics that spying will occur.

15. Peter J. Katzenstein, ed., *The Culture of National Security: Norms and Identity in World Politics* (New York: Columbia University Press, 1996).

16. Martha Finnemore and Kathryn Sikkink, "International Norm Dynamics and Political Change," *International Organization*, Vol. 52, No. 4 (Autumn 1998), pp. 887–917, <https://www.jstor.org/stable/2601361>.

By proof of wrongdoing, we mean that states express confidence in the evidence they hold of another state's secret misdeeds. If discoverers remain uncertain about another state's activities, then they do not yet possess proof. If they hold proof of wrongdoing, states have three options. First, they can *reveal* the wrongdoing through official government communications and share evidence with all relevant actors to support their claims.¹⁷ All states learn of the wrongdoing—if they care to listen. In 2010, the United Arab Emirates released detailed surveillance footage and other documentation revealing Israeli responsibility for the assassination of a Hamas official in Dubai.¹⁸ In 2014, the United States indicted five Chinese People's Liberation Army (PLA) hackers with stealing U.S. firms' intellectual property.¹⁹

Second, states can *conceal* knowledge of their discovery. In 1970, the president-elect of Costa Rica, José Figueres Ferrer, secretly accepted a \$200,000 "loan" from the Soviet Union in exchange for promoting diplomatic and commercial ties between Costa Rica and the Soviet Union. The Central Intelligence Agency (CIA) learned the details of this arrangement and reported them to Henry Kissinger, then national security adviser. U.S. leaders considered "publicly exposing the link," but ultimately kept the corruption hidden.²⁰ During and after bargaining with Iran as part of the July 2015 "Joint Comprehensive Plan of Action," to cite another example, the United States concealed some evidence of the "possible military dimensions" of Iran's nuclear program.²¹

Third, states that discover another's wrongdoing may *privately share* proof of wrongdoing with a limited number of actors. The discoverer nevertheless declines to go public and asks those in whom they confide to act on the proof but not reveal the proof publicly. Empirically, private sharing tends to take two forms. First, the discoverer may pass proof to one or a small group of states. In

17. Revealing proof of wrongdoing is not always the same as disclosing its source, whether it be a spy, a satellite, or a defector. Nonetheless, this article addresses the possibility that losing a source of intelligence may factor into decision-making about concealing or revealing proof.

18. Ronen Bergman et al., "An Eye for an Eye: Anatomy of Mossad's Dubai Operation," *Der Spiegel*, January 17, 2011, spiegel.de/international/world/an-eye-for-an-eye-the-anatomy-of-mossad-s-dubai-operation-a-739908.html.

19. Michael S. Schmidt and David E. Sanger, "5 in China Army Face U.S. Charges of Cyberattacks," *New York Times*, May 19, 2014, <https://www.nytimes.com/2014/05/20/us/us-to-charge-chinese-workers-with-cyberspying.html>. China violated a WTO-codified norm against intellectual property theft.

20. "Memorandum from Viron P. Vaky of the National Security Council to the President's Assistant for National Security Affairs (Kissinger)," April 11, 1970, *FRUS, 1969-1976*, Vol. E-10: *Documents on American Republics, 1969-1972* (Washington, D.C.: GPO, 2009), <https://history.state.gov/historicaldocuments/frus1969-76ve10/d173>.

21. Nahal Toosi, "Kerry: Iran Doesn't Have to Account for Past Nuclear Weapons Research," *Politico*, June 16, 2015, <https://www.politico.com/story/2015/06/kerry-iran-doesnt-have-to-account-for-past-nuclear-weapons-research-119074>.

2007, for example, Israeli intelligence officials traveled to the United States to share evidence with U.S. leaders of a secret nuclear reactor under construction in Syria. Neither Israeli nor U.S. officials revealed this evidence publicly.²² Second, the discoverer may pass proof to an international organization. Member states often pass intelligence to the International Atomic Energy Agency (IAEA), for instance.²³

Discoverers that choose to conceal or share privately proof of wrongdoing acknowledge that secrecy is a wasting asset and that the truth will ultimately emerge by leak, press release, or declassification. They nevertheless attempt to conceal for as long as necessary.

How Concealment and Revelation Aid Coercion

Although it is just one among many tools of coercion, possessing proof can be a powerful asset to discoverers. When states uncover proof of wrongdoing that runs counter to their interests, we explain their decision to conceal, share privately, or reveal this information. Our theory consists of two sequential independent variables: the discoverer's relative leverage over the wrongdoer, followed by the discoverer's assessment of whether it can expect others to act against the wrongdoer. To elucidate the logic of the theory, we first explain the two ways in which secrecy aids coercion—the face-saving mechanism and the blackmail mechanism. Then we explain why states with less leverage may choose to forgo these benefits if they doubt that the state with the most leverage will pressure the wrongdoer to change its behavior.

FACE-SAVING MECHANISM

Concealment allows targets of coercion to save face. By highlighting this virtue of secrecy, we build on research by scholars who critique the notion that publicity is the sine qua non for making threats and assurances effective. New work explains why states often defy expectations that they will act openly.²⁴ Our work builds most on that of Shuhei Kurizaki, who shows in a formal model that private threats allow leaders in the receiving state to back down without paying domestic audience costs.²⁵ We contend that saving face is im-

22. Yaakov Katz, *Shadow Strike: Inside Israel's Secret Mission to Eliminate Syrian Nuclear Power* (New York: St. Martin's, 2019).

23. States that lack proof can also share leads with the IAEA or UN Panels of Experts to enlist their help in gathering further information. Following our definition, we would not consider this to be a situation in which a state holds proof of wrongdoing.

24. Carson and Yarhi-Milo, "Covert Communication"; and Yarhi-Milo, "Tying Hands behind Closed Doors."

25. Shuhei Kurizaki, "Efficient Secrecy: Public versus Private Threats in Crisis Diplomacy," *Ameri-*

portant to targets of coercion because they are wary of two separate audiences. Before domestic audiences, the risks to leaders who bow to foreign threats include being voted out of office or overthrown in rebellions or coups. Weakness before third parties may undermine leaders' reputations for resolve and lead to war and other forms of future interstate predation. Thus, a discoverer that chooses to conceal proof of wrongdoing enables secret compliance by the culprit and shields it from perceived domestic and international reputational costs.

A long tradition of scholarship has observed the value of face-saving. While scholars dispute whether a state's reputation for upholding threats and following through with promises affects its future credibility, all agree that leaders value maintaining a reputation for resolve.²⁶ Empirical studies show that face-saving weighs heavily in the minds of leaders who are targets of coercive pressure.²⁷ Coercers should offer their targets the opportunity to save face, because public concession "demands more humiliation."²⁸

Yet, the literature on face-saving tends to focus on how third parties help disputants save face, for example, by either arbitration through international institutions or mediation.²⁹ This article focuses on the choices of actors that engage in coercion. Discoverers of proof may grant or deny face-saving secrecy.

BLACKMAIL MECHANISM

The second benefit of concealment is blackmail, whereby discoverers threaten to reveal a secret that incriminates a wrongdoer. Actors sometimes employ this practice in domestic politics. Scholars of authoritarian control have noted how

can Political Science Review, Vol. 101, No. 3 (August 2007), pp. 543–558, doi.org/10.1017/S0003055407070396.

26. On capabilities trumping reputations, see Daryl G. Press, *Calculating Credibility: How Leaders Assess Military Threats* (Ithaca, N.Y.: Cornell University Press, 2005). On the salience of reputation, see Alex Weisiger and Keren Yarhi-Milo, "Revisiting Reputation: How Past Actions Matter in International Politics," *International Organization*, Vol. 69, No. 2 (Spring 2015), pp. 473–495, doi.org/10.1017/S0020818314000393.

27. Sechser demonstrates that states defy coercive demands because they fear acquiring a reputation for backing down. Todd S. Sechser, "Goliath's Curse: Coercive Threats and Asymmetric Power," *International Organization*, Vol. 64, No. 4 (October 2010), pp. 627–660, <https://www.jstor.org/stable/40930451>.

28. Robert J. Art, "To What Ends Military Power?" *International Security*, Vol. 4, No. 4 (Spring 1980), p. 10, doi.org/10.2307/2626666. See also Thomas C. Schelling, *Arms and Influence* (New Haven, Conn.: Yale University Press, 1966), pp. 82, 125; and David Stasavage, "Open-Door or Closed-Door? Transparency in Domestic and International Bargaining," *International Organization*, Vol. 58, No. 4 (October 2004), pp. 667–703, doi.org/10.1017/S0020818304040214.

29. Beth A. Simmons, "Capacity, Commitment, and Compliance: International Institutions and Territorial Disputes," *Journal of Conflict Resolution*, Vol. 46, No. 6 (December 2002), pp. 829–856, doi.org/10.1177%2F002200202237931; and Shawn L. Ramirez, "Mediation in the Shadow of an Audience: How Third Parties Use Secrecy and Agenda-Setting to Broker Settlements," *Journal of Theoretical Politics*, Vol. 30, No. 1 (January 2018), pp. 119–146, doi.org/10.1177%2F0951629817729227.

autocrats from Russia to Ukraine to Peru have used blackmail to neutralize their critics.³⁰ According to Keith Darden, in the 1990s Ukraine's leader, Leonid Kuchma, used his sprawling surveillance apparatus to gather compromising information (*kompromat*) about the crimes of powerful figures, share the incriminating evidence with the wrongdoers behind closed doors, and, in exchange for their loyalty, conceal the evidence from criminal prosecutors.³¹ In this context and others, James Choy finds that to successfully blackmail their domestic opponents, rulers need convincing proof of criminal wrongdoing, control over whether to reveal such proof, and a citizenry that values punishing criminals. The ability to broadcast information therefore becomes a powerful tool.³²

Blackmail works similarly in the context of international coercion. States that collect intelligence clandestinely do not automatically diffuse it throughout the system. Instead, they may engage in concealment and confront the wrongdoer with evidence behind closed doors. Rather than being spared from prosecution or citizens' demands for retribution, there are two benefits for the target if discoverers withhold proof of wrongdoing.³³ First, target states understand that when discoverers publicize proof of wrongdoing, they open up the possibility of justifying punishment against the wrongdoer. Publicity can make the case for war, or it can legitimize impending punishments in the eyes of the discoverer's own citizens, the discoverer's allies, and third parties. Publicity may even beget pressure on the discoverer to initiate a war. Second, publicity can also unleash a global or multilateral campaign of pressure against the wrongdoer. If the discoverer goes public, its proof can help set the agenda in other states, which may also bring pressure to bear on the wrongdoer. The literature on naming and shaming shows that information affects how actors treat norm violators. For example, networks of advocates for victims in one country may employ the "boomerang effect" to convince the citizens of another country to pressure their own governments to intervene.³⁴ Our theory builds on this literature by showing that discoverers can influence wrongdoers by threatening to

30. Keith A. Darden, "Blackmail as a Tool of State Domination: Ukraine under Kuchma," *East European Constitutional Review*, Vol. 10, Nos. 2–3 (Spring/Summer 2001), pp. 67–71; and John Mcmillan and Pablo Zoido, "How to Subvert Democracy: Montesinos in Peru," *Journal of Economic Perspectives*, Vol. 18, No. 4 (Fall 2004), pp. 69–92, doi.org/10.1257/0895330042632690.

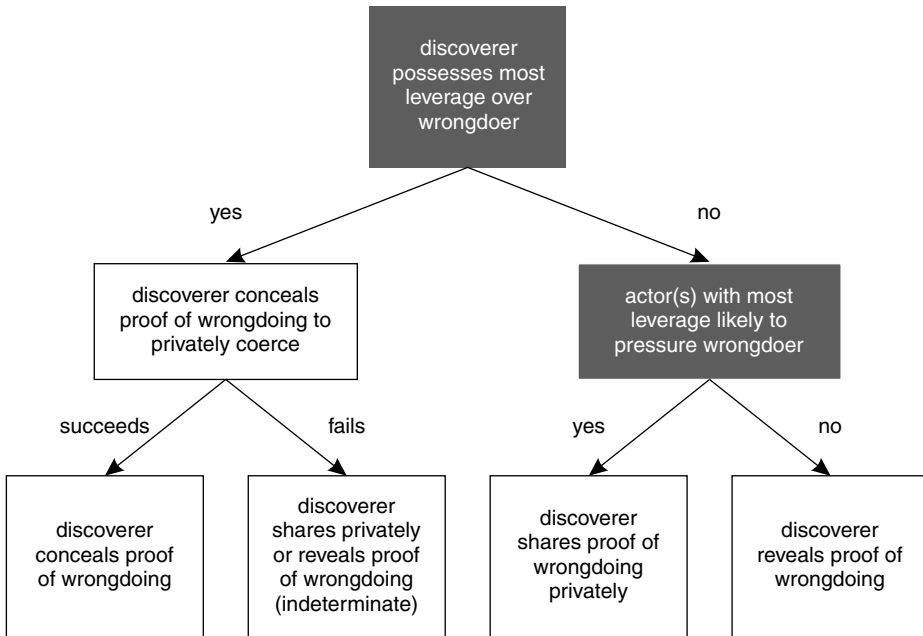
31. Darden, "Blackmail as a Tool."

32. James P. Choy, "Kompromat: A Theory of Blackmail as a System of Governance," *Journal of Development Economics*, Vol. 147 (November 2020), doi.org/10.1016/j.jdeveco.2020.102535.

33. There are deductive reasons for targets to question the credibility of both a coercer's promise to conceal and its threat to publicize; publicity forgoes the coercive benefits of secrecy, and concealment risks blowback from leaks.

34. Margaret E. Keck and Kathryn Sikkink, *Activists beyond Borders: Advocacy Networks in International Politics* (Ithaca, N.Y.: Cornell University Press, 1998).

Figure 1. How States Wield Proof to Coerce Wrongdoers



launch a global campaign against them.³⁵ By engaging in concealment, the discoverer spares the wrongdoer of these developments.

RELATIVE LEVERAGE DRIVES THE USE OF PROOF

Whether and how discoverers capitalize on the face-saving and blackmail mechanisms depends on their relative leverage (see figure 1, in which the sequential independent variables appear in shaded boxes). Keeping in mind their goal of changing the wrongdoer’s behavior, the discoverer considers what actor or organization is best positioned to influence the guilty party. Possessing proof is its own form of leverage, but here we refer to the broader leverage that states possess over the wrongdoer, irrespective of proof. If the discoverer assesses that it is best positioned to exert influence, then we expect it to engage in concealment. Discoverers with the most leverage forgo little by keeping others in the dark. They typically couple their decision to conceal with a decision to privately confront the wrongdoer about its behavior. Discoverers

35. In existing literature, the strategy of “naming and shaming” is not contingent upon the behavior of norm violators, which overlooks the possibility of blackmail.

may capitalize on the coercive benefits of this approach by using the face-saving and blackmail mechanisms.

Our classification of the actor with the most leverage follows the assessment that states make themselves. We use speech evidence from government officials to code this variable. We predict that states assess whether they possess the most leverage over the wrongdoer on the basis of two considerations. The first is the capacity to use force. The ability to carry out brute force missions at lower cost, owing to strength or geographic proximity, confers higher military leverage. The second consideration is the ability to cut off benefits. Scholarship on coercion consistently finds that it is easier to coerce those with whom states already have a relationship.³⁶ States possess higher leverage over a target if their existing security or economic linkages (e.g., military alliances, security assistance, energy dependence, trade agreements, or foreign direct investment) run deep. Although allies maintain stronger ties of this sort, coercers need not be allies to be in this position. As long as coercers can threaten to withdraw benefits, they can impose penalties.

While we predict that discoverers with the most leverage will conceal proof of wrongdoing, we also expect them to adjust their approach over time if coercion fails. Despite being in the best position to act in private against the wrongdoer, they may conclude that the most promising next step is to convince several actors to pressure the wrongdoer to change its behavior. Thus, they may shift to either sharing privately or revealing publicly proof of wrongdoing. When a discoverer's attempt to coerce the wrongdoer fails, our theory cannot predict how a discoverer will proceed. Discoverers may ultimately conclude that the wrongdoer is not coercible and that brute force is the best option. U.S. Secretary of State Colin Powell's 2003 speech to the United Nations (UN) Security Council sharing supposed evidence of an Iraqi weapons of mass destruction (WMD) program, for instance, signified the United States' decision to abandon efforts to coerce Saddam Hussein and instead to invade Iraq.³⁷ Alternatively, if discoverers determine that a target is not coercible, they may opt to covertly employ military force. In such cases, discoverers may conceal

36. Daniel W. Drezner, *The Sanctions Paradox: Economic Statecraft and International Relations* (Cambridge: Cambridge University Press, 1999); Nicholas L. Miller, "The Secret Success of Nonproliferation Sanctions," *International Organization*, Vol. 68, No. 4 (Fall 2014), pp. 913–944, doi.org/10.1017/S0020818314000216; and Etel Solingen, *Nuclear Logics: Contrasting Paths in East Asia and the Middle East* (Princeton, N.J.: Princeton University Press, 2007).

37. At the time he appeared at the UN, Powell reported that President Bush had already decided to use force. See Colin Powell, "Colin Powell: U.N. Speech 'Was a Great Intelligence Failure,'" interview by Jason M. Breslow (Boston, Mass.: PBS Frontline, May 17, 2016), <https://www.pbs.org/wgbh/frontline/article/colin-powell-u-n-speech-was-a-great-intelligence-failure/>.

the proof they possess to surprise the wrongdoer, evade the wrongdoer's defenses, and cloak the discoverer's use of force.

If the discoverer assesses that it is not best positioned to influence the wrongdoer, then the discoverer will aim to share its proof with the actor(s) that it identifies as having the most leverage over the wrongdoer.³⁸ For the discoverer, the prospect of sharing proof raises the question of whether others will be willing to pressure the wrongdoer to halt their norm violations. If the discoverer assesses that the actor(s) with the most leverage is likely to act, then our theory predicts that the discoverer will privately pass proof of wrongdoing to them in order to preserve the possibility that the actor may capitalize on the benefits of face-saving and blackmail.

Yet, discoverers may doubt whether actors with the most leverage are likely to act against wrongdoers. All states have private information about their own interests and willingness to act. Discoverers struggle to know such details. Privately passing proof of wrongdoing to another actor leaves open the possibility that it will fail to follow through. The more influential actor could delay, act half-heartedly, or later deny that it ever knew of the wrongdoing. At worst, the more influential actor could collude to abet the crime.

Influential actors, however, may be subject to a vulnerability. Many states make rhetorical or codified pledges to uphold certain international norms or condemn specific types of wrongdoing. States may pass legislation authorizing executive agencies to punish sanction violators, or they may vow to indict illicit traffickers. In speeches, declaratory policy documents, or treaty texts, leaders may promise to respect norms of national sovereignty or protect human rights or free speech.³⁹ A discoverer can capitalize on a more leveraged state's pledges to uphold an international norm by challenging it to match its deeds to its words.

In cases in which discoverers express doubt about whether influential actors will move to stop the wrongdoer's norm violations, we expect discoverers to compel states with more leverage to act by revealing proof of wrongdoing. The

38. It is possible for the discoverer to identify states or multilateral organizations as carrying the most leverage. Our theory does not explain why a discoverer will choose to pass its proof to an institution over a state because, in instances of private sharing, both avenues intend to preserve the same virtues of privacy: face-saving and blackmail. The choice between sharing privately with a state or an institution also will depend on the capacity of the institution to keep secrets and conduct face-saving diplomacy. See Reid B.C. Pauly, "Deniability in the Nuclear Nonproliferation Regime: The Upside of the Dual-Use Dilemma," *International Studies Quarterly* (2021), doi.org/10.1093/isq/sqab036; and Carnegie and Carson, *Secrets in Global Governance*.

39. These pledges do not overlap perfectly with state interests; states may bluff, or they may make public commitments for nonstrategic reasons. See Kelly M. Greenhill, *Weapons of Mass Migration: Forced Displacement, Coercion, and Foreign Policy* (Ithaca, N.Y.: Cornell University Press, 2010).

discoverer employs what we call “catalytic coercion.” The power of catalytic coercion derives from two potential costs (i.e., reputational costs and hypocrisy costs) that discoverers with less leverage may impose on states with more leverage to compel them to act. First, leaders fear acquiring reputations for bluffing.⁴⁰ Discoverers that publicize proof of wrongdoing pressure states to act by introducing the prospect of reputational costs for states that have made public commitments to punish those who violate international norms. Second, hypocrisy costs are similar but have been less developed in the literature. Kelly Greenhill defines them as the political costs that actors incur when their actions contravene their commitment to certain values.⁴¹ With regard to coercive engineered migration, Greenhill finds that the weak extort the strong by threatening to highlight their hypocritical treatment of refugees. Other scholars find that leaders go to lengths to avoid paying hypocrisy costs, such as by engaging in covert action to evade publicly breaking international law.⁴² Building on this work, our theory points to how discoverer states can wield information to catalytic effect by generating the prospect of hypocrisy costs. Discoverers with less leverage that go public about wrongdoing put actors with more leverage into the unenviable position of having to act, lest they be labeled hypocrites.⁴³

As with the first independent variable (i.e., relative leverage), we use speech evidence to measure the discoverer’s assessment of others’ likelihood to pressure the wrongdoer. If discoverers view others as likely to act, we expect to observe policymakers acknowledging their shared interests with actors with more leverage. They may point to past instances of cooperation in the relevant area. In contrast, discoverers who doubt whether those with more leverage will act will openly express their doubts. Such discoverers will indicate in their statements that they are unsure of influential actors’ interests.

Overall, states in possession of proof of wrongdoing choose among concealment, private sharing, and publicity according to their leverage over the

40. These enforcers’ reputational fears are distinct from targets’ reputational fears discussed earlier. Targets fear acquiring reputations for giving in, whereas enforcers fear acquiring reputations for bluffing.

41. Greenhill, *Weapons of Mass Migration*, pp. 4, 52. See also Martha Finnemore, “Legitimacy, Hypocrisy, and the Social Structure of Unipolarity: Why Being a Unipole Isn’t All It’s Cracked Up to Be,” *World Politics*, Vol. 61, No. 1 (January 2009), p. 74, doi.org/10.1017/S0043887109000082.

42. Michael Poznansky, “Feigning Compliance: Covert Action and International Law,” *International Studies Quarterly*, Vol. 63, No. 1 (March 2019), pp. 72–84, doi.org/10.1093/isq/sqy054.

43. We expect all states that have made public commitments to stopping norm violations, regardless of regime type, to be vulnerable to hypocrisy costs. Greenhill finds that liberal and illiberal regimes have proven vulnerable. Greenhill, *Weapons of Mass Migration*, p. 10. If a state has not publicly committed to upholding a norm, however, they will be impervious to this pressure.

wrongdoer and their expectations of other states' willingness to act. These strategic decisions aim to stop wrongdoing, directly or indirectly. States, in short, use information as a tool of coercion.

ALTERNATIVE EXPLANATIONS FOR CONCEALING, SHARING PRIVATELY, OR REVEALING PROOF OF WRONGDOING

In contrast to our theory, the existing literature offers three explanations for why states decide to conceal, share privately, or reveal proof of wrongdoing: norm preservation, geopolitical relationships, and the protection of intelligence sources.⁴⁴ First, to protect international norms, states may want to conceal violations of those norms.⁴⁵ Allison Carnegie and Austin Carson argue that to keep perceived rates of norm violations low and dampen further defection, discoverers sometimes conceal a state's wrongdoing. Regarding nuclear nonproliferation, discoverers recognize that openly acknowledging one state's secret defiance of the norm against nuclear proliferation may trigger a proliferation cascade among neighbors. If this explanation is correct, then states' motives for concealment more broadly, including regarding other norm violations, may follow a similar logic: States that are concerned about protecting public perception of inviolable norms will conceal proof of wrongdoing.

A second explanation is that, even if a discoverer deems a wrongdoer's behavior to run counter to its interests, discoverers treat wrongdoing by allies and adversaries differently.⁴⁶ If a state discovers an ally's wrongdoing, it will conceal that wrongdoing. The discoverer chooses to prioritize protecting an ally. Conversely, when states detect an adversary's wrongdoing, they seize the opportunity to reveal and criticize its misdeeds. Publicizing a target's wrongdoing may also boost the credibility of a discoverer's threat that is intended to change the adversary's behavior.⁴⁷

The third explanation is that discoverers only share privately or reveal proof of wrongdoing if they believe that doing so will not jeopardize valuable intelli-

44. We argue that a state's choice regarding what to do with proof is distinct from states' decisions about whether to keep other aspects of statecraft secret, such as threats, assurances, or negotiation itself. The secrecy of proof of wrongdoing may nevertheless facilitate the secrecy of other aspects of statecraft.

45. Carnegie and Carson, "The Spotlight's Harsh Glare," pp. 4–7.

46. Carnegie and Carson point to this as an important factor in discoverers' decisions about what to do with proof of wrongdoing. Carnegie and Carson, *Secrets in Global Governance*, pp. 92–93.

47. Deploying proof of adversaries' wrongdoing in this way is an extension of the logic of publicity as a hand-tying signal of resolve. James Fearon wrote of public threats, but when states publicize proof, they similarly increase the costs that they would pay if they were to permit open wrongdoing to go unpunished. James D. Fearon "Domestic Political Audiences and the Escalation of International Disputes," *American Political Science Review*, Vol. 88, No. 3 (September 1994), pp. 577–592, doi.org/10.2307/2944796.

gence sources. Some work finds support for this explanation. For instance, private sharing with the IAEA increased after it instituted a confidentiality system in the early 1990s.⁴⁸

Research Design and Case Selection

The decision to conceal, share privately, or publicize proof of wrongdoing presents itself across an array of issue areas. Although states pursue a range of proscribed activities in secret (e.g., harboring international terrorists, trafficking illicit goods, seeking to sway foreign elections, stealing intellectual property, or conducting assassination campaigns), this article focuses on instances in which states make significant discoveries about others' nuclear weapons programs. We do so for three reasons. First, nuclear arsenals are major security assets and, as such, nonproliferation is an intrinsically important area of statecraft and a top priority of the United States and other great powers.⁴⁹ Second, there is a widespread international norm against the proliferation of nuclear weapons.⁵⁰ Many actors in the system have publicly committed to upholding it. The norm is codified in the 1970 Treaty on the Nonproliferation of Nuclear Weapons (NPT), extended indefinitely in 1995. Per our scope condition, the discoverers we examine consider violations of this norm to be against their interests. Third, the archival record regarding nuclear programs contains better documentation than other domains in which the decision to conceal, share privately, or publicize arises. Historically, states have questioned what actor, if any, they should inform about having detected nuclear weaponization attempts, including catching wrongdoers red-handed. Indeed, each case may contain multiple episodes of discoverers acquiring secret information about ongoing weaponization activities.

To probe the key causal pathways of our theory, we select four cases within the nonproliferation universe that occurred after the 1970 entry into force of the NPT and for which our independent variables vary dramatically. First, we select two cases in which a discoverer possesses the most leverage over a wrongdoer: the United States' discovery of proof of nuclear weapons pro-

48. Carnegie and Carson, *Secrets in Global Governance*, p. 97.

49. Miller, *Stopping the Bomb*, pp. 3–4. States expend considerable resources to monitor nuclear activities with some success. Jeffrey T. Richelson, *Spying on the Bomb: American Nuclear Intelligence from Nazi Germany to Iran and North Korea* (New York: W.W. Norton, 2007); and Cullen G. Nutt, "Proof of the Bomb: The Influence of Previous Failure on Intelligence Judgments of Nuclear Programs," *Security Studies*, Vol. 28, No. 2 (2019), pp. 321–359, doi.org/10.1080/09636412.2019.1551569.

50. Maria Rost Rublee, *Nonproliferation Norms: Why States Choose Nuclear Restraint* (Athens: University of Georgia Press, 2009).

grams in Taiwan in the late 1980s and in Libya in the early 2000s. In both cases, we predict that the United States should engage in concealment, which should make it easier for the discoverer to coerce the wrongdoer. We pair these cases to probe whether the geopolitical relationship alternative explanation (i.e., Taiwan is an ally of the United States and Libya was, at the time, an adversary) is sufficient to explain states' decision-making when they possess proof of wrongdoing. Whether the wrongdoer is an ally or a foe, we expect that discoverers with the most leverage will conceal proof of wrongdoing to avail themselves of the coercive benefits of face-saving and blackmail. Next, we select two cases of discoverers that possess relatively little leverage over the wrongdoer: the Soviet Union with respect to South Africa in 1977 and U.S. detection of North Korean plutonium production and reprocessing in 1984 and 1989. We pair these cases because the Soviet Union and the United States diverged on our second independent variable. The Soviets concluded that the United States, the actor with the most leverage, was unlikely to pressure South Africa to halt its preparations for a nuclear test. In contrast, in the 1980s the United States reached the opposite conclusion: U.S. officials believed that the Soviet Union would, indeed, pressure North Korea if provided with proof of its wrongdoing. Thus, our theory predicts that the Soviet Union in 1977 should engage in publicity to catalyze the United States to act, whereas U.S. officials in the 1980s should privately share their proof with the Soviets.

These four cases include examples of discoverers that either do or do not have the most leverage, and that either expect or doubt that others will act on proof of wrongdoing. In each case, we explain why alternative explanations are less convincing.

U.S. Detection of Taiwan's Nuclear Weapons Research

In 1988, the United States discovered that Taiwan had a secret nuclear weapons program. This discovery was an unwelcome surprise because U.S. officials had believed that Taiwan's flirtation with nuclear weapons ended in 1976 when Taiwan agreed to limit its program.⁵¹ In reality, in 1981 the Taiwan mil-

51. State Department to Embassy in Taipei, "Demarche on ROC's Nuclear Intentions," September 11, 1976, cable 224790, National Security Archive, George Washington University, Washington, D.C. (hereafter, National Security Archive), <https://nsarchive2.gwu.edu/NSAEBB/NSAEBB20/docs/doc14.pdf>; and David Albright and Corey Gay, "Taiwan: Nuclear Nightmare Averted," *Bulletin of the Atomic Scientists*, Vol. 54, No. 1 (January/February 1998), pp. 54–60, doi.org/10.1080/00963402.1998.11456811. See also Vipin Narang, *Seeking the Bomb: Strategies of Nuclear Proliferation* (Princeton, N.J.: Princeton University Press, forthcoming); and David Albright and Andrea Stricker, *Taiwan's Former Nuclear Weapons Program: Nuclear Weapons On-Demand* (Washington, D.C.: Institute for Science and International Security, 2018).

itary again began to accelerate its nuclear weapons research.⁵² Taiwan planned to separate plutonium from spent fuel from the Taiwan Research Reactor (TRR) in a disguised facility and then present the world with a nuclear fait accompli.⁵³ The IAEA failed to detect these activities.⁵⁴

In January 1988, Colonel Chang Hsien-yi, a CIA informant highly placed in Taiwan's nuclear program, passed proof of Taiwan's wrongdoing to the United States. Chang absconded to the United States with stolen documents, which detailed "damning evidence" of Taiwan's secret reactor program.⁵⁵ (Precisely when the United States detected evidence of Taiwan's wrongdoing remains murky. At the latest, the United States acquired proof of Taiwan's deception when Chang defected in January 1988.)⁵⁶ On the significance of the proof of wrongdoing, according to Vipin Narang, "If not for Chang Hsien-yi's defection in 1988, Taiwan's renewed effort to hide a nuclear weapons program may have succeeded."⁵⁷

UNITED STATES CONCEALS PROOF OF WRONGDOING

In this case, the United States assessed that it possessed the most leverage over Taiwan. A declassified 1970s U.S. National Intelligence Estimate (NIE) on possible Taiwanese proliferation noted how "Taiwan's security is so heavily dependent on the continued adherence of the US to the Mutual Defense Treaty." Moreover, if Taiwan attempted to develop nuclear weapons, the United States and others could "cut off fuel supplies and technical support for its nuclear power program."⁵⁸ In the 1980s, Taiwan remained dependent on the United States.⁵⁹

As our theory predicts, the United States chose to conceal its proof of Taiwan's wrongdoing and confront Taiwan's leaders privately. In January 1988, furious U.S. officials began "confidential discussions" with Lee Tenghui,

52. Albright and Stricker, *Taiwan's Former Nuclear Weapons Program*, p. 126.

53. *Ibid.*, pp. 157–160.

54. *Ibid.*, p. 231.

55. Tim Weiner, "How a Spy Left Taiwan in the Cold," *New York Times*, December 20, 1997, <https://www.nytimes.com/1997/12/20/world/how-a-spy-left-taiwan-in-the-cold.html>.

56. Albright and Stricker, *Taiwan's Former Nuclear Weapons Program*, p. 123; and Richelson, *Spying on the Bomb*, p. 368.

57. Narang, *Seeking the Bomb*.

58. "Taipei's Capabilities and Intentions Regarding Nuclear Weapons Development," Special National Intelligence Estimate 43-1-72, November 1972, doc. 1A, National Security Archive, <https://nsarchive2.gwu.edu/nukevault/ebb221/T-1a.pdf>.

59. See, e.g., "Taiwan, Nuclear Weapons, and Nonproliferation," State Department Telegram 137129 to AIT, April 29, 1988, doc. 31, National Security Archive, <https://nsarchive.gwu.edu/dc.html?doc=5676743-Document-31-State-Department-telegram-137129-to>. See also Albright and Stricker, *Taiwan's Former Nuclear Weapons Program*, p. 225; and Miller, *Stopping the Bomb*.

Taiwan's new president. News of the episode did not leak until March 1988.⁶⁰ The real story of the U.S. spy in Taiwan emerged only a decade later.⁶¹

Consistent with the blackmail mechanism, U.S. officials privately presented Taiwan with evidence of its wrongdoing behind closed doors and demanded an end to its nuclear weapons program. U.S. President Ronald Reagan sent a personal letter to President Lee asking Taiwan to cease all nuclear weapons development, dismantle its equipment, and remove heavy water from the TRR and shut it down.⁶² On January 20, 1988, David Dean, the director of the American Institute in Taiwan (AIT, the de facto U.S. embassy in Taipei), met with Chief of the General Staff Hau Pei-tsun and relayed Reagan's demands in person.⁶³ Dean handed him satellite images of the Chiu-Peng missile testing range and said U.S. officials knew that "high explosive tests related to nuclear weapons development had occurred there."⁶⁴ James Lilley, a former CIA official with extensive experience in China, later explained of the U.S. approach: "They got the guy [Chang] out. They got the documentation. And they confronted the Taiwanese."⁶⁵

Taiwan shuttered the reactor, citing "economic concerns" as the reason.⁶⁶ Before the end of January 1988, teams of U.S. nuclear specialists arrived to verify the shutdown and removal of the reactor's heavy water. By June, all the heavy water was on a ship bound for the U.S. Department of Energy facility in Savannah River, South Carolina. Taiwan also adopted an accelerated schedule to ship its irradiated fuel to the United States. Workers dismantled Taiwan's plutonium separation facility, which was under construction.⁶⁷

Our research shows that the United States embraced a strategy that included both the face-saving and blackmail mechanisms. Taiwanese leaders felt humiliated by Chang's defection. On February 24, 1988, General Hau wrote in his journal of Chang's "shame to our nation" and, according to David Albright and Andrea Stricker, asked the United States to help Taiwan prevent "public commentary by Chang."⁶⁸ Hau wrote in his diary, "I specifically asked

60. Stephen Engelberg and Michael R. Gordon, "Taipei Halts Work on Secret Plant to Make Nuclear Bomb Ingredient," *New York Times*, March 23, 1988, <https://www.nytimes.com/1988/03/23/world/taipei-halts-work-on-secret-plant-to-make-nuclear-bomb-ingredient.html>.

61. Weiner, "How a Spy Left Taiwan in the Cold."

62. Albright and Stricker, *Taiwan's Former Nuclear Weapons Program*, p. 183.

63. Ibid. AIT replaced the U.S. Embassy in Taiwan after normalization of relations with the People's Republic of China and passage of the Taiwan Relations Act (TRA), which reaffirmed a de facto alliance with Taiwan.

64. Ibid., p. 184.

65. Weiner, "How a Spy Left Taiwan in the Cold."

66. Albright and Stricker, *Taiwan's Former Nuclear Weapons Program*, p. 186.

67. Ibid., pp. 185–187.

68. Ibid., p. 185.

[General Yeh] Chang-tong to notify David Dean that the US must contain Chang."⁶⁹ Dean agreed to keep him quiet. In fact, Chang remained silent for many years as he and his family moved to Virginia and then Idaho to start a new life.⁷⁰

In Washington, U.S. officials covered up Taiwan's wrongdoing and prevaricated about the reasons for its change in behavior. When the *New York Times* published its first story about Taiwan's reactor shutdown in March 1988, the State Department's press guidance echoed Taiwan's official excuse, that Taiwan was shuttering its reactor due to economic concerns. The press guidance instructed State Department officials to reply to inquiries from the press: "We are not aware of any violation of safeguards. . . . It is our belief that Taiwan is not engaged in activities which are inconsistent with its non-proliferation commitments."⁷¹ Although the State Department had been aware of Taiwanese violations and Chang's alleged spying, it advised diplomats to tell reporters that "we have no information here" and to refer them to an earlier press statement.⁷² The *New York Times* covered the State Department's silence accordingly.⁷³ In a memo to AIT staff in April 1988, the State Department's desk officer for Taiwan affairs, David Brown, recognized that the Taiwanese would be sensitive to complying in public with U.S. demands: "While a decision to pursue a nuclear weapons option would force fundamental changes in US relations with Taiwan, we believe it wise to avoid the appearance of dictating or threatening Taiwan."⁷⁴ Brown advised against public communication and offered guidance on how to engage with Taiwanese counterparts in private.

Concealment seems to have worked. Taiwan ended its secret pursuit of nuclear weapons and returned to compliance with the NPT. As Albright and Stricker conclude, "[Secrecy] hides embarrassing conflicts from publics and bureaucracies, allowing one side to back down while easing the implementation of constraints and reducing potential opposition."⁷⁵

69. Quoted in Albright and Stricker, *Taiwan's Former Nuclear Weapons Program*, p. 185.

70. Chang recalls striking a "gentleman's agreement" with the U.S. government to keep a low profile. *Ibid.*, p. 197.

71. "Press Guidance on N.Y. Times Article on Secret Nuclear Power Plant," State Department Telegram 989853 to AIT, March 24, 1988, doc. 29, National Security Archive, <https://nsarchive.gwu.edu/dc.html?doc=5676741-Document-29-State-Department-telegram-989853-to>.

72. "New York Times Article Returns Chang Hsien-yi Case to Headlines," AIT Telegram 09194 to State Department, March 24, 1988, doc. 30, National Security Archive, <https://nsarchive.gwu.edu/dc.html?doc=5676758-Document-30-AIT-Telegram-09194-to-State>.

73. Engelberg and Gordon, "Taipei Halts Work."

74. "Taiwan, Nuclear Weapons, and Nonproliferation," April 29, 1988.

75. Albright and Stricker, *Taiwan's Former Nuclear Weapons Program*, p. 235. The authors nevertheless note drawbacks to government secrecy.

ALTERNATIVE EXPLANATIONS FOR THE TAIWAN CASE

Of the four cases, Taiwan offers the most potential support for the alternative explanations. First, the norm preservation explanation expects the United States to conceal its proof in this case to guard against norm violations by Taiwan's neighbors. We cannot rule this out as an explanation. U.S. policymakers did fear cascading regional proliferation if Taiwan were permitted to continue its nuclear program. We note that the leading explication of this school of thought by Carnegie and Carson nevertheless predicts that the United States would publicize Taiwanese wrongdoing because, despite their desire to protect the norm of nonproliferation, U.S. officials expressed confidence that Taiwan was likely to comply with U.S. pressure.⁷⁶ Instead, the United States confronted Taiwan in secret and concealed proof of its wrongdoing.

Second, the geopolitical relations alternative explanation expects the United States to conceal Taiwan's wrongdoing given Taiwan's status as a U.S. ally. The alliance probably affected U.S. decision-making. During the 1980s, before the United States discovered proof of Taiwan's wrongdoing, it acknowledged China's likely hostile reaction to a secret Taiwanese weapons program.⁷⁷ Chang himself has said that he spied for the United States because he feared that a Taiwanese nuclear weapon would incite war between China and Taiwan.⁷⁸ In the available statements from U.S. policymakers in 1988, however, we do not find explicit evidence that the United States engaged in concealment merely because Taiwan was a friend or because U.S. policymakers feared that publicity would lead to Chinese aggression.

Third, the protection of intelligence sources explanation expects the United States to conceal its proof to protect Chang's precious access to Taiwan's secret nuclear program. This factor does not appear to have been determinative. U.S. officials did wait to confront Taiwan about its nuclear program until immediately after the CIA had exfiltrated its mole. Once Chang was safely stateside, however, U.S. concerns for sources and methods would have been greatly diminished. Yet, U.S. officials kept quiet about what the United States had discovered. For months after Chang's defection, including when the *New York Times* broke the story in March, U.S. officials refused to acknowledge Taiwan's wrongdoing or that it had conceded to any U.S. pressure.

76. Carnegie and Carson, "The Spotlight's Harsh Glare," p. 16.

77. Jack Anderson, "Secret Report Sees Taiwan Near A-Bomb," *Washington Post*, January 25, 1982, <https://www.proquest.com/historical-newspapers/secret-report-sees-taiwan-near-bomb/docview/147513112/se-2?>

78. Albright and Stricker, *Taiwan's Former Nuclear Weapons Program*, pp. 194–195.

U.S. Detection of Libya's Nuclear Procurement

As with the Taiwan case, U.S. officials calculated that the United States possessed the most leverage over Libya when they detected its secret proliferation activity. But in this instance, the wrongdoer was not an ally. Despite the hostility between the two countries, we expect the United States to conceal evidence of Libya's wrongdoing, threaten to reveal its proof if Libya did not change its behavior, and permit Muammar Qaddafi to save face.

Over several years starting in the 1990s, Libya paid up to \$200 million to a rogue Pakistani nuclear scientist, A.Q. Khan, to purchase a vast uranium enrichment program. In the early 2000s, U.S. and British intelligence officials began to penetrate Khan's global network in the black market. They identified Libya as a Khan customer seeking centrifuges and weapons designs.⁷⁹ The CIA circulated classified estimates inside the U.S. government regarding Libya's weapons activities. In late 2001, the CIA moved up the date by which Libya may be able to "produce enough weapons grade uranium for a nuclear warhead."⁸⁰ In February 2002, U.S. intelligence intercepted a conversation between A.Q. Khan and Matouq Muhammad Matouq, a Libyan official in charge of the secret nuclear program. The two men discussed importing centrifuges to Libya and their plans for uranium enrichment.

Also in the early 2000s, Qaddafi sought to begin mending ties with the West. In 1988, Libyan intelligence officers had detonated a bomb on a transatlantic flight over Lockerbie, Scotland, that killed 259 people, including many U.S. citizens. UN and U.S. sanctions followed. In 1999, Libya extradited two Lockerbie suspects, and U.S. diplomats held periodic secret talks with Libya starting that year. The United States demanded that Libya compensate the victims of Lockerbie and halt its WMD programs. Only then would the United States lift sanctions against Libya. In 2002, Libya agreed to pay \$10 million to each Lockerbie victim's family.

UNITED STATES CONCEALS PROOF OF WRONGDOING

As they amassed evidence of Libya's nuclear activity, U.S. officials assessed that the United States had the most leverage over Libya. Assistant Secretary of State for Near Eastern Affairs William Burns, who was responsible for secret negotiations with Libya on a range of issues starting in 2001, highlighted the impact of ongoing sanctions on Libya: "The energy sector was starved for in-

79. *Report of the Commission on the Intelligence Capabilities of the United States regarding Weapons of Mass Destruction* (Washington, D.C.: GPO, 2005), p. 257.

80. *Ibid.*, p. 260.

vestment, and the country's infrastructure was in shambles."⁸¹ In a meeting with President George W. Bush in 2003, Steve Kappes, a key U.S. negotiator involved in secret talks with Qaddafi, noted Libya's desperate need for foreign investment, which the United States could offer.⁸²

Given U.S. leverage, we predict concealment by the United States of proof of Libyan wrongdoing. This is what we observe. Only Great Britain, with which the United States was jointly prosecuting the investigation, would know about the wrongdoing. Instead of going public, the United States concealed Libya's ongoing ties with A.Q. Khan. As in the Taiwan case, the United States used the proof that it possessed to pressure Libya in secret talks to halt its efforts to purchase materials for a nuclear weapons program. The United States also calculated that such discretion would offer the Libyans a way to save face.

In 2001 and 2002, Burns began to hint that the United States possessed proof of Libyan wrongdoing when he met with Musa Kusa, Libya's notorious intelligence chief. "I made clear that we had solid evidence [that Libya had active WMD programs]," Burns recalls.⁸³

In 2003, Libya's talks with Britain and the United States regarding WMD grew more serious. In March, as U.S. and British troops massed in Kuwait to attack Iraq, Qaddafi approached British intelligence through his son Saif al-Islam about fully disclosing his secret WMD programs. Qaddafi asked the British to intercede with the United States. Later in the month, Director of Central Intelligence George Tenet and his counterpart from the British foreign intelligence service (MI6) briefed Prime Minister Tony Blair and President Bush on the overture from Libya.⁸⁴ Bush tasked Tenet with managing the talks; Tenet turned to Kappes, his deputy director of operations.⁸⁵

U.S. decisionmakers were unsure whether the Libyans truly intended to give up on their pursuit of nuclear weapons. In their secret meetings during the first half of 2003, Libyan negotiators refused to acknowledge their country's nuclear program. Although he thought that multiple factors could push Libya to accept a deal, an uncertain Kappes told President Bush, "The Libyans' track record was such that they would likely get cold feet before the deal was done."⁸⁶

81. William J. Burns, *The Back Channel: A Memoir of American Diplomacy and the Case for Its Renewal* (New York: Random House, 2019), p. 191.

82. George Tenet and Bill Harlow, *At the Center of the Storm: The CIA during America's Time of Crisis* (New York: Harper Perennial, 2008), p. 293.

83. Burns, *The Back Channel*, p. 193.

84. Gordon Corera, *Shopping for Bombs: Nuclear Proliferation, Global Insecurity, and the Rise and Fall of the A.Q. Khan Network* (Oxford: Oxford University Press, 2009).

85. Judith Miller, "How Gadhafi Lost His Groove," *Wall Street Journal*, May 16, 2006, <https://www.wsj.com/articles/SB114773941211953610>.

86. Tenet and Harlow, *Center of the Storm*, p. 293.

As our theory expects, the United States and Britain wielded secret proof of Libyan wrongdoing to facilitate their coercive demands. According to several accounts, the CIA used its sources inside the Khan network to ensnare Libya. U.S. spies identified a shipment from Malaysia bound for Libya containing a large delivery of centrifuge technology from Khan. “The plan was to first use the evidence to convince the reluctant Moammar Kaddafi to abandon his clandestine nuclear program and turn over the information that could be used to indict Khan,” Catherine Collins and Douglas Frantz write.⁸⁷

On October 3, 2003, at a port in Italy, U.S. and British spies intercepted the *BBC China* ship carrying nuclear components to Libya. According to Tenet, U.S. personnel “found precisely manufactured centrifuge parts in forty-foot containers listed on the ship’s manifest as simply ‘used machine parts.’”⁸⁸ The United States and the United Kingdom removed the offending shipping containers and then sent the *BBC China* back on its way to Libya.

The United States and the United Kingdom gave no thought to going public with this evidence. Instead, as our theory predicts, they engaged in concealment. Mark Allen, the senior British intelligence officer involved in the secret talks, contacted Musa Kusa and sought an urgent meeting to discuss Libya’s nuclear program, which Libyan officials had continued to deny existed. “The Libyans had finally been caught, red-handed,” William Tobey recounts. Robert Joseph, the National Security Council’s (NSC) top counterproliferation official, “urged that the seizures be kept secret to maximize American leverage on Qaddafi,” Tobey adds. Joseph’s bosses, including Stephen Hadley, then the deputy national security adviser, concurred.⁸⁹

On October 7, repeating the approach that the United States took in Taiwan, Allen and Kappes flew to Libya for a secret meeting with Musa Kusa to confront him with their proof of Libya’s centrifuge program.⁹⁰ The U.S. and British spies used a strategy consistent with the blackmail mechanism. If Libya did not admit its complicity, they signaled, then the United States and Britain could publicize their proof and make the case for punishing Libya. “If Qaddafi refused to abandon the program, negotiations would end and there would be consequences for him and his country,” Collins and Frantz re-

87. Catherine Collins and Douglas Frantz, *Fallout: The True Story of the CIA’s Secret War on Nuclear Trafficking* (New York: Free Press, 2011), p. 78. Albright echoes this account. David Albright, *Peddling Peril: How the Secret Nuclear Trade Arms America’s Enemies* (New York: Free Press, 2010), p. 211.

88. Tenet and Harlow, *Center of the Storm*, p. 293.

89. William Tobey, “A Message from Tripoli: How Libya Gave Up Its WMD,” *Bulletin of the Atomic Scientists*, December 3, 2014, <https://thebulletin.org/2014/12/a-message-from-tripoli-how-libya-gave-up-its-wmd/>.

90. Robert G. Joseph, *Countering WMD: The Libyan Experience* (Fairfax, Va.: National Institute Press, 2009), p. 7.

count.⁹¹ Kappes reportedly told Qaddafi, “You are the drowning man and I am the lifeguard.”⁹²

The U.S. and British use of concealment, coupled with blackmail, succeeded. Members of a U.S. congressional commission wrote that the seizure of the *BBC China*, which constituted “definitive proof” of Libya’s wrongdoing, “served as a critical factor in Tripoli’s decision to open up its weapons programs to international scrutiny.”⁹³ A British parliamentary report investigating British intelligence performance regarding weapons of mass destruction drew the same conclusion: “The discoveries made enabled the UK and US Governments to confront Libyan officials with this evidence of their nuclear-related procurement at a time when Libya was still considering whether to proceed to full admission of its programmes.”⁹⁴

Our research on U.S. and British decision-making in this case also supports the face-saving mechanism. In keeping the seizure of the centrifuge parts on the *BBC China* secret, key officials recognized that they could allow Libya to save face and concede quietly. Conversely, going public might have jeopardized Libyan compliance. Unaware of the secret talks taking place between the United States and Libya, U.S. Undersecretary of State John Bolton had planned to hold a press conference hailing the seizure of the centrifuges aboard the ship. Tenet telephoned senior officials at the State Department and explained the situation. Bolton canceled the briefing.⁹⁵ “We were concerned that if U.S. officials launched into the typical and well-deserved Libya-bashing language,” Tenet explains, “Qaddafi might cancel the whole deal out of embarrassment.”⁹⁶

After the seizure of the centrifuge parts on the *BBC China*, Libya relented on requests to inspect facilities that U.S. and British spies suspected were sites for WMD development. A secret team of U.S. and British officials flew to Libya within two weeks. The inspectors subsequently accessed chemical weapon and ballistic missile sites in Libya, but the Libyans still denied having a nuclear program. Before conducting another technical visit, U.S. and British officials invited Musa Kusa to a meeting in London. Again, they used proof of

91. Collins and Frantz, *Fallout*, p. 84.

92. David Ignatius, “The CIA’s Mission Possible,” *Washington Post*, March 10, 2006, <https://www.washingtonpost.com/archive/opinions/2006/05/10/the-cias-mission-possible/aae3360d-6b1a-49f5-b90d-d1ba757833ac/>.

93. *Report of the Commission on the Intelligence Capabilities of the United States regarding Weapons of Mass Destruction*, p. 258. In his memoirs, the State Department’s William Burns echoes these sentiments. Burns, *The Back Channel*, p. 192.

94. House of Commons, “Review of Intelligence on Weapons of Mass Destruction” (London: The Stationary Office, July 14, 2004), p. 21.

95. Tenet and Harlow, *Center of the Storm*, p. 294.

96. *Ibid.*

wrongdoing to induce Libyan compliance, specifically by threatening blackmail. According to a Libyan account of the meeting in November 2003, Kappes handed Musa Kusa a compact disc containing a recording of Matouq Muhammad Matouq's February 2002 conversation with A.Q. Khan, including "everything that was talked about—the amount of uranium, 10 tons, and the centrifuge equipment." According to Tenet, Kappes and his British counterpart said, "Look, we know you guys purchased a centrifuge facility."⁹⁷ According to a Libyan transcript of the meeting, quoted by Western journalists, Kappes said, "Maybe in other circumstances and in other times, this information [on Libya's nuclear plans] could be used adversely."⁹⁸ Kappes, according to the Libyan transcript, further alluded to U.S. publicity of intelligence prior to the invasion of Iraq: "Maybe Powell could talk about it in the UN."⁹⁹ As our theory expects, Kappes told the Libyans that the United States could go public with the information about Libya's wrongdoing—and it could use that information to build a case for punishing Libya. Instead, for the moment, the United States was abstaining from publicity to coerce Libya to make a deal.

After the *BBC China* interdiction and then the November 2003 meeting, Libya agreed to a second secret inspection in December and made new disclosures about its nuclear program. These admissions satisfied the CIA and MI6. Later that month, the two sides negotiated the language for Libya's December 19 public announcement that they were surrendering their nuclear, chemical, and biological weapons programs. As our theory expects, supporting Libya's need to save face, the United States and Britain did not publicly acknowledge Libya's wrongdoing or the pressure that they had secretly brought to bear against the Libyans. The discoverers in this case concealed their proof of Libya's dealings with the Khan network, and they recognized Qaddafi's need to uphold his reputation with his domestic supporters and third-party observers. Robert Joseph, the NSC official who attended the final negotiations, acknowledged that Qaddafi was exposing himself to "a degree of political risk." As a result, Joseph explains, "the Libyans emphasized, and the U.S. and UK participants supported, the need to characterize Libya's decision as 'voluntary.'" Libya wanted to be sure that the decision would "not be construed as giving in to U.S.

97. *Ibid.*, p. 296.

98. Kappes is quoted in Deborah Haynes, "How a Little Cotswold Hotel Became the Rendezvous for Gaddafi's Nuclear Climbdown," *Times*, November 1, 2011, <https://www.proquest.com/docview/901188441/27F93D4F0AE44539PQ/1>. Judith Miller and Robert Joseph corroborate Haynes's account of Kappes's statements. Miller, "How Gadhafi Lost His Groove"; and Joseph, *Countering WMD*, p. 7.

99. Kappes quoted in Haynes, "How a Little Cotswold Hotel Became the Rendezvous for Gaddafi's Nuclear Climbdown."

pressure.”¹⁰⁰ In Libya’s announcement, Qaddafi’s foreign minister said that, “Of its own free will,” Libya would eliminate its “internationally proscribed weapons.”¹⁰¹ Qaddafi’s regime portrayed this as a perspicacious decision, because “an arms race does not serve [Libya’s] security nor the security of the region.”¹⁰²

News of the *BBC China*’s seizure and its broader significance did not surface in the world press until the end of the month, even though governments and security services in Germany, Italy, the United Kingdom, and the United States were involved in the operation. On December 31, twelve days after Libya’s announcement, the *Wall Street Journal* finally reported the intercept, quoting unnamed U.S. officials as absolving Libya’s leaders of blame.¹⁰³ As our theory would predict, U.S. policymakers minimized the significance of Libyan wrongdoing.

ALTERNATIVE EXPLANATIONS FOR THE LIBYA CASE

Our examination of the Libya case does not lend support to the three alternative explanations in the literature. First, we do not uncover evidence that the United States concealed Libya’s proof of wrongdoing because it wanted to preserve international norms. Rather, as our theory expects, U.S. officials threatened to reveal proof of Libya’s wrongdoing if Libya did not comply with U.S. demands. Further, Carnegie and Carson’s rendering of the norm protection explanation expects publicity in this case, because U.S. officials did not fear reactive proliferation by nearby states and thus need not have worried about hiding Libya’s wrongdoing from those who might follow suit.¹⁰⁴ Instead, for all of 2003, both before and after the interdiction of the *BBC China*, U.S. leaders and intelligence agencies made no public mention of their discoveries about Libya’s ties to the Khan network. In its semiannual report to Congress in June 2003, the CIA referenced only innocuous developments, namely cooperation between Libya and Russia at a known nuclear research center.¹⁰⁵

100. Joseph, *Countering WMD*, p. 20.

101. William Tobey, “A Message from Tripoli, Part 2: How Libya Gave Up Its WMD,” *Bulletin of the Atomic Scientists*, December 3, 2014, <https://thebulletin.org/2014/12/a-message-from-tripoli-part-2-how-libya-gave-up-its-wmd/>.

102. Quoted in Joseph, *Countering WMD*, p. 14.

103. Carla Anne Robbins, “Cargo Seizure Fueled Libya Arms Shift,” *Wall Street Journal*, December 31, 2003, <https://www.wsj.com/articles/SB107284422137410900>.

104. Carnegie and Carson, “The Spotlight’s Harsh Glare,” appendix, p. 39.

105. Central Intelligence Agency (CIA), “Attachment A, Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions,” January 1–June 30, 2003, *Federation of American Scientists*, https://fas.org/irp/threat/cia_jan_jun2003.htm. The CIA tacitly admitted in early 2004 that it had withheld certain information from the public about Libyan activities. The CIA report references A.Q. Khan for the first time. See Office of the Director of National Intelligence, “Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Muni-

Second, the geopolitical relationship alternative explanation expects that the United States would publicize Libyan wrongdoing because the United States and Libya remained antagonistic in 2003.¹⁰⁶ But we argue the United States chose concealment to blackmail Libya and to let it save face. In his public remarks welcoming Libya's December 19, 2003, announcement, President Bush referenced the campaign of concealment: "Our understanding with Libya came about through quiet diplomacy."¹⁰⁷ Although in March 2004 some members of the Bush administration seemed interested in embarrassing Libya and capitalizing politically on its capitulation, our research indicates that such behavior deviated from White House strategy. That month, U.S. Secretary of Energy Spencer Abraham gathered dozens of journalists in Oak Ridge, Tennessee, to display the components of Libya's nuclear program, which the United States had transported stateside. As our theory would expect, this publicity "hurt Libya with Arab public opinion, and domestically," Matouq Matouq told IAEA Director General Mohammed ElBaradei, "because it had given the impression that the Americans had unilaterally disarmed Libya, one country strong-arming another." Consistent with our logic, the United States corrected its error and canceled a forthcoming display.¹⁰⁸

Third, the protection of intelligence sources alternative explanation expects the United States to conceal its proof to learn as much as possible through its secret sources about Libya's illicit nuclear supplier, A.Q. Khan, and Khan's other customers. We find some evidence for this alternative explanation. Before 2003, the United States and the United Kingdom sought to gather information about Khan and his ties to Iran, another major proliferation concern.¹⁰⁹ Yet, starting in 2003, both official and secondary accounts of the Libya case make clear that the primary objective became how to stop Libya rather than how to gather further information about Khan's network. The report by the British Parliament regarding the United Kingdom's intelligence notes,

By January 2003, the JIC [Joint Intelligence Committee] was becoming particularly concerned at the progress Libya might be able to make as a result of the assistance it had received from the network.

tions," January 1–December 31, 2004, *Office of the Director of National Intelligence*, pp. 3–4, https://www.dni.gov/files/documents/Newsroom/Reports%20and%20Pubs/2004_unclass_report_to_NIC_DO_16Nov04.pdf.

106. Despite payments to the Lockerbie victims and some counterterrorism intelligence sharing, the United States and Libya maintained no diplomatic relations. The United States continued to list Libya as a state sponsor of terrorism.

107. Quoted in Joseph, *Countering WMD*, p. viii.

108. Mohamed ElBaradei, *The Age of Deception: Nuclear Diplomacy in Treacherous Times* (New York: Metropolitan, 2011), p. 160.

109. See, e.g., David E. Sanger, *The Inheritance: The World Obama Confronts and the Challenges to American Power* (New York: Harmony, 2009), p. 77.

Action to close down the network had until this stage been deferred to allow the intelligence agencies to continue their operations to gather further information on the full extent of the network. . . . But Khan's activities had now reached the point where it would be dangerous to allow them to go on.¹¹⁰

Indeed, the CIA's plan to catch Libya red-handed relied on its most prized informants. U.S. and British policymakers accepted that the interdiction would likely cause these sources to lose access to further information about the network. According to Albright, "With Urs's [Urs Tinner, a CIA informant inside the Khan network] help, the CIA could intercept the next shipment, the largest of the four. Seizing the shipment would get items out of circulation and provide concrete evidence of Libya's secret nuclear weapons effort."¹¹¹ Before the seizure, the CIA warned Tinner and its other sources that A.Q. Khan would likely suspect that a mole was in his network if the United States were to intercept the *BBC China*. But the United States and Britain apprehended the components on the ship anyway, and they kept quiet about the episode to coerce Libya more effectively.

Soviet Discovery of South Africa's Nuclear Test Site

Discoverers that lack leverage may forgo the benefits of secrecy (i.e., face-saving and blackmail) in favor of publicizing proof of wrongdoing, according to our theory. This choice depends on whether the discoverer believes that actors with more leverage are likely to take action to pressure the culprit to end its wrongdoing. The Soviet Union found itself in this position with respect to South Africa. In July 1977, two Soviet satellites, Cosmos 922 and 932, made passes over the South African portion of the Kalahari Desert.¹¹² They photographed suspicious drilling equipment and boreholes hundreds of feet deep. The South Africans were preparing a nuclear testing site. Indeed, its first cold test was imminent.

SOVIET UNION LACKS LEVERAGE OVER SOUTH AFRICA

Proof in hand, the Soviet Union wished to stop South Africa from testing a nuclear device. As our theory predicts, the Soviet Union first evaluated its leverage over South Africa. In a letter notifying the United States of the discovery, Leonid Brezhnev, General Secretary of the Communist Party of the Soviet Union, indicated it lacked leverage relative to other countries because the Soviets neither maintained any kind of relationship (i.e., trade, security, or even diplomatic) with South Africa nor possessed a cost-effective option to

110. House of Commons, "Review of Intelligence on Weapons of Mass Destruction," p. 18.

111. Albright, *Peddling Peril*, p. 211.

112. Richelson, *Spying on the Bomb*, pp. 277–278.

threaten it militarily.¹¹³ The United States and France, on the other hand, possessed significant leverage over South Africa because both states assisted South Africa in the nuclear field.¹¹⁴ Brezhnev recognized specifically the United States' relative advantage in having "at their disposal the necessary channels and possibilities for the rendering of a direct restricting influence on this state."¹¹⁵ According to Sarah Bidgood, "Moscow needed Washington to leverage [its relationship with South Africa] . . . in order to persuade the country to halt its nuclear-weapons programme."¹¹⁶

SOVIET UNION REVEALS PROOF OF WRONGDOING

According to our theory, the Soviet Union should next consider the likelihood that those with the most leverage will pressure the wrongdoer to change its behavior. The available evidence indicates that the Soviets doubted whether the United States shared their interest in stopping South African proliferation. The Soviets perceived the United States as having sheltered the racist Afrikaaner regime as an anti-communist bulwark in Africa. In his message to President Jimmy Carter, Brezhnev highlighted the duty of permanent members of the UN Security Council, "who carry a special responsibility for the maintenance of peace and international security." He reminded Carter of the "certain obligations" he had taken on as a signatory of the NPT: "World public opinion will rightly ask: since . . . agreements have failed to prevent the emergence of nuclear weapons in the USA [Union of South Africa], then what value do they have?"¹¹⁷ Statements by Andrei Gromyko, the Soviet foreign

113. In 1976, the Soviet Union reportedly asked the United States for assistance with a strike on South Africa's enrichment complex, but the United States declined. Matthew Fuhrmann and Sarah E. Kreps, "Targeting Nuclear Programs in War and Peace: A Quantitative Empirical Analysis, 1941–2000," *Journal of Conflict Resolution*, Vol. 54, No. 6 (December 2010), pp. 831–859, doi.org/10.1177%2F0022002710371671. Albright provides a similar account, including that "the Soviets presented evidence" at the meeting. If this meeting occurred, Soviet behavior would fit with what we expect. After encountering a reluctant United States in 1976, the Soviet Union in 1977 calculated that publicity was necessary to catalyze U.S. action. David Albright, "South Africa and the Affordable Bomb," *Bulletin of the Atomic Scientists*, Vol. 50, No. 4 (1994), p. 42, doi.org/10.1080/00963402.1994.11456538.

114. Nuclear suppliers often find leverage in the ability to cut off supplies of nuclear reactor fuel, which is not readily replaceable. Peter Liberman, "The Rise and Fall of the South African Bomb," *International Security*, Vol. 26, No. 2 (Fall 2001), p. 69, doi.org/10.1162/016228801753191132; and Nicholas L. Miller, "Why Nuclear Energy Programs Rarely Lead to Proliferation," *International Security*, Vol. 42, No. 2 (Fall 2017), pp. 40–77, doi.org/10.1162/ISEC_a_00293.

115. "Telegram from the Department of State to the Embassy in the Soviet Union," August 11, 1977, *FRUS, 1977–1980*, Vol. 16: *Southern Africa*, pp. 896–897, <https://history.state.gov/historicaldocuments/frus1977-80v16/d288>.

116. Sarah Bidgood, "The 1977 South Africa Nuclear Crisis," in William C. Potter and Sarah Bidgood, eds., *Once and Future Partners: The United States, Russia, and Nuclear Non-Proliferation* (New York: Routledge, 2018), p. 71.

117. "Telegram from the Department of State to the Embassy in the Soviet Union," August 11, 1977.

minister, in subsequent months also suggest Soviet suspicion of U.S. motives. During a meeting with Carter in September 1977, Gromyko proposed that the Soviet Union and the United States “work together . . . to resolve some of the difference which existed between us with regard to the situation in Southern Africa.”¹¹⁸ In December 1977, Soviet scholar Valeriy Davydov, who did not work for the Kremlin but whose views U.S. officials believed were representative of the Soviet Union’s,¹¹⁹ complained of South Africa’s “leading role in the so-called ‘protection’ of the sea communication of the ‘free world’ at the Cape of Good Hope.” Thus, Davydov argued that the United States and the other “capitalist countries” had “turned a blind eye to the rapid development of South Africa’s nuclear program.” Davydov concluded, “before the signal of the USSR [in August 1977], the Western countries could not (or did not want to) take action.”¹²⁰

Given their doubts about whether the United States would act if the Soviets privately passed them proof of wrongdoing, Soviet officials decided that revealing the Kalahari Desert test site was their best option to halt South Africa’s nuclear development. In his August 6 message to Carter, Brezhnev outlined this strategy: “The Soviet Union intends in the nearest future to publish an appropriate statement, having in mind to draw the attention of governments and public opinion to the dangerous plans of [South Africa].”¹²¹

The sequence of its publicity campaign over several days in August 1977 shows how the Soviet Union increased the pressure on the United States to act.

118. Memorandum of Conversation, September 23, 1977, 10:30a.m.–1:20p.m., “The President’s Meeting with USSR Foreign Minister A.A. Gromyko” (Washington, D.C.: White House, 1994), p. 3, U.S. Declassified Documents Online, <https://link.gale.com/apps/doc/CK2349048829/USDD?u=anna82201&sid=bookmark-USDD&xid=aae1d586&pg=1>.

119. See, for example: Cable from Amembassy Moscow to Secstate Washdc, “USA Institute Analyst Proposes Arms Control Topics for Reagan-Brezhnev Summit,” May 20, 1982, <https://www.cia.gov/readingroom/docs/CIA-RDP84B00049R001603970017-3.pdf>; and Cable from Secstate Washdc to Amembassy Moscow, “Response to USA Institute on Proposed Arms Control Topics,” July 1, 1982, <https://www.cia.gov/readingroom/docs/CIA-RDP87R00029R000200430026-3.pdf>.

120. Valeriy F. Davydov, “Ladernaia ugroza u mysa Dobroi Nadezhdy” [The nuclear threat at the cape of good hope], trans. Lachlan MacKenzie, *SShA* (December 1977), p. 51. Davydov later published a book in which he further explains that Soviet publicity “forced” others to act. V.F. Davidov, *Translation: Nonproliferation of Nuclear Weapons and U.S. Policy*, trans. Foreign Broadcast Information Service (Moscow: Izdatel’svo “Nauka”, 1980), <https://www.cia.gov/readingroom/docs/CIA-RDP82-00850R000300100030-4.pdf>.

121. “Memorandum from William Hyland of the National Security Council Staff to President Carter,” August 6, 1977, *FRUS, 1977–1980*, Vol. 6: *Soviet Union* (Washington, D.C.: GPO, 2013), pp. 180–182, <https://history.state.gov/historicaldocuments/frus1977-80v06/d41>. While this specific Brezhnev message to Carter was private, the Soviets chose to go public at the same time that they sent the private message. U.S. government accounts of the episode are consistent with our coding of publicity. For example, Matthew Nimetz through Warren Christopher to the Secretary, “South African Nuclear Problem,” September 8, 1980, with memorandum from Warren Christopher attached: “South African Nuclear Problem,” September 27, 1980, National Security Archive, <https://nsarchive.gwu.edu/dc.html?doc=3227327-40>.

First, Soviet officials announced in a TASS news item on August 8 that South Africa intended to test a nuclear weapon, without saying how or where.¹²² The next day, another TASS announcement accused the West (NATO and Israel, in particular) of aiding South African nuclear weapons development.¹²³ Finally, on August 18, the Soviets slipped the detail about the Kalahari Desert location into an additional TASS news item.¹²⁴ As soon as it was published, the U.S. embassy in the Soviet Union cabled the United States with a quick translation.¹²⁵

In the span of eleven days, with each additional detail, the Soviet Union's publicity campaign made an impact on the United States. On August 10, four days after receiving Brezhnev's message, and two days after the Soviets went public, the State Department wrote to its embassy in South Africa that the United States' reputation as a nonproliferation enforcer would suffer if it did not hold South Africa accountable: "In light of the specificity of the charge, the fact that it was raised privately with us prior to its public release, and the close coordination of demarches with other Western governments, the US cannot dismiss such an allegation without an explanation from the SAG."¹²⁶

Other states also felt compelled to act in the wake of Soviet publicity. France issued a *démarche* to South Africa that specifically mentioned the Soviet discovery of the site in the Kalahari. Threatening to cut off fuel supplies for the Koeberg nuclear reactor, the French cautioned, "Following informations [*sic*] published by the Agency Tass, the French Government, in a public declaration dated 10th August, has emphasized without ambiguity that it would condemn any initiative from South Africa to endow itself with nuclear capacity."¹²⁷

U.S. leaders acknowledged among themselves that the United States would pay reputation and hypocrisy costs if they failed to restrain South Africa from proliferating. They sensed, too, that the Soviet Union appreciated this dy-

122. "TASS Issues Statement on Nuclear Weapons in S. Africa," Moscow TASS International Service, August 8, 1977, FBIS Daily Reports, NewsBank database.

123. "TASS Condemns Suppliers of Nuclear Technology to S. Africa," Moscow TASS International Service, August 9, 1977, FBIS Daily Reports, NewsBank database.

124. Cable from Secstate Washdc to Usdel Secretary, "Possible South African Nuclear Program," August 22, 1977, Access to Archival Databases (AAD), U.S. National Archives and Records Administration (NARA), <https://aad.archives.gov/aad/createpdf?rid=191238&dt=2532&dl=1629>.

125. *Ibid.*

126. "Telegram from the Department of State to the Embassy in South Africa," August 10, 1977, *FRUS, 1977-1980*, Vol. 16, pp. 894-895, <https://history.state.gov/historicaldocuments/frus1977-80v16/d287>.

127. "Unofficial Translation of Aide Memoire from French Embassy in South Africa to Government of South Africa Requesting that South Africa Prove that It Does Not Seek the Ability to Conduct a Nuclear Test," August 18, 1977, South African Foreign Affairs Archives, Brand Fourie, Atomic Energy, File 2/5/2/1, Vol. 1, Vol. 2, <https://digitalarchive.wilsoncenter.org/document/114151>; and Liberman, "The Rise and Fall of the South African Bomb," pp. 50, 69-70.

namic. Ambassador Andrew Young, a Carter confidante, sent a cable to the president and the secretary of state warning them that South Africa's intransigence regarding the NPT and safeguards "leaves us holding the bag before the international community on the question of South Africa's nuclear plans. . . . The Soviets know what's going on in the Kalahari about as well as we do and they must sense our vulnerability." Young wished to avoid a situation in which the United States appeared to be "the defenders of South Africa" and called on U.S. leaders to pressure South Africa further.¹²⁸ Soviet media explicitly labeled the United States a hypocrite. In a CIA National Intelligence Bulletin on August 17, intelligence analysts noted, "Isvestiya (a Soviet newspaper) returned to this [South African nonproliferation] theme in an article which implied that the US was guilty of hypocrisy for not forcing South Africa to live up to the tenets of the nuclear non-proliferation treaty."¹²⁹

As our theory predicts, the Soviet Union's revelations catalyzed the United States into taking action to pressure South Africa. On August 18, the U.S. ambassador to South Africa, William Bowdler, warned South African Foreign Minister R.F. "Pik" Botha on behalf of President Carter: Testing a nuclear device would rupture the two states' relations and constitute a "serious threat to peace."¹³⁰ Initially, Botha and Brand Fourie, the secretary of foreign affairs, reacted with outrage and denial, demanding evidence.¹³¹ The next day, U.S. Secretary of State Cyrus Vance privately relayed proof to Botha. The evidence included specific coordinates in the desert, and he offered to share photographs of drill rigs, a lattice tower, power and communication lines, secured housing, an airstrip, and an outer patrol road—all consistent with a nuclear test site.¹³² A flurry of diplomatic exchanges culminated in a press conference by President Carter on August 23 announcing South Africa's pledges not to develop or test nuclear weapons.¹³³

128. Cable from Secstate Washdc to White House, "For the President and the Secretary from Andrew Young, Subject: South African Nuclear Issue," September 22, 1977, AAD NARA, <https://aad.archives.gov/aad/createpdf?rid=219729&dt=2532&dl=1629>.

129. CIA, "National Intelligence Daily Cable," August 17, 1977, p. 1, <https://www.cia.gov/readingroom/docs/CIA-RDP79T00975A030300010012-1.pdf>.

130. "Letter, US Ambassador Bowdler to South African Foreign Minister Botha," August 18, 1977, South African Ministry of Foreign Affairs Archives, Brand Fourie, Atomic Energy, File 2/5/2/1, Vol. 1, Vol. 2, contributed by Anna-Mart van Wyk to Nuclear Proliferation International History Program (NPIHP), <https://digitalarchive.wilsoncenter.org/document/114150>.

131. "Telegram from the Department of State to the Embassies in the United Kingdom and France and the White House," August 18, 1977, *FRUS, 1977-1980*, Vol. 16, pp. 911-913, <https://history.state.gov/historicaldocuments/frus1977-80v16/d294>.

132. "Telegram from the Department of State to the Embassies in South Africa, France, and the United Kingdom," August 19, 1977, *FRUS, 1977-1980*, Vol. 16, pp. 914-915, <https://history.state.gov/historicaldocuments/frus1977-80v16/d295>.

133. See "Cable from South African Secretary for Foreign Affairs Brand Fourie to All South African Heads of Mission Outlining the South African Government's Position on Recent Nuclear Testing Charges," August 26, 1977, South African Foreign Affairs Archives, Brand Fourie, Atomic

In terms of South Africa's reaction, the Soviets' use of proof to catalyze pressure on South Africa bore mixed results. In 1977, South Africa caved and canceled a planned cold test. But South Africa seethed at what it interpreted as a "Soviet propaganda exercise."¹³⁴ The publicity of the episode contributed to its decision to redouble its secret efforts to build a nuclear weapon. If the Soviet Union had not publicized proof of wrongdoing, statements by U.S. leaders and diplomats indicate that the United States would have concealed proof. A draft reply to Brezhnev's message of August 6 (written by Deputy Secretary of State Warren Christopher) thanked the Soviets for the information but expressed regret that the Soviet Union had not "avoided public comment."¹³⁵ Carter himself told Brzezinski: "Zbig—what we want is: no test. If they have to lie about what their plans were, let them do so—Let them save face. J.C."¹³⁶ South African leaders were indeed reluctant to back down in public. Fourie relayed a message through the U.S. embassy in Pretoria from Botha and Prime Minister John Vorster that, in backing down, South Africa wished not to refer by name to the facility in the Kalahari Desert.¹³⁷ "Reference to the Kalahari facility," the South Africans feared, "would be viewed by the South African public as concrete evidence of USG spying on South Africa and 'open a hornet's nest.'"¹³⁸ But the Soviets had already gone public.

ALTERNATIVE EXPLANATIONS IN THE SOUTH AFRICA CASE

The three alternative explanations perform poorly in the South Africa case. First, the norm preservation alternative expects the Soviet Union to conceal proof of South Africa's wrongdoing to prevent cascading norm violations. Brezhnev's message to Carter mentioned the viability of the NPT and potential further proliferation, but such fears did not stop the Soviet Union from reveal-

Energy, File 2/5/2/1, Vol. 1, Vol. 2, contributed by Anna-Mart van Wyk to NPIHP, <https://digitalarchive.wilsoncenter.org/document/114180>.

134. "Draft Letter and Aide Memoire from South African Foreign Minister R.F. Botha to US Secretary of State Cyrus Vance," September 30, 1977, South African Foreign Affairs Archives, contributed by Anna-Mart van Wyk to NPIHP, <https://digitalarchive.wilsoncenter.org/document/116635>.

135. "Letter, Warren Christopher to William Hyland, 'Response to Soviet Message on South Africa,'" August 10, 1977, HAPP, NPIHP, <https://digitalarchive.wilsoncenter.org/document/119249>. Carter's actual response to Brezhnev on August 15 eliminated this section, a moot issue after the TASS news broke. See "Telegram from the Department of State to the Embassy in the Soviet Union," August 15, 1977, *FRUS, 1977-1980*, Vol. 6, p. 182, <https://history.state.gov/historicaldocuments/frus1977-80v06/d42>.

136. "Memorandum from the President's Assistant for National Security Affairs (Brzezinski) to President Carter," undated, *FRUS, 1977-1980*, Vol. 16, p. 922, <https://history.state.gov/historicaldocuments/frus1977-80v16/d301>.

137. Cable from American Embassy Pretoria to Secretary of State, "Possible South African Weapons Program," August 21, 1977, AAD NARA, <https://aad.archives.gov/aad/createpdf?rid=190545&dt=2532&dl=1629>.

138. *Ibid.*, p. 2.

ing proof of wrongdoing.¹³⁹ In their study, Carnegie and Carson designate the United States as the discoverer in this case and conclude that in 1977 the United States went public “to prevent a test.”¹⁴⁰ We disagree. The details of the 1977 episode instead demonstrate that the Soviet Union discovered proof of South African wrongdoing and publicized its proof to catalyze the United States. Our theory of coercing with proof offers a better explanation for the events of 1977.

Second, the geopolitical relations alternative explanation expects the Soviet Union to go public with its proof in this case because South Africa was a Soviet adversary. The Soviets might use proof to criticize South Africa or score propaganda points against its Cold War rival, the United States. Instead, our evidence indicates that the Soviets genuinely hoped to change South African behavior. U.S. officials themselves ruled out propaganda as a primary Soviet interest in 1977.¹⁴¹ U.S. intelligence also stated that Soviet leaders seemed “genuinely disturbed” by South Africa’s activities.¹⁴² Soviet decision-making regarding what to do with proof hinged on what it thought would be most successful in halting Pretoria’s behavior.

Third, the protection of intelligence sources alternative expects the Soviet Union to conceal its proof when instead the Soviet Union did the opposite. As William Potter and Bidgood write, Soviet sharing of “sensitive intelligence information . . . was particularly noteworthy as it probably risked compromising a Soviet spy in South Africa.”¹⁴³ Although the Soviet Union acknowledged having only satellite imagery, a human source likely cued the satellite passes over the Kalahari Desert.¹⁴⁴

U.S. Detection of North Korean Proliferation

Twice in the 1980s, the United States discovered proof of North Korean nuclear wrongdoing. Whereas the case of South Africa shows how a discoverer with

139. “Memorandum from William Hyland of the National Security Council Staff to President Carter,” August 6, 1977, *FRUS, 1977–1980*, Vol. 6, pp. 180–182, <https://history.state.gov/historicaldocuments/frus1977-80v06/d41>.

140. Carnegie and Carson, “The Spotlight’s Harsh Glare,” appendix, p. 28.

141. “Telegram from the Department of State to the Embassy in South Africa,” August 10, 1977, *FRUS, 1977–1980*, Vol. 16, pp. 894–895, <https://history.state.gov/historicaldocuments/frus1977-80v16/d287>.

142. CIA, “National Intelligence Daily Cable,” September 28, 1977, p. 2, <https://www.cia.gov/readingroom/docs/CIA-RDP79T00975A030300010082-4.pdf>.

143. Sarah Bidgood and William Potter, *Cold War Lessons for Contemporary U.S.-Russian Nonproliferation Cooperation: The South African Case* (Washington, D.C.: Nuclear Threat Initiative, 2016), <https://www.nti.org/analysis/articles/cold-war-lessons-contemporary-us-russian-nonproliferation-cooperation-south-african-case/>.

144. Richelson, *Spying on the Bomb*, p. 277; and Potter and Bidgood, *Once and Future Partners*.

less leverage reveals proof when it doubts whether actors with more leverage are likely to act on it, this case of U.S. discovery of North Korea's wrongdoing is one in which the discoverer with less leverage believes that others will act on its proof.

We focus on U.S. decision-making in the early period of North Korea's proliferation efforts. Of course, in the 1990s and the 2000s, the United States continued to work to limit North Korea's pursuit of nuclear weapons. Yet, our theory about the use of proof should explain the United States' choices when it first obtained concrete evidence of North Korea's activities and knowledge of those activities among other actors was not widespread.

In contrast to the Soviet–South Africa case, the United States assessed that the Soviet Union would lean on North Korea to halt its activity. Given this assessment, U.S. officials should privately pass their proof of wrongdoing to the Soviet Union. In both 1984/1985 and 1989, this is what we observe.

North Korea consistently claimed that its nuclear activities were for civilian rather than military purposes. In 1967, with Soviet assistance North Korea completed construction of a small experimental reactor at Yongbyon, about 65 miles north of Pyongyang. Although North Korea was not a signatory of the NPT, the Soviet Union insisted that it permit the IAEA to inspect the reactor. In 1977, North Korea agreed.¹⁴⁵

In the early 1980s, however, North Korea's activities at the Yongbyon nuclear facility started to arouse U.S. suspicion. In April 1984, U.S. spy satellites detected construction work on a new building. The CIA assessed it to be "a large, graphite-moderated natural uranium-fueled research reactor."¹⁴⁶ Once completed, it would "be capable of producing significant quantities of nuclear weapons-grade plutonium."¹⁴⁷

1984: UNITED STATES LACKS LEVERAGE OVER NORTH KOREA

Given North Korea's reliance on the Soviets for aid and trade, in this case the United States assessed that the Soviet Union was best positioned to influence North Korea.¹⁴⁸ The salient question was whether the United States should privately share or go public with its proof of North Korea's new (and unsafeguarded) reactor construction. Publicity could spur action by the

145. Young Sun Song, "North Korea's Nuclear Issue," *Journal of Northeast Asian Studies*, Vol. 10, No. 3 (September 1991), p. 65, <https://link.springer.com/article/10.1007/BF03025074>.

146. CIA, "Monthly Warning Meetings for April 1984," May 9, 1984, p. 1, <https://www.cia.gov/readingroom/docs/CIA-RDP91B00776R000100080009-4.pdf>.

147. CIA, "Nuclear Reactor under Construction in North Korea," April 19, 1984, p. 2 of pdf (pages are redacted), <https://www.cia.gov/readingroom/docs/CIA-RDP86M00886R000800100037-6.pdf>.

148. Michael J. Mazarr, *North Korea and the Bomb: A Case Study in Nonproliferation* (New York: St. Martin's, 1995), p. 41.

Soviets, although it may also reduce the likelihood of coercive success by eliminating the possibility of face-saving or blackmail.

UNITED STATES ENGAGES IN PRIVATE SHARING

Early in the 1980s, Reagan administration officials stated that the Soviets were likely to cooperate with the United States in confronting nuclear proliferators. Despite East-West tension, State Department officials noted in an internal document in 1981 that “the Soviets have generally supported US non-proliferation objectives.”¹⁴⁹ Thus, when the United States discovered that North Korea was building a new reactor, U.S. officials appear to have concluded that the Soviets would, if notified, take action to stop it. Our theory predicts that the United States should eschew publicity and engage in private sharing, which it did in 1984 and 1985. A State Department briefing paper for Secretary of State George Shultz from January 1985 outlined the United States’ approach: “Ambassador [Richard] Kennedy [the Reagan administration’s ambassador-at-large for nuclear nonproliferation] recently raised the matter [of North Korea’s nuclear reactor] again in Moscow; the Soviets this time asked for additional information (which we are providing) rather than their usual non-reply.”¹⁵⁰ According to Michael Mazarr, “U.S. officials reminded Moscow of its obligations under the Nonproliferation Treaty.”¹⁵¹ Thus, the United States privately shared its proof with a more leveraged actor and reminded the Soviet Union of its public commitments.

U.S. private sharing, as well as the U.S. request that the Soviet Union pressure North Korea to end its nuclear work, had the desired effect on Soviet officials. In the words of Mazarr, “Anxious to maintain the Soviet Union’s image as a dedicated foe of proliferation, and probably just as keen as their U.S. counterparts on avoiding a North Korean bomb, the Soviets complied.”¹⁵² During a December 1985 visit to the Soviet Union by Kang Song San, the Korean Workers’ Party secretary, Soviet officials demanded that North Korea sign the NPT. In exchange for its signature, the Soviets offered to help North Korea build four light-water nuclear reactors.¹⁵³ On December 12, North Korea

149. “Request for Review of Draft Paper on the Security Dimension of Non-Proliferation,” April 9, 1981, NPIHP, Mandatory Declassification Review request, contributed by William Burr, <https://digitalarchive.wilsoncenter.org/document/114233>.

150. “Department of State: Briefing Paper,” circa January 1985, National Security Archive Electronic Briefing Book No. 87, doc. 5, <https://nsarchive2.gwu.edu/NSAEBB/NSAEBB87/nk05.pdf>.

151. Mazarr, *North Korea and the Bomb*, p. 41. Citing an interview with Paul Wolfowitz, Oberdorfer gives a similar rendering of events. See Don Oberdorfer and Robert Carlin, *The Two Koreas: A Contemporary History* (New York: Basic Books, 2001), p. 254.

152. Mazarr, *North Korea and the Bomb*, p. 43.

153. Oberdorfer and Carlin, *Two Koreas*, p. 254.

relented to Soviet pressure and signed the NPT. The State Department and the CIA concluded that the Soviet Union had persuaded North Korea to comply through a clear quid pro quo.¹⁵⁴

Consistent with our theory, as details about North Korea's wrongdoing and subsequent accession to the NPT emerged publicly, both the United States and the Soviet Union declined to mention that the Soviets had pressured North Korea to sign the NPT. Instead, as the United States and Britain did with respect to Libya's renunciation of WMD, the United States portrayed North Korea's decision as voluntary. Two weeks after the North Koreans' signature, the United States announced that North Korea had joined the NPT but declined to offer a motive for its decision. Nor did U.S. officials mention the quid pro quo.¹⁵⁵

The CIA acknowledged the backstory in its classified reports to U.S. policymakers: "Moscow was instrumental in inducing Pyongyang to sign the NPT," and North Korea's concession on the NPT was "no doubt a condition for Soviet help to North Korea's nuclear program."¹⁵⁶

1989: UNITED STATES AGAIN LACKS LEVERAGE OVER NORTH KOREA

North Korea's cooperation with both the Soviet Union and (indirectly) the United States proved temporary. In 1986, North Korea completed construction of the suspect reactor at Yongbyon, which had aroused the United States' concern in 1984. Despite signing the NPT, North Korea delayed concluding a comprehensive safeguards agreement with the IAEA.¹⁵⁷ Then, in the spring of 1989, U.S. intelligence detected more ominous signs of a North Korean effort to engage in reprocessing. "North Korea is rapidly expanding its nuclear-related activities," the CIA reported in a special estimate, calling it a "program of proliferation concern."¹⁵⁸ Imagery from spy satellites showed an approximately 200-yard-long building adjacent to the Yongbyon reactor that resembled a reprocessing plant.¹⁵⁹

154. CIA, "East Asia Brief," December 27, 1985, National Security Archive Electronic Briefing Book No. 87, doc. 6, <https://nsarchive2.gwu.edu/NSAEBB/NSAEBB87/nk06.pdf>.

155. Michael R. Gordon, "North Korea Joins Pact to Prevent the Spread of Nuclear Weapons," *New York Times*, December 27, 1985, <https://www.nytimes.com/1985/12/27/world/north-korea-joins-pact-to-prevent-the-spread-of-nuclear-weapons.html>.

156. CIA, "North Korea's Nuclear Efforts," April 28, 1987, p. 3, https://www.cia.gov/readingroom/docs/DOC_0000835118.pdf; and CIA, "North Korea-USSR: Implications of NPT Accession," March 18, 1986, p. 2, <https://www.cia.gov/readingroom/docs/CIA-RDP86T01017R000605680001-5.pdf>.

157. Richelson, *Spying on the Bomb*, p. 348.

158. CIA, "North Korea: Nuclear Program of Proliferation Concern," March 22, 1989, p. 1, https://www.cia.gov/readingroom/docs/DOC_0000835122.pdf.

159. Richelson, *Spying on the Bomb*, p. 357.

As it had in 1984, the United States recognized that it lacked leverage over North Korea. “The United States, of course, had zero influence with the totalitarian regime of Kim Il-Sung,” Secretary of State James Baker writes in his memoir.¹⁶⁰ In 1988, Vice President George H.W. Bush told Soviet Foreign Minister Eduard Shevardnadze that the United States “had no influence over North Korea.”¹⁶¹

UNITED STATES AGAIN ENGAGES IN PRIVATE SHARING

As in 1984, U.S. officials calculated that their proof of wrongdoing would likely motivate the Soviet Union to act. According to our theory, the United States should eschew publicity and engage in private sharing, repeating its approach of 1984 and 1985. Over the course of 1989, the United States behaved accordingly. Baker writes, “We enlisted the help of North Korea’s superpower patrons—the Soviet Union and China—to pressure their client state.”¹⁶² In their third meeting, in July 1989, Baker “told [Foreign Minister] Shevardnadze that the U.S. government believed the North was ‘probably’ building the infrastructure for a nuclear weapons program that might be operational by the 1990s.”¹⁶³ Accounts of this meeting and other consultations in the first half of 1989 regarding North Korea make clear that the U.S. officials offered evidence to back up their claims.¹⁶⁴ Baker states that he requested “a very active Soviet effort” to press the North Koreans to halt their reprocessing of plutonium and accept IAEA safeguards.¹⁶⁵ Shevardnadze agreed to try to help, adding that the Soviet Union would pursue a new round of high-level talks with North Korea.

As in 1984 and 1985, the United States declined to go public with its proof of North Korean wrongdoing. Yet, in contrast to the earlier episode, it did not succeed in stifling publicity by other actors. In June 1989, the month before

160. James A. Baker III, *The Politics of Diplomacy: Revolution, War, and Peace, 1989–1992* (New York: G.P. Putnam’s Sons, 1995), p. 595.

161. Shevardnadze spoke in the context of a discussion about the security of the South Korean Olympics and reining in any North Korean disruption. Memorandum of Conversation, March 23, 1988, 11:40 a.m.–2:35 p.m., *FRUS, 1981–1988*, Vol. 6, pp. 858–867, <https://history.state.gov/historicaldocuments/frus1981-88v06/d138>. For similar U.S. statements about its lack of leverage over North Korea to Chinese leaders, see Memorandum of Conversation, “President Bush’s Meeting with General Secretary of the Central Committee of the Communist Party Zhao Ziyang of the People’s Republic of China,” February 26, 1989, The United States and the North Korean Nuclear Threat, doc. 3, National Security Archive, <https://nsarchive.gwu.edu/dc.html?doc=5750500-National-Security-Archive-Doc-03-Memorandum-of>.

162. Baker, *Politics of Diplomacy*, p. 595.

163. *Ibid.*

164. Don Oberdorfer, “North Koreans Pursue Nuclear Arms,” *Washington Post*, July 29, 1989, <https://www.washingtonpost.com/archive/politics/1989/07/29/north-koreans-pursue-nuclear-arms/a707f893-f9e8-4ce2-bf73-69d777bc5d1a/>.

165. Baker, *Politics of Diplomacy*, p. 595.

Baker shared proof with Shevardnadze, U.S. intelligence officials briefed a group of South Korean government officials on U.S. concerns. Within days, a recipient of that briefing leaked word of the proof to the South Korean press, whose coverage in turn alerted the U.S. media.¹⁶⁶

Consistent with our theory, U.S. officials still preferred not to discuss the proof. Don Oberdorfer wrote in the *Washington Post* that “Officials are under orders not to comment publicly” because the proof of North Korea’s wrongdoing was “closely held in the Bush administration.”¹⁶⁷ John Fialka reported in the *Wall Street Journal* that a State Department spokesman “would neither confirm nor deny South Korean press reports that a five-man team of U.S. officials showed the photos to South Korean officials last month.”¹⁶⁸

Our theory does not explain the many reasons for North Korean defiance of outsiders’ demands regarding its nuclear program, but we expect that this initial instance of publicity probably reduced the likelihood that North Korea would back down. In the words of Oberdorfer, “The intelligence briefing and the notoriety it attained launched the public and political tumult over the North Korean nuclear program.”¹⁶⁹ The leak caused negotiations with North Korea to “play out under the watchful eye of the media,” William Drennan writes.¹⁷⁰

Irrespective of the leak, U.S. officials were pessimistic about the ultimate outcome of coercive diplomacy. In a meeting with South Korean officials in the fall of 1989, Baker said he believed that the Soviets would confront North Korea about its nuclear activities yet again, even if their efforts were likely to fail. “They [the Soviets] profess to be equally concerned, and said they would raise it with North Korea as they had before. I have no reason to doubt that they will raise it nor to believe that it will stop North Korea,” Baker assessed.¹⁷¹

ALTERNATIVE EXPLANATIONS IN THE NORTH KOREA CASE

The three alternative explanations receive mixed support in the case of North Korea. The first alternative explanation expects the United States not to reveal

166. Mazarr, *North Korea and the Bomb*, p. 35.

167. Oberdorfer, “North Koreans Pursue Nuclear Arms.”

168. John Fialka, “North Korea May Be Developing Ability to Build Nuclear Weapons,” *Wall Street Journal*, July 19, 1989, <https://www.proquest.com/newspapers/north-korea-may-be-developing-ability-build/docview/398124707/se-2?>

169. Oberdorfer and Carlin, *The Two Koreas*, p. 256.

170. William Drennan, “Nuclear Weapons and North Korea,” in Robert J. Art and Patrick M. Cronin, eds., *The United States and Coercive Diplomacy* (Washington, D.C.: United States Institute of Peace Press, 2003), p. 165.

171. Memorandum of Conversation, “Meeting with President Roh Tae Woo of the Republic of Korea,” October 17, 1989, p. 4, <https://bush41library.tamu.edu/files/memcons-telcons/1989-10-17--Tae-Woo.pdf>.

its proof to preserve the nonproliferation norm and prevent a regional cascade of nuclear weapons pursuit. U.S. actions undercut this logic. The United States shared its proof with multiple states, including those in the region that might have engaged in reactive proliferation. According to Carson and Carnegie, the United States need not have worried about a cascade of nuclear proliferation in the region because North Korea would comply with international pressure to cease its pursuit of nuclear weapons.¹⁷² But contrary to this prediction that the United States would publicize proof of North Korea's wrongdoing, in both 1984 and 1989 the United States privately shared its proof with the Soviet Union and others. Accounts from 1989 show that the leak by South Korea of the United States' proof of North Korean wrongdoing irritated U.S. officials. On the basis of interviews with U.S. diplomats, the *Boston Globe* reported days later, "Americans believe the news leak compromised chances of using quiet diplomacy with the Soviet Union, which supplies North Korea's nuclear technology, to persuade its ally to stop the plant's construction."¹⁷³ South Korea had interfered with the United States' preference to privately share proof of wrongdoing to facilitate the Soviet Union's quiet diplomacy with North Korea.

Second, the geopolitical relationship explanation expects publicity by the United States, as the United States and North Korea were longtime adversaries. If this explanation is correct, the United States might have used proof of wrongdoing to criticize North Korea or to boost the credibility of its threats against North Korea. Instead, the United States privately shared proof of North Korea's wrongdoing with the Soviet Union.

The third alternative explanation expects the United States to conceal its proof in order to protect sources of intelligence on North Korean wrongdoing. Our analysis of the available evidence finds that U.S. policymakers prioritized stopping North Korea's activities, even if doing so jeopardized sensitive intelligence sources. In 1984 and 1985, the United States provided detailed information to the Soviet Union about North Korea's activities. The United States did the same in 1989. Although U.S. officials in 1989 were concerned that South Korea's leak about North Korea's wrongdoing may prejudice future intelligence collection, we argue that the primary reason for U.S. displeasure was because South Korean publicity might have imperiled the effort to influence North Korea.¹⁷⁴

172. Carnegie and Carson make a prediction about U.S. behavior in 1989. They do not include 1984. Carnegie and Carson, "The Spotlight's Harsh Glare," appendix, p. 37.

173. John Gittelsohn, "U.S. Officials in South Korea Feeling the Heat," *Boston Globe*, July 11, 1989, <https://www.proquest.com/historical-newspapers/us-officials-south-korea-feeling-heat/docview/2445597888/se-2?>

174. *Ibid.*

Conclusion

States that catch norm violators red-handed wield a form of coercive power. To restrain transgressors, discoverers decide to conceal, share privately, or reveal proof depending on their leverage over the wrongdoer relative to other actors. States with more leverage eschew publicity and use secrecy to blackmail wrongdoers while also allowing them to save face. The United States wielded proof to coercive advantage in this way when it discovered secret proliferation by Taiwan in 1988 and again in 2003 when it discovered Libyan illicit procurement. If a discoverer assesses that another actor has more leverage over the wrongdoer, it then bases its decision to share proof of wrongdoing privately or publicly on whether the discoverer believes that actor is likely to take action to stop the wrongdoer. When the United States assessed in the 1980s that the Soviet Union held more influence over North Korea and was likely to attempt to restrain proliferation, it privately shared proof of North Korean wrongdoing with Soviet officials. On the other hand, the Soviet Union harbored doubts about U.S. policy toward South Africa. As a result, the Soviet Union in 1977 broadcasted its discovery of South Africa's nuclear test site in the Kalahari Desert, catalyzing the United States to wield its influence and uphold its non-proliferation commitments.

We find in these four cases—United States-Taiwan, United States-Libya, Soviet Union-South Africa, and United States-North Korea—that the alternative explanations of norm preservation, geopolitical relationships, and protecting intelligence sources played secondary roles in discoverers' decision-making regarding the use of proof. The norm preservation explanation may have factored into U.S. decision-making in Taiwan, where U.S. policymakers feared a proliferation cascade in the region, but it received little support in the other three cases. Regarding a discoverer's behavior over time, our argument and one prioritizing the protection of norms may be complementary. When a discoverer catches a coercible target red-handed, and the norm violation runs counter to its interest, its priority is to change the wrongdoer's behavior. When a wrongdoer proves to be impervious to coercion or persuasion, states that uncover new violations by such an incorrigible offender may decide to conceal the crime to limit damage to a norm. For example, in 1984 the United States was concerned about the consequences of public knowledge of South Africa's nuclear weapons program, which had advanced since 1977.¹⁷⁵ Still, our four

175. CIA, "Trends in South Africa's Nuclear Security Policies and Programs," National Intelligence Estimate, October 5, 1984, p. 3, https://www.cia.gov/readingroom/docs/DOC_0000107420.pdf. See also Carnegie and Carson, "The Spotlight's Harsh Glare."

cases move the discussion of secrecy and wrongdoing in international politics away from third-party reactions and toward coercive strategy, which is the primary concern when discoverers initially uncover wrongdoing.

We also did not find consistent evidence to support the geopolitical relationship alternative explanation. Regarding Libya and North Korea, both of which were adversaries of the United States, U.S. officials did not go public with their proof of wrongdoing. In South Africa, the Soviet Union went public not to tar an adversary but to try to prevent a South African nuclear test. Granted, in the case of Taiwan, concerns about protecting an ally probably factored into U.S. officials' decision-making. The United States was aware in the 1980s that China could react aggressively to Taiwan's nuclear ambitions. Once additional documents from the period are declassified, scholars should investigate the degree to which such concerns drove U.S. decision-making. We note, however, the potential correlation between the discoverer and wrongdoer being allies and the discoverer having the most leverage over the wrongdoer. Thus, what other studies observe as the differential treatment of proof regarding the wrongdoing of allies and adversaries may be attributable to leverage instead.¹⁷⁶

Finally, concern for the protection of intelligence sources did not drive discoverers' decision-making. In the cases of South Africa and North Korea, the Soviet Union and the United States likely jeopardized sources of intelligence by revealing or sharing privately, respectively, their proof of wrongdoing. In Taiwan, once a key source defected, the United States continued to conceal proof of wrongdoing. In Libya, the United States was willing to jeopardize its sources within the illicit Khan network in order to stop Qaddafi.

Our research also revises a conventional wisdom in Cold War nonproliferation history that treats the 1977 South African crisis as a prime instance of cooperation between the superpowers to stem proliferation.¹⁷⁷ The Soviet Union and the United States did not so much collude as the Soviets publicized proof regarding the Kalahari Desert test site to catalyze the United States.

The Soviet strategy to galvanize the United States through catalytic publicity may also extend to interactions among allies. In the case of North Korean proliferation, South Korea, not the Soviet Union or China, leaked word of the proof. Although the person or entity responsible for that leak remains unclear, it is possible that South Korea distrusted Soviet and U.S. willingness to act and decided to go public to try to catalyze these states with more leverage to pressure North Korea. Elsewhere in the nuclear domain, this pattern repeats itself.

176. Carnegie and Carson, *Secrets in Global Governance*.

177. Coe and Vaynman, "Collusion and the Nuclear Nonproliferation Regime"; and Potter and Bidgood, *Once and Future Partners*.

Israel publicized proof of Iran's nuclear weapons progress when it doubted U.S. resolve to act.¹⁷⁸ This points to the need for future research on whether strong states can stifle or minimize catalytic publicity by their weaker allies.

The power of our theory outside the nuclear realm is also an avenue for further research. Nonproliferation is indeed a strong norm, and states possess effective levers to enforce it.¹⁷⁹ In other areas of wrongdoing, however, we see states use smoking guns in ways that our theory expects. Before they go public, discoverers often try a quiet approach. As we mentioned in the introduction, the United States decided to stay quiet about its discovery of the Soviet biological weapons program in 1989 and issue a private *démarche*.¹⁸⁰ In September 1992, the Soviets relented and agreed to dismantle their biological weapons program.¹⁸¹ In 2012, a top U.S. diplomat and military official held a private meeting with Chinese leaders regarding the hacking activities of the PLA.¹⁸² The officials "confronted the Chinese government with proof that American companies were being hacked by the People's Liberation Army to benefit Chinese firms," the *Washington Post* recounted. In subsequent years, seeing no change in Chinese wrongdoing, the United States took a more public approach to the problem, culminating in the 2014 U.S. Department of Justice indictment of five PLA actors. Similarly, in 2013, when the United States acquired ironclad proof of Bashar al-Assad's use of chemical weapons in the Syrian civil war, the United States used proof in the way we expect. U.S. officials identified Russia as the state with the most leverage over Syria. Early that year, Secretary of State John Kerry privately shared proof with Russia of al-Assad's uses of sarin gas in an ill-fated attempt to spur Vladimir Putin to "rein in his proxy."¹⁸³ After a subsequent, horrific chemical attack in August 2013, the United States took a different approach. This time, when Russia continued to deny that Syrian forces had used chemical weapons, the Obama ad-

178. Daniel Sobelman, "Restraining an Ally: Israel, the United States, and Iran's Nuclear Program, 2011–2012," *Texas National Security Review*, Vol. 1, No. 4 (August 2018), pp. 10–38, doi.org/10.15781/T23T9DS99.

179. Supplier relationships and coordination among members of the Nuclear Suppliers Group is one source of leverage absent in other domains that contributes to the ultimate effectiveness of coercive nonproliferation. Miller, "Why Nuclear Energy Programs Rarely Lead to Proliferation." Other work points to "competitive shaming" as a cause of a strengthening nonproliferation regime over time. Jeff D. Colgan and Nicholas L. Miller, "Rival Hierarchies and the Origins of Nuclear Technology Sharing," *International Studies Quarterly*, Vol. 63, No. 2 (June 2019), pp. 310–321, doi.org/10.1093/isq/sqz002.

180. Alibek and Handelman, *Biohazard*, p. 148.

181. *Ibid.*, pp. 177–178.

182. Ellen Nakashima, "Indictment of PLA Hackers Is Part of Broad U.S. Strategy to Curb Chinese Cyberspying," *Washington Post*, May 22, 2014, https://www.washingtonpost.com/world/national-security/indictment-of-pla-hackers-is-part-of-broad-us-strategy-to-curb-chinese-cyberspying/2014/05/22/a66cf26a-e1b4-11e3-9743-bb9b59cde7b9_story.html.

183. John Kerry, *Every Day Is Extra* (New York: Simon and Schuster, 2018), p. 526.

ministration revealed its evidence at a public briefing.¹⁸⁴ The publicity seemed to catalyze Russia, which soon compelled Syria to permit the removal of its chemical stockpile.¹⁸⁵

We find other cases in which discoverers' behavior diverges from what we expect. In December 2014, the United States uncovered evidence implicating North Korea in a destructive hacking operation against Sony. According to our theory, the United States would conceal its proof of wrongdoing and privately confront North Korea, as it did with respect to Chinese hacking in 2012. Instead, the Obama administration publicly accused North Korea of being behind the hack and cited evidence to back up its claim.¹⁸⁶ Shortly thereafter, the United States retaliated by imposing new sanctions on ten senior North Korean officials.¹⁸⁷ One reason the United States surrendered the leverage that comes with concealing proof of guilt may be that secrecy in this case did not have a long half-life. Rumors of North Korean culpability were already circulating before President Obama's announcement.¹⁸⁸ Thus, the United States' ability to blackmail North Korea or allow it to save face was already eroding. Another possible reason is domestic politics. Owing to the rumors, the administration may have calculated that if it did not go public it would face a domestic political backlash for covering up North Korean responsibility. In future research, scholars should test the significance of these factors.

Finally, we acknowledge that weaponizing proof of guilt exists in tension with norms of democratic transparency. We do not recommend that policy-makers engage in long-term cover-ups. Yet catching states red-handed—with a transcript of a secret meeting, a defector's documents, or pristine satellite imagery—constitutes a kind of power. To use that power to greatest effect, discoverers with leverage must clamp down on leaks and quietly confront wrongdoers over their misdeeds. This preserves the possibility for states to grant wrongdoers the opportunity to save face and at the same time blackmail them.

184. *Ibid.*, p. 530.

185. *Ibid.*, pp. 537, 540.

186. David E. Sanger, Michael S. Schmidt, and Nicole Perlroth, "Obama Vows a Response to Cyberattack on Sony," *New York Times*, December 19, 2014, <https://www.nytimes.com/2014/12/20/world/fbi-accuses-north-korean-government-in-cyberattack-on-sony-pictures.html>. For additional discussion, see Brendan Rittenhouse Green and Austin G. Long, "Signaling with Secrets," in Erik Gartzke and Jon R. Lindsay, eds., *Cross-Domain Deterrence: Strategy in an Era of Complexity* (Oxford: Oxford University Press, 2019), p. 231.

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