

Dear workshop participants,

This is the theory chapter to my book manuscript, which I'm tentatively calling *Signaling in International Politics: The Symbolic Meaning of Arms Sales* (I'm not wedded to the title). I am returning to this theory chapter after taking about a year away due to medical issues, so I am looking forward to your feedback!

I am trying to develop the theory in two stages. The first is the ideal theory, presented in simplified form: how and why are arms transfers symbolic, and what signals do they send. Then, in the later part of the chapter, I am adding in complications and complexities that reflect how arms transfers actually work – things like how many weapons are transferred, the issue of multiple audiences, and comparisons to other types of signals in states' toolkits. I am also working on clarifying the contributions of the book, and showing that this is primarily a theory about signaling, rather than a book about the arms trade.

For some added context, the other chapters in the book are qualitative case comparisons, and I am adding a chapter of more contemporary mini-cases. Here's a very brief overview of the other chapters:

- US arms sales to Pakistan, 1954-1965. Begins with the signing of the mutual defense treaty, and ends with Indo-Pakistani War over Kashmir. Shows how Pakistan wanted more and more signals of support, which the US was reluctant to give because of Pakistan's behavior toward India and China. US arms transfers to Pakistan made it very difficult for the US to initiate a political relationship with India.
- US, French, and Soviet sales in the Middle East prior to 1967 war. Traces the lead up to the 1967 war through the uncertainties created by arms transfer signals. The US did not want to be strongly allied with Israel, but because of arms transfers was seen as Israel's great power patron (which Israel knew, and asked for additional arms transfers to solidify). The US was simultaneously trying to cultivate a relationship with Jordan, and Jordan was pursuing US weapons to rebuff offers from the Soviet Union – Jordan did not want to be identified with the Arab League and Israel.
- US arms sales to Taiwan during the opening to China. Shows how arms transfer signals to Taiwan prolonged the normalization process and angered China. Also shows the problem of multiple audiences, as the US did not want its European allies to think it was abandoning Taiwan, resulting in arms sales to Taiwan solely for signaling purposes. Arms sales were a foundational part of the US policy of strategic ambiguity, and remain a sensitive and important signal in US-China-Taiwan relations today.

Thanks for taking time to read the chapter!

## Chapter 2: A Theory of Symbolic Signaling

“[You] do not sell arms without saying, in effect, ‘In light of the receiving country’s known policies, friends, and enemies, we anticipate that, in the last resort, we will be on their side in the case of any conflict. We shall want them to defeat their enemies.’”

- Julius Nyerere, former President of Tanzania, 1971<sup>1</sup>

“When a country acquires an advanced U.S. defense system, they are not simply buying a product to enhance their security, they are also seeking a relationship with the United States.”

- Andrew J. Shapiro, Assistant U.S. Secretary of State for Political-Military Affairs, 2012<sup>2</sup>

As symbolic signals, weapons transfers send message about the political alignment between the sender and receiver. These messages help states differentiate between close friends, acquaintances, and opponents in a manner that is clear and comprehensible in an otherwise noisy international system. By clarifying political alignments, symbolic signals also have observable effects on the direction of a state’s foreign policy behaviors. But why does the transfer of weapons serve as a symbolic signal, and what is the meaning of different types of weapons transfers?

The exchange of goods or services is a common way for actors to understand their relationship with one another. Giving gifts, for example, can signal an invitation to a partnership, and indicates that the giver has an interest in the receiver.<sup>3</sup> Different types of gifts – whether based on price, quality, thoughtfulness, usefulness, or something else – can be used “to create, maintain, modulate, or sever relationships” with individuals or groups.<sup>4</sup> Giving something to

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<sup>1</sup> Quoted in Catrina 1988, 13.

<sup>2</sup> Andrew J. Shapiro, “A New Era for US Security Assistance,” *The Washington Quarterly* 35, no. 4 (2012): 23–35.

<sup>3</sup> John F. Sherry, “Gift Giving in Anthropological Perspective,” *Journal of Consumer Research* 10, no. 2 (1983): 158; See also Jan Van Baal, *Reciprocity and the Position of Women: Anthropological Papers* (Assen: Van Gorcum, 1975).

<sup>4</sup> Sherry, “Gift Giving in Anthropological Perspective,” 158; Pamela Shurmer, “The Gift Game,” *New Society* 18, no. 482 (1971): 1242–44; Mary Finley Wolfenbarger, “Motivations and Symbolism in Gift-Giving Behavior.,” *Advances in Consumer Research* 17, no. 1 (1990): 349.

another actor serves as a signal of that actor's intentions about future investment in a relationship.<sup>5</sup> These types of exchanges are common in the international system, even as the norms that guide them change over time.<sup>6</sup> Consider exchanges that occur as part of Head of State visits or other diplomatic protocols. The exchanges are meaningful to the actors involved, and the items that are exchanged communicate different messages. Similarly, dispatching a low-level consular official will send a very different message than an Ambassador's visit. As relationships change over time, so too do expectations about the type of exchange.<sup>7</sup> Crucially, gifts and exchanges also symbolize the actors' relationship to others within a particular network.<sup>8</sup> Consider gift giving around birthdays or holidays. If you receive five cards and one set of tickets to a Bruce Springsteen concert, it's fairly easy to determine which givers are friends and which giver is (or wants to be) the closest friend. Additionally, the friends in this scenario are also able to see the difference between the friendship tier and the closest-friendship tier.<sup>9</sup> The social processes that affect gift-giving and exchanges at the individual level apply to weapons transfers, too.

Weapons are often given as gifts, but even when they are sold they communicate something about the relationship between the sender and the receiver. Their exchange clarifies uncertainties about the level of political alignment between the sender and receiver, and also allows the receiver to see how they stack up against others in the sender's network. Scholars and policymakers recognize this signaling function, and believe that weapons can convey a variety of

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<sup>5</sup> Colin Camerer, "Gifts as Economic Signals and Social Symbols," *American Journal of Sociology* 94 (1988): S180.

<sup>6</sup> Tina M. Lowrey, Cele C. Otnes, and Julie A. Ruth, "Social Influences on Dyadic Giving over Time: A Taxonomy from the Giver's Perspective," *Journal of Consumer Research* 30, no. 4 (2004): 556.

<sup>7</sup> Sherry, "Gift Giving in Anthropological Perspective," 158; Shurmer, "The Gift Game."

<sup>8</sup> Lowrey, Otnes, and Ruth, "Social Influences on Dyadic Giving over Time," 547.

<sup>9</sup> Mary Finley Wolfenbarger, "Motivations and Symbolism in Gift-Giving Behavior," *NA-Advances in Consumer Research Volume 17*, 1990, 702.

messages.<sup>10</sup> The goal of giving them to another actor is, as with all signaling, to clarify uncertainties and understand the level of political support and alignment between the two.

However, there is little exploration of why some arms are more symbolic than others, or over the meaning of the political signal. For example, supersonic aircraft are seen as important because they are “expensive, visible, and get a great deal of attention in the policy-making process.”<sup>11</sup>

But if expense, visibility, and attention were the necessary criteria for weapons to become symbols, then nearly all types of weapons would be included. Other weapons thought to receive significant attention are submarines and main battle tanks.<sup>12</sup> It’s not clear, though, why submarines, supersonic aircraft, and tanks are conceptually distinct from other types of weapons. Which weapons are birthday cards, and which weapons are Bruce Springsteen tickets?

To understand which weapons are more symbolically-resonant than others, I sort conventional weapons along two dimensions: military utility and prestige. These dimensions, which are independent from one another, allow me to see which weapons will carry strong messages of political support, which ones will be weaker messages, and which weapons transfers will indicate a lack of closeness or alignment. Categorizing weapons along these dimensions also emphasizes the importance of weapons as symbolic signals. Few other items or actions, if any, have the dual combination of material power and symbolic power. I then use this categorization

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<sup>10</sup> Christian Catrina, *Arms Transfers and Dependence* (New York: UNIDIR, 1988), 12; Jennifer Erickson, *Dangerous Trade: Arms Exports, Human Rights, and International Reputation* (Columbia University Press, 2015), 6; Geoffrey Kemp and Steven Miller, “The Arms Transfer Phenomenon,” in *Arms Transfers and American Foreign Policy*, ed. Andrew J. Pierre (New York: New York University Press, 1979), 46.

<sup>11</sup> These weapons may also signal a long-term relationship because of maintenance contracts and continued need for spare parts. These “lifetime costs” are an essential, but oft-overlooked, aspect of the weapons trade. Edward J. Laurance, *The International Arms Trade* (New York: Lexington Books, 1992), 38.

<sup>12</sup> William J. Durch, *Constructing Regional Security: The Role of Arms Transfers, Arms Control, and Reassurance* (New York: Palgrave Macmillan, 2000), 14; Keren Yarhi-Milo, Alexander Lanoszka, and Zack Cooper, “To Arm or to Ally? The Patron’s Dilemma and the Strategic Logic of Arms Transfers and Alliances,” *International Security* 41, no. 2 (2016): 90–139 includes “offensive weapons” as signals, but, as the authors themselves acknowledge, and as will be shown later, there are problems in determining the offensive or defensive character of various weapons.

to explain the meaning of symbolic signals, and show how those signals affect the direction of the receiver's foreign policy behaviors.

In brief: different categories of weapons will or will not make sense given the existing political relationship between a pair of states. Transfers that make sense help maintain the status quo, and should result in minimal foreign policy changes. Transfers that signal a positive shift will send an upgrade signal, indicating a growing alignment and closeness between the sender and receiver. The receiver's foreign policy should shift to be more proactive: expansive in aims and aggressive in pursuit of those aims (whether that aggression means drawing a harder line in negotiations or threatening the use of force). Transfers that are of a lower type than expected will send a downgrade signal, indicating distance and a growing distance between the sender and receiver. The receiver's foreign policy should shift to be reactive: less expansive in aims and less aggressive in means. Finally, transfers whose meaning is unclear or unsettled will lead to both sides seeking clarification through additional weapons transfers and/or other types of signals. The receiver's foreign policy should not significantly change, though it may try to test the waters to see if its interpretation of the signal is shared by the sender.

### **Categorizing Conventional Weapons Transfers**

The category of conventional weapons is not a monolith; it contains weapons as varied as armored personnel carriers and the most advanced fighter jets. These weapons have different battlefield uses and their exchange clarifies uncertainties about the level of political alignment between the sender and receiver. Weapons transfers also allows the receiver to see how they stack up against others in the sender's network. But when and why is one type of weapon transfer understood to signal a close political alignment? I suggest that the symbolic power of conventional weapons – and thus their ability to serve as signals – lies at the junction of the

weapon's military utility and its prestige. Military utility captures the usefulness of the weapon for the state that can receive it; the potential destructive power of weapons distinguishes them from other goods and is one important piece of the weapon's symbolic power. The prestige of the weapon is the second important piece of symbolic power, and comes from the weapon's perceptual association with desirable roles or categories of actors. Categorizing conventional weapons along these two dimensions provides both a way to unpack the large category of "conventional weapons" and helps us see which weapons transfers are more symbolically resonant than others.

### **Military Utility**

Unlike other goods, weapons transfers directly affect a state's relative power. This is important for symbolic power, because transferred weapons can be independently used by the receiver. Unlike symbolic exchanges at diplomatic visits, state dinners, or even joint statements, weapons have a life and a usefulness beyond the initial moment of transfer that makes them distinct. This characteristic means that receiving the weapon represents a degree of trust between the sender and receiver and shared understanding about proper use. States will be much less likely to transfer highly useful weapons to states that they are unsure of or who they think might use the weapons in ways the sender does not desire.

There are two facets of military utility. First is the weapon able to accomplish its core duties without significant flaws or complications? This question is important because some weapons – especially those at the technological cutting edge – end up failing in their core duties. For example, targeting issues can cripple medium-range and intercontinental ballistic missiles. The Chinese-made DF-3, popular in the 1980s, are one example of this missile, where the integration

between targeting and flight mean the missile is unlikely to hit its target.<sup>13</sup> Similarly, the F-104 fighter jet was known for stalling when pilots sharply banked during flight, seriously reducing the usefulness of the plane as a fighter-interceptor. If a weapon can pass the bar of accomplishing its core duties, its military utility comes down to more contextual factors.

The second facet of military utility is affected by factors such as geography, military skill level, and strategic environment that affect how and where a state can use the weapon. As an extreme example, consider Singapore's purchase of 200 Leopard tanks from Germany. Singapore built an underground storage facility for these Cold War-era tanks, and it is unclear how or where Singapore, an island city-state, would use the tanks.<sup>14</sup> While the Leopard tanks do have kinetic striking power, Singapore's geography and strategic environment limits their military utility. In less extreme examples, weapons' military utility can be limited by geography or infrastructure. Many bridges, for example, are not equipped to handle the weight of tanks, which can restrict the range of these weapons and limit their use.

Geography can also affect military utility. The need to secure key geographies was partly behind Russia's 2014 invasion of Crimea: the Sevastopol naval base is Russia's only warm-water naval base and is a crucial link to Russia's global naval operations. Without this naval base, Russia's ability to make use of naval assets is severely limited.<sup>15</sup> In addition to the location of bases and forces, terrain that is difficult to traverse or operate in – such as jungles or mountains – can limit the military utility of weapons. Recognizing this variation is important in

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<sup>13</sup> Nuclear Threat Initiative, "Saudi Arabia: Missile," August 2015, <http://www.nti.org/learn/countries/saudi-arabia/delivery-systems>. Unless, of course, the state has a nuclear warhead to put on the missile.

<sup>14</sup> DSEI Seminar, London, UK, September 2015.

<sup>15</sup> Alan Yuhas and Raya Jalabi, "Ukraine Crisis: Why Russia Sees Crimea as Its Naval Stronghold," *The Guardian*, March 7, 2014, sec. World news, <https://www.theguardian.com/world/2014/mar/07/ukraine-russia-crimea-naval-base-tatars-explainer>; "Crimea's Strategic Value to Russia," *CSIS* (blog), March 18, 2014, <https://www.csis.org/blogs/post-soviet-post/crimeas-strategic-value-russia>.

understanding why a weapon can be highly useful for one state and much less useful for a second state.

### **Weapon Prestige**

The second dimension crucial for understanding weapons transfers is prestige. Scholars have long recognized that some weapons are more prestigious than others.<sup>16</sup> Often these weapons are the ones that are expensive, technologically advanced, and with striking power, like supersonic aircraft and submarines. While there is a baseline level of kinetic power necessary to be a candidate for prestige, not all weapons with firepower are prestigious. As a concept, prestige is relational and perceptual, and is often not linked to economic value or cost.<sup>17</sup> Additionally, because prestige is a perceptual concept, the weapons that are seen as prestigious can change over time. There are a number of pathways by which weapons can become prestigious, and it is often difficult to tell *a priori* which arms will be seen as prestigious. Conventional arms can become prestigious by association with desirable roles or categories of actors, and by scarcity and technological prowess.

Arms associated with a desirable role or characteristic are prestigious. One variation of this is arms associated with the great powers, and therefore their status and success, are seen as prestigious.<sup>18</sup> This association explains why main battle tanks, supersonic aircraft, and submarines are prestigious arms. The great powers used those weapons – though not always to great military effect – during the world wars. Even main battle tanks, which are less

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<sup>16</sup> Lilach Gilady, *The Price of Prestige* (Chicago: University of Chicago Press, 2017), 34, <https://press.uchicago.edu/ucp/books/book/chicago/P/bo25338548.html>; Alexander Wendt and Michael Barnett, “Dependent State Formation and Third World Militarization,” *Review of International Studies* 19, no. 4 (1993): 321–47; Durch, *Constructing Regional Security*.

<sup>17</sup> Rebecca Bliege Bird and Eric Alden Smith, “Signaling Theory, Strategic Interaction, and Symbolic Capital,” *Current Anthropology* 46, no. 2 (2005): 233.

<sup>18</sup> Theo Farrell, “World Culture and Military Power,” *Security Studies* 14, no. 3 (2005): 466; John W. Meyer et al., “World Society and the Nation-State,” *American Journal of Sociology* 103, no. 1 (1997): 164.

technologically advanced than supersonic aircraft or submarines, are prestigious because of their association with the great power wars of the twentieth century.<sup>19</sup> To have tanks puts a state closer, perceptually, to being a great power. Although having tanks does not make one a great power, not having tanks surely takes one out of the running.<sup>20</sup> To have tanks puts a state closer, perceptually, to being a great power. Although having tanks does not make one a great power, not having tanks surely takes one out of the running.<sup>21</sup> A similar type of associational prestige can be seen in intercontinental ballistic missiles. These weapons are seen as prestigious because of their perceptual association with nuclear weapons,<sup>22</sup> even though there are many weapons within this platform that are universally ineffective because they have poor targeting capabilities and poor construction.<sup>23</sup>

There is, however, a baseline level of kinetic power necessary to be a prestige weapon. For this reason, not all arms associated with great powers are prestigious. Refueling planes stand out as weapons that have extremely high levels of technology – from the sensors to detect how close it is to the plane taking on fuel, to the in-air delivery system, to an engine able to give lift to a

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<sup>19</sup>Dana P. Eyre, Mark C. Suchman, and Victoria D. Alexander, “Military Procurement as Rational Myth: Notes on the Social Construction of Weapons Proliferation” (American Sociological Association annual meeting, New York, NY, 1986), 10; Wendt and Barnett, “Dependent State Formation and Third World Militarization,” 336–37.

<sup>20</sup> Similarly, many states see possessing a military of a particular type and organization as a symbol of modern statehood. For example, Ireland has an air force with no combat aircraft. Farrell, “World Culture and Military Power,” 463; See also Dana P Eyre and Mark C Suchman, “Status, Norms, and the Proliferation of Conventional Weapons: An Institutional Theory Approach,” in *The Culture of National Security: Norms and Identity in World Politics*, ed. Peter J Katzenstein (New York: Columbia University Press, 1996), 79–113; Joellen Pretorius, “The Security Imaginary: Explaining Military Isomorphism,” *Security Dialogue* 39, no. 1 (March 1, 2008): 99–120, <https://doi.org/10.1177/0967010607086825>.

<sup>21</sup> Similarly, many states see possessing a military of a particular type and organization as a symbol of modern statehood. For example, Ireland has an air force with no combat aircraft. Farrell, “World Culture and Military Power,” 463; See also Eyre and Suchman, “Status, Norms, and the Proliferation of Conventional Weapons: An Institutional Theory Approach”; Pretorius, “The Security Imaginary.”

<sup>22</sup> Keith B. Payne and Robert Rudney, “The Unique Value of Ballistic Missiles for Deterrence and Coercion,” in *Report of the Commission to Assess the Ballistic Missile Threat to the United States*, 1998, [https://fas.org/irp/threat/missile/rumsfeld/pt3\\_payne.htm](https://fas.org/irp/threat/missile/rumsfeld/pt3_payne.htm).

<sup>23</sup> Sean M. Lynn-Jones and Steven E. Miller, *America’s Strategy in a Changing World: An International Security Reader* (MIT Press, 1992), 368.

massive plane, to all of the associated safety mechanisms – and that require an extraordinary level of skill to pilot. This distinction is not just about firepower or kinetic capabilities. It is a variation on the anthropological distinction between practical and prestige goods.<sup>24</sup> Practical goods solve practical problems – like a shovel that used to dig a hole – whereas prestige goods solve social problems and tend to be for display rather than for use – a gold shovel that is only for display, and communicates that its owner does not need to dig holes. In the military domain, practical goods solve practical problems like logistics and the movement of materiel. Refueling and transport planes, and armored troop carriers fit in this category, even if they are technologically sophisticated machines. Unlike the prestige goods that anthropologists study, conventional weapons are intended for use. But consider the types of weapons most commonly displayed during military parades, air shows, or military exercises: audiences rarely cheer for or take note of refueling planes, but eyes will turn and follow a fighter jet in the sky. At their core, prestige weapons have the fundamental characteristics of what defines a weapon: destructive power.

Scarcity and technological prowess are prestige pathways that determine the specific ladder of prestigious weapons. That is, associations with great powers or other desirable roles determine whether or not a category of weapons (e.g., fighter planes or tanks) are prestigious. But scarcity and technological prowess determine which specific weapons (e.g., F-104 fighter jet vs. F-5 jet or M1A1 tank vs. T-92 tank) are more prestigious than others within the same category. Scarcity is an important pathway because prestige is relational and there is a finite amount of it in any

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<sup>24</sup> Brian Hayden, “Practical and Prestige Technologies: The Evolution of Material Systems,” *Journal of Archaeological Method and Theory* 5, no. 1 (1998): 2, 11; Gilady, *The Price of Prestige*, 35; Aimée M. Plourde, “The Origins of Prestige Goods as Honest Signals of Skill and Knowledge,” *Human Nature* 19, no. 4 (2008): 374–88; Aimée M. Plourde, “Prestige Goods and the Formation of Political Hierarchy: A Costly Signaling Model,” in *Pattern and Process in Cultural Evolution*, ed. Stephen Shennan (University of California Press, 2009), 265–76; Jordi Vidal, “Prestige Weapons in an Amorite Context,” *Journal of Near Eastern Studies* 70, no. 2 (2011): 364.

given context.<sup>25</sup> Once too many states have access to a prestigious weapon, it loses its prestige and becomes more ordinary. This means that the types of weapons viewed as prestigious can change over time as weapons become more or less available to greater numbers of states. Importantly, scarcity applies to all weapons regardless of their date of creation. States often withhold certain weapons from others, even when that weapon is not the most technologically advanced. The United States, for example, will not export the F-22 Raptor fifth-generation stealth jet introduced in 2005, even as it collaborates with international partners on the F-35 Lightning II, a fifth-generation stealth jet introduced in 2019. These weapons are similar in their levels of technological sophistication, and the F-35 has some more advanced systems than the F-22. While both belong to a prestigious category, the relative scarcity of the F-22 makes it more prestigious. This is not to say that the F-35 is *not* prestigious. It is, but for reasons of both scarcity and technological prowess. The F-35 is one of only a handful of fifth-generation fighters, and is prestigious in part because of its association with the technological cutting edge.

The case of the F-35 Lightning II shows how technological prowess can mark a weapon as prestigious even when that weapon suffers from fatal operational flaws. The F-35 was designed to replace older fighter jets, including the F-16, F-15, and F-18, and has been touted by Lockheed Martin, its producer as “the most lethal, survivable, and connected fighter jet in the world.”<sup>26</sup> Lockheed has consistently emphasized that the jet is at the technological cutting edge. However, the jet has been plagued so many problems that in 2019 the U.S. Defense Secretary called it

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<sup>25</sup> Steve Wood, “Prestige in World Politics: History, Theory, Expression,” *International Politics* 50, no. 3 (2013): 390; Gilady, *The Price of Prestige*, 52; Plourde, “Prestige Goods and the Formation of Political Hierarchy: A Costly Signaling Model,” 266.

<sup>26</sup> “F-35 Lightning II,” <https://www.lockheedmartin.com/en-us/products/f-35.html>.

“fucked up.”<sup>27</sup> Among the many issues with the plane include basic functions: If the plane climbs at a steep angle, as it might to avoid an enemy attack, problems with the design mean it might “suddenly tumble out of control and crash.”<sup>28</sup> Problems with the jet mean that the U.S. Air Force is planning to rely on the F-16, not the F-35, through 2048 at least.<sup>29</sup> Despite tacit admission that the F-35 has failed, international partners are clamoring for the jet.<sup>30</sup> The UK, Australia, Norway, the Netherlands, Israel, Japan, South Korea, and Belgium placed orders for the F-35, and the plane has yet to lose out to any other fighter in a formal procurement competition.<sup>31</sup> These states are hopeful that the F-35s flaws will get worked out, but even if that process takes many years, the states benefit from the prestige of the F-35. As Caverley, Kapstein, and Vucetic wrote, “Joint Strike Fighter membership provides its own benefit in terms of prestige, access to technology and subcontracts, and close security ties with the United States.”<sup>32</sup> The technological cutting

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<sup>27</sup> David Axe, “America Is Stuck With a \$400 Billion Stealth Fighter That Can’t Fight,” *The Daily Beast*, June 13, 2019, sec. us-news, <https://www.thedailybeast.com/america-is-stuck-with-a-dollar400-billion-stealth-fighter-that-cant-fight>.

<sup>28</sup> Axe; See also Sean Gallagher, “DOD Tester’s Report: F-35 Is Still a Lemon,” *Ars Technica*, January 30, 2020, <https://arstechnica.com/information-technology/2020/01/not-a-straight-shooter-dod-review-cites-fleet-of-faults-in-f-35-program/>; Dan Grazier, “F-35 Fail: The Stealth Fighter Still Has 883 Problems And There’s No Solution in Sight,” *The National Interest*, March 14, 2020, <https://nationalinterest.org/blog/buzz/f-35-fail-stealth-fighter-still-has-883-problems-andtheres-no-solution-sight-133127>; David Axe, “If We Just Fix These 900 Flaws, America’s F-35 Stealth Fighter Will Be Unstoppable,” *The National Interest*, February 20, 2020, <https://nationalinterest.org/blog/buzz/if-we-just-fix-these-900-flaws-americas-f-35-stealth-fighter-will-be-unstoppable-124961>; Kyle Mizokami, “The F-35 Is Cheap To Buy (But Not To Fly),” *Popular Mechanics*, October 30, 2019, sec. Military Aviation, <https://www.popularmechanics.com/military/aviation/a29626363/f-35-cheap/>.

<sup>29</sup> Benjamin Brimelow, “The F-16 First Flew 47 Years Ago, and the Air Force May Keep It Flying Decades Longer Due to Problems with the F-35,” *Business Insider*, February 18, 2021, <https://www.businessinsider.com/air-force-may-keep-f16-flying-longer-over-f35-issues-2021-2>.

<sup>30</sup> David Axe, “The U.S. Air Force Just Admitted The F-35 Stealth Fighter Has Failed,” *Forbes*, February 23, 2021, sec. Aerospace & Defense, <https://www.forbes.com/sites/davidaxe/2021/02/23/the-us-air-force-just-admitted-the-f-35-stealth-fighter-has-failed/>; Brett Tingley, “Joint Chiefs Seek A New Warfighting Paradigm After Devastating Losses In Classified Wargames,” *The Drive*, July 27, 2021, <https://www.thedrive.com/the-war-zone/41712/joint-chiefs-seek-a-new-warfighting-paradigm-after-devastating-losses-in-classified-wargames>.

<sup>31</sup> Jonathan Caverley, Ethan B. Kapstein, and Srdjan Vucetic, “F-35 Sales Are America’s Belt and Road,” *Foreign Policy*, July 12, 2019, <https://foreignpolicy.com/2019/07/12/f-35-sales-are-americas-belt-and-road/>.

<sup>32</sup> Caverley, Kapstein, and Vucetic.

edge has kept the F-35 a prestigious weapon, even as it suffers from signification and sometimes fatal flaws.

While cost is often used as a heuristic for prestige, this does not hold for conventional weapons. One problem with inferring prestige from cost is that there is no standard or clear way to calculate the cost of a weapon. For example, the AGM-154 Joint Standoff Weapon, produced by Raytheon, has an acquisition cost of \$3.3 billion. But because the Navy and Air Force ordered 12,000 missiles the per-unit production cost is \$246,585.<sup>33</sup> By contrast, General Dynamic's M1A1 Abrams Tank has a per-unit cost of \$2.38 million.<sup>34</sup> The Abrams tank, though a useful main battle tank, was first produced in the 1970s, where as the JSOW is a brand-new missile. Determining prestige based on cost would be misleading in this case. Further, some transfer agreements include contracts for maintenance and/or spare parts. This would increase the *value* of the transfer, but would not indicate anything about prestige.<sup>35</sup>

Because prestige is perceptual, key actors can try to influence others' perceptions of their weapons. I saw this during fieldwork at international weapons exhibitions in two ways. One, more subtle way, of trying to influence perceptions was based on the type of display area that states and manufacturers had for their weapons. Some states had flashier, larger, and more visible display areas that included signs and mock weapons hanging from ceilings, while others had more subdued and smaller display areas. Having a bigger display area attracted more people, fueling the perception that the weapons and the state selling them were popular and worth

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<sup>33</sup> "AGM-154A Joint Standoff Weapon," *Federation of American Scientists*, 2000, <https://fas.org/man/dod-101/sys/smart/agm-154.htm>.

<sup>34</sup> "General Dynamics awarded \$358 million for 150 M1A1 SA Abrams Tanks for Morocco," 30 September 2015, <http://www.generaldynamics.com/news/press-releases/2015/09/general-dynamics-awarded-358-million-150-m1a1-sa-abrams-tanks-morocco>.

<sup>35</sup> The US GAO calculated that in 1991, the M1A1 tank had an operations and support cost of \$159.74 *per mile*. United States General Accounting Office, "Abrams Tank: Operating Costs More Than Expected," Report Number NSIAD-91-114, 1991, p. 4, <http://www.gao.gov/assets/220/213784.pdf>.

checking out. At a demonstration of weapons on a mock battlefield, fake explosions and the demo soundtrack were used to try to amp up audience members’ feelings about certain weapons. The tanker truck—certainly not a prestigious weapon—drove onto the fake battlefield accompanied by explosions, whereas the more prestigious arms like tanks did not require such fanfare. Actors have a limited amount of influence over prestige perceptions. Unless they are able to affect the weapon’s associational, scarcity, or technological prowess, any active attempts to influence perceptions will only make a difference at the margins.

**Symbolic Power Weapons Typology**

The symbolic power of conventional weapons comes from the intersection of military utility and prestige. Combining these dimensions yields four categories of conventional weapons, as shown in Table 1. Because military utility is a contextual variable, the specific content of this table will look different for different actors (though submarines may be a prestigious category, they would be of high military utility for the United States or China, and of lower military utility for a land-locked state or a state with a navy that is not trained to sail submarines).

		Military Utility	
		High	Low
Weapon Prestige	High	Boom	Bling
	Low	Backbone	Blip

*Figure 1: Conventional Weapons Typology*

Boom weapons are highly prestigious and capable, and are the most symbolically-powerful type of weapon. Categories of weapons include fighter jets, submarines, main battle tanks, and missile defense systems, though there will be some variations based on the actor acquiring the

weapon. Bling in the world of armaments are weapons that are significantly less effective than others of the same type, but still considered prestigious. These weapons will typically come from the same category of weapons as Boom weapons, but will be of a less useful type. For example, the F-104 A/B fighter jet is from a prestigious and useful category of weapons, but this specific plane was ineffective as a defensive interceptor or mid-air fighter. Similarly, the DF-3 missile is a medium-range intercontinental ballistic missile that has significant targeting issues that reduce its ability to be militarily effective.

Bling weapons can also be prestigious weapons that are useful in many situations, but *not* for the state at hand. For example, main battle tanks are prestigious, but not very useful in mountainous regions or in places where they would have to cross bridges or roads that would not support their weight. Bling weapons still pack a symbolic punch, but are not quite as powerful as Boom weapons.

Backbone weapons are low in prestige but high in relative military utility, and have a lower symbolic power than either Boom or Blip weapons. For example, the KC-46 Pegasus tanker plane is technologically advanced, but is not part of prestigious category of weapons. Backbone weapons are often ignored in typical analyses of military power or in the offense-defense balance, but they are the unsung heroes of the military. Backbone weapons are essential for enabling most operations, but never get any of the credit.<sup>36</sup>

Finally, Blip weapons are low in prestige and relative military utility, and have very little, if any, symbolic power. This category includes ammunition, firearms, small bombs. Though all of these weapons *do* have military use, they need to be used in large quantities, and usually in conjunction with other weapons, in order to be as useful as the other categories, particularly for

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<sup>36</sup> For work on the importance of logistics, see Ryan T. Baker, "Logistics and Military Power: Tooth, Tail, and Territory in Conventional Military Conflict," Ph.D. Dissertation, George Washington University, 2021.

state-state transfers. However, contexts of civil war or rebel armed groups can change the resonance of blip weapons, and they can become important intra-war signaling devices. For example, in some contexts having new M-4 rounds signals support from one individual/group to another, but AK-47 rounds do not.

### **Sending Symbolic Signals**

As symbolic goods, conventional weapons are a field-relevant capital. Their symbolic power comes from the intersection of military utility and prestige, and their exchange creates a system of shared meaning that states use to understand the political relationship between the sender and receiver.<sup>37</sup> Weapons transfers create, maintain, and sever political relationships, and in turn create social and political hierarchies. Weapons transfers can send symbolic signals with three meanings: expected weapons transfer send maintenance signals that uphold the status quo, unexpectedly positive transfers send upgrade signals and indicate a growing closeness and alignment, and unexpectedly negative transfers send a downgrade signal and indicate a break or convergence in alignment. The expectedness of a weapons transfer is determined by the existing political relationship between the sender and receiver.

The history of relations and beliefs about future relations set a baseline of expectations that will or will not be met by a weapons transfer, or non-transfer.<sup>38</sup> These expectations are also determined by where states see themselves in the social and political hierarchy, and where they

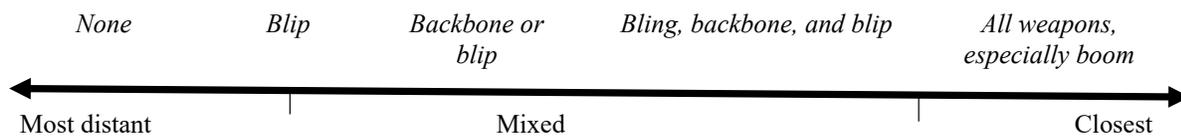
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<sup>37</sup> John F. Sherry Jr, "Gift Giving in Anthropological Perspective," *Journal of Consumer Research*, 1983, 158; Paul Musgrave and Daniel H. Nexon, "Defending Hierarchy from the Moon to the Indian Ocean: Symbolic Capital and Political Dominance in Early Modern China and the Cold War," *International Organization* 72, no. 3 (2018): 598, <https://doi.org/10.1017/S0020818318000139>; Rebecca Adler-Nissen, "The Diplomacy of Opting out: A Bourdieudian Approach to National Integration Strategies," *JCMS: Journal of Common Market Studies* 46, no. 3 (2008): 668; Van Baal, *Reciprocity and the Position of Women*.

<sup>38</sup> Janice Bially Mattern and Ayşe Zarakol, "Hierarchies in World Politics," *International Organization* 70, no. 3 (2016): 637; Danielle L. Lupton, *Reputation for Resolve: How Leaders Signal Determination in International Politics* (Cornell University Press, 2020), 33.

want to go.<sup>39</sup> Political relationships are obviously complex and multi-faceted; this section presents a necessarily simplified and static model that explains how weapons transfers send signals and the meaning and effects of those signals in order to unpack the logic and effects of different types of weapons transfers. Later sections of this chapter will add in complications and nuances, but it is first necessary to explain symbolic signaling in a more simplified manner.

The simplified model of political relationships and transfer expectations is outlined in Figure 2, below. As explained in detail in this section, close allies expect to receive all types of weapons, especially boom weapons. Allies with a mix of congruent and conflicting relations don't expect to receive boom weapons, but, at the closer end, will expect bling, backbone and blip. As the states grow more distant, they expect only blip, or no transfers at all.



*Figure 2: Transfer expectations based on political relationship*

Understanding whether a transfer is expected or unexpected matters for knowing the meaning of the signal it sends. Transfers that meet these expectations will send maintenance signals.

Transfers that deviate from these expectations will signal change – either in a positive direction (upgrade signal) or in a negative or disappointing direction (downgrade signal), as summarized in Table

<sup>39</sup> Mattern and Zarakol, “Hierarchies in World Politics.”

<b>Transfer's fit with existing relations</b>	<b>Signal Meaning</b>
Accords	Maintenance
Negatively surprising	Downgrade
Positively surprising	Upgrade
Unclear	Unsettled meaning

*Table 1: Transfer expectations and signal meaning*

### **Close Friends and Allies**

The closest friends and allies expect all types of weapons transfers, especially boom weapons. States tend to reserve Boom weapons for their friends because these weapons are the most symbolically powerful, and can make a significant impact on the battlefield. The symbolic power of Boom weapons reflects the weight of the relationship between the sender and receiver, which means that only the closest friends and allies expect boom weapons.<sup>40</sup> Political relationships among the closest allies also lead to interoperability and joint mission concerns, which helps explain expectations for all other weapons types.<sup>41</sup> The need to work together and have weapons systems that can communicate with one another – a concern shared by the closest allies – drives transfer expectations. As these expectations are realized and become common occurrences, they become part of the standard operating procedure for these close allies.<sup>42</sup> For example, it is not surprising that the NATO allies have similar arsenals, nor that they engage in

<sup>40</sup> Sherry, "Gift Giving in Anthropological Perspective," 158; Shurmer, "The Gift Game."

<sup>41</sup> Andrew G. Long and Brett Ashley Leeds, "Trading for Security: Military Alliances and Economic Agreements," *Journal of Peace Research* 43 (2006): 433–51; Ethan B. Kapstein, "Allies and Armaments," *Survival* 44 (2002): 141–55; Keith Krause, "Constructing Regional Security Régimes and the Control of Arms Transfers," *International Journal* 45, no. 2 (April 1, 1990): 386–423, <https://doi.org/10.2307/40202676>; James D. Morrow, "Arms Versus Allies: Trade-Offs in the Search for Security," *International Organization* 47, no. 2 (April 1, 1993): 207–33.

<sup>42</sup> Lowrey, Otnes, and Ruth, "Social Influences on Dyadic Giving over Time," 556.

cooperate development of advanced Boom weapons.<sup>43</sup> These expected transfers send a maintenance signal, and signal that nothing has changed from the status quo. The transfer of Boom weapons transfers from Russia to Syria since 2015, including T-90S tanks and MiG-29S fighter aircraft, signal the continuation of close ties between Russia and Syrian leader Bashar al-Assad.<sup>44</sup>

Among close friends and allies, transfer denials are unexpected, especially of the highly symbolic Boom and Bling weapons. As Freedman observed “*refusing to sell arms is a major political act. It appears as a calculated insult, reflecting on the stability, trust, and credit-worthiness, or technical competence of the would-be recipient.*”<sup>45</sup> When this happens among close friends and allies, the non-transfer sends a downgrade signal, indicating a disagreements and rifts in the relationship. For example, the US removed Turkey from the F-35 program in July 2019, after Turkey purchased S-400 air defense systems from Russia. Stopping the sale of F-35s, and removing Turkey as a partner-producer, was a strong signal that reflected the growing rift between Turkey and the NATO allies. At the same time, Turkey’s S-400 purchase was a signal of growing closeness between it and Russia.<sup>46</sup>

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<sup>43</sup> Mark Lorell and Julia Lowell, “Pros and Cons of International Weapons Procurement Collaboration.” (National Defense Research Institute, 1995); Richard Charles Fast, “The Politics of Weapons Standardization in NATO.” (University of California Santa Barbara, 1981).

<sup>44</sup> Data obtained from SPIRI trade register database. See also Shannon Dick, “The Arms Trade and Syria,” *Georgetown Journal of International Affairs*, September 2, 2019, <https://www.georgetownjournalofinternationalaffairs.org/online-edition/2019/9/2/the-arms-trade-and-syria>.

<sup>45</sup> Lawrence Freedman, “Britain and the Arms Trade,” *International Affairs*, 1978, 389–90.

<sup>46</sup> Selim Sazak, “Why Did Turkey Buy Russian — Not Western — Missile Defense Systems?,” *The Washington Post Monkey Cage*, July 17, 2019, <https://www.washingtonpost.com/politics/2019/07/17/why-did-turkey-buy-russian-s-s/>; Jennifer Spindel, “What Turkey’s Purchase of a Russian Air Defense System Means for the U.S. And Nato,” *The Washington Post Monkey Cage*, July 23, 2019, <https://www.washingtonpost.com/politics/2019/07/23/what-turkeys-s-purchase-means-us-nato/>; Kareem Fahim, Karen DeYoung, and Amie Ferris-Rotman, “Turkey Takes First Shipment of Russian S-400 Air-Defense System in Defiance of U.S. and NATO Warnings,” *The Washington Post*, July 12, 2019, [https://www.washingtonpost.com/world/middle\\_east/turkey-takes-first-shipment-of-russian-s-400-air-defense-system-in-defiance-of-us-and-nato-warnings/2019/07/12/d9f446c2-a00b-11e9-83e3-45fded8e8d2e\\_story.html?noredirect=on&utm\\_term=.784228aa50e5](https://www.washingtonpost.com/world/middle_east/turkey-takes-first-shipment-of-russian-s-400-air-defense-system-in-defiance-of-us-and-nato-warnings/2019/07/12/d9f446c2-a00b-11e9-83e3-45fded8e8d2e_story.html?noredirect=on&utm_term=.784228aa50e5).

Upgrade signals, indicating a growing closeness and deeper relationship, are much more difficult to send among close friends and allies. Already at the top of the hierarchy, there is much less room for maneuvering. Therefore, when upgrade signals are sent they are used for within-group differentiation, such as withholding a certain type of Boom weapon from all but a few. While the category of close friends and allies expects to receive Boom weapons, there can be differentiation through specific types of weapons, as when the US and UK announced the deal to share nuclear submarine technology with Australia in September 2021. Australia had previously agreed to purchase diesel-powered submarines from France, but jumped at the opportunity to receive the nuclear-powered submarine technology, which also indicated an acceptance into the US's inner circle. The AUKUS deal marks only the second time the US has agreed to share its nuclear submarine technology.<sup>47</sup>

### **Mixed Relationships**

There are a range of state political relationships that are of mixed character. States in this category are at times close and cooperate on issues, and other times disagree and work at odds. In general, Bling, Backbone, and Blip weapons are expected transfers for this type of relationship.

The most expected type of transfers for this category of relationship are Backbone and Blip weapons. The lower symbolic power of Backbone and Blip weapons do not signal a deep connection or very robust relationship. Their transfer sends a maintenance signal and indicates that the sender and receiver remain in a mixed relationship.

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<sup>47</sup> The White House, "Joint Leaders Statement on AUKUS," The White House, September 15, 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/15/joint-leaders-statement-on-aucus/>; Patrick Wintour, "What Is the Aucus Alliance and What Are Its Implications?," *The Guardian*, September 16, 2021, sec. Politics, <https://www.theguardian.com/politics/2021/sep/16/what-is-the-aucus-alliance-and-what-are-its-implications>.

Most political relationship can be categorized as mixed, which means that signals will be very useful for within-category differentiation. Bling weapons are particularly useful for this, since their level of symbolic power sends a signal not only to the receiver, but to observing states, marking the receiver as on a higher rung of the sender's relationship hierarchy.<sup>48</sup> Bling weapons will frequently send an upgrade signal, and indicate that within the mixed relationship, the sender and receiver are more in alignment than they were before. This does not mean that the sender and receiver are close friends, but it does represent a growing alignment and opens the door for a stronger political relationship in the future. Within the mixed category, states that receive Bling weapons will perceive themselves as higher on political and social hierarchies than states that do not. Jordan, for example, expected to receive the F-104 Starfighter jet, a Bling weapon, from the United States in 1967. The US and Jordan were not close friends, as they often disagreed about Israel. But they did collaborate to try to keep the Soviet Union out of Jordan and to limit Soviet influence in the region. Instead of receiving the requested F-104 Starfighter, Jordan was sent a small number of backbone and blip weapons, including rifles and utility trucks, indicating that Jordan was *not* as high on the political hierarchy as it would have liked to believe.

In this relationship category, Boom weapons transfers are unexpected. The high symbolic power of these weapons would signal a change in the future relationship between sender and receiver, including likely upgrade in the social and political hierarchy for the receiver. Receiving Boom weapons would send a strong upgrade signal, above and beyond the signal sent by a Bling weapons transfer. For states that had previously received Bling weapons, a subsequent non-

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<sup>48</sup> Lowrey, Otnes, and Ruth, "Social Influences on Dyadic Giving over Time," 547; Plourde, "Prestige Goods and the Formation of Political Hierarchy: A Costly Signaling Model," 272; Gilady, *The Price of Prestige*, 37.

transfer of these weapons would send a downgrade signal. The absence of these transfers at a later date would indicate a change, and that the receiver was being bumped down a hierarchy.

### **Distant or Adversarial Relationships**

States that have relationships that are distant or adversarial or are frequently at odds with one another should not transfer any weapons. While Blip weapons might be transferred if these states happen to find themselves in agreement about a relatively small issue, in general the transfer of any type of weapon is unexpected and would signal a change in relations. This is doubly the case for states that have had adversarial relations. Blip transfers would be an interesting change for states that were distant, but would be a bigger shock when transferred between adversaries. Any positive overture would be notable, but especially when that overture includes the symbolic power of a weapons transfer.

U.S. arms sales to Vietnam in 2016, the first after the lifting of an arms embargo, are one example of an unexpected transfer and thus upgrade signal among distant states. As suggested by the arms embargo, Vietnam and the US were often at odds, and the U.S. often criticized Vietnam's human rights record.<sup>49</sup> The lifting of the arms embargo, and the subsequent transfer of offshore patrol vessels and trainer aircraft (backbone weapons) sent an upgrade signal about the future relationship between the U.S. and Vietnam.

### **The Foreign Policy Effects of Symbolic Signals**

Symbolic signals have two key foreign policy effects. First, the different levels of prestige in transferred weapons produces and communicates status hierarchies within groups. Fighter jet

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<sup>49</sup> Phillip Orchard, "The US Opens Its Arms to Vietnam," *Stratfor*, May 26, 2016, <https://worldview.stratfor.com/article/us-opens-its-arms-vietnam>.

transfers are a common way of producing and reproducing these status hierarchies.<sup>50</sup> Receiving one type of fighter jet instead of another type is one way that senders can draw boundaries around groups of states, marking some as members of the in-group. Refusing to transfer (or to accept the transfer of) a particular weapon can be a powerful exclusionary method. One example of status hierarchies can be seen in fighter jets. The F-15 Eagle and F-16 Fighting Falcon are both highly capable and prestigious supersonic fighter jets in the US arsenal. The planes have similar capabilities, though US transfers of the planes help differentiate between significant non-NATO allies from other US allies. The F-16 Fighting Falcon is much more widely available than the F-15, and is flown by twenty six states, including Chile, Indonesia, Iraq, Jordan, and Turkey. The plane is freely transferred to such an extent that India was negotiating to produce the F-16 in India.<sup>51</sup> A handful of European countries also fly the F-16. By contrast, the F-15 Eagle is given only to the closest non-NATO allies: Japan, Saudi Arabia, and Israel all fly the plane. Having the F-15 marks a state as part of the closer inner circle.

Establishing or clarifying status hierarchies is often an explicit motivation for sending or denying certain transfers. From the sender's perspective, it is useful to be able to sort receivers and have that sorting visible to others. From the receiver's perspective, it is useful to know where one stands in relation to others. Once communicated, a status hierarchy affects the type of weapons a state thinks it should receive, and can be a source of mismatch. A US NATO ally would expect to receive the same weapons as other NATO allies, and would be surprised if it were excluded from receiving high-status weapons. Similarly, when non-NATO allies are included in the transfer of key weapons, they perceive their status to have increased. For this

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<sup>50</sup> Srdjan Vucetic and Atsushi Tago, "Why Buy American? The International Politics of Fighter Jet Transfers," *Canadian Journal of Political Science/Revue Canadienne de Science Politique* 48, no. 1 (2015): 101–24.

<sup>51</sup> Franz-Stefan Gady, "Will India and the United States Coproduce Fighter Aircraft?," *The Diplomat*, April 11, 2016, <http://thediplomat.com/2016/04/will-india-and-the-united-states-coproduce-fighter-aircraft/>.

reason, South Korea linked its inclusion in the production and transfer of F-35 jets to its status as a major non-NATO ally.<sup>52</sup>

The second effect of symbolic signals is on the receiver's foreign policy positions. Effects on foreign policy are best thought of as changes from a baseline. A state is very unlikely to radically change its strategic goals or its primary methods of pursuing those goals based on signals of any type.<sup>53</sup> However, a state may proactively expand and pursue greater aims, or it may reactively shrink its foreign policy ambitions and focus only on those most essential goals. States also have a choice in how aggressively they pursue their foreign policy goals, and aggression need not imply the use of military force. States may draw harder lines in negotiations, they may use more belligerent rhetoric, or they may display greater tolerance for escalation or risk-taking.<sup>54</sup> The symbolic signals sent by weapons transfers communicate information about political alignment and closeness; armed with better knowledge about what type of support to expect, states make decisions about what to pursue and how to pursue it.

The table below summarizes the transfers, signals, and direction of foreign policy change.

<b>Transfer's fit with existing relations</b>	<b>Signal Meaning</b>	<b>Direction of foreign policy changes</b>
Accords	Maintenance	No/marginal change
Negatively surprising	Downgrade	Reactive, pursue shrinking aims less aggressively Prevention in rare cases
Positively surprising	Upgrade	Proactive, pursue expanded aims more aggressively
Unclear	Unsettled meaning	Minimal change while seeking clarification

<sup>52</sup> See "Global Participation: The centerpiece of 21st century global security," Lockheed Martin, <https://www.f35.com/global>.

<sup>53</sup> Charles L Glaser, "The Security Dilemma Revisited," *World Politics* 50, no. 1 (1997): 171–201.

<sup>54</sup> Mark S. Bell, "Beyond Emboldenment: How Acquiring Nuclear Weapons Can Change Foreign Policy," *International Security* 40, no. 1 (July 1, 2015): 94, [https://doi.org/10.1162/ISEC\\_a\\_00204](https://doi.org/10.1162/ISEC_a_00204).

**Maintenance Signals: Minimal Change**

Maintenance signals are those signals that accord with existing expectations. They reinforce the status quo, and should produce very little change in foreign policy behaviors. Note that the type of weapon necessary to send a maintenance signal will change over time, both within a particular dyad and within a system. As new weapons are produced, what counts as a boom weapon versus a bling weapon can shift, so states need to be sensitive to what is available and the ways that relationship expectations change over time.

**Upgrade Signals: Proactive Foreign Policy**

Bringing with them a message of closer political alignment and support, upgrade signals can enable the receiver to pursue a more proactive foreign policy. Empirically, this should allow the state to pursue expanded aims more aggressively, since it brings with it the confidence of a growing closeness with the sender. Actions that might previously have seemed risk no longer seem so out of reach because of the signaled political support of the sender. States should also take actions to cement their relationship with the sender, which could include formalizing defense relationships, coordinating foreign or defense policies, or providing additional resources to the sender.<sup>55</sup>

Upgrade signals put the receiver in the driver's seat; it feels confident to lead and be proactive in pursuit of its foreign policy goals. This could mean baiting an adversary into attacking, so that the receiver can invoke a mutual defense agreement, being more tolerant of escalation and/or belligerent rhetoric, and drawing a harder line in negotiations. The receiver should be less likely to compromise with adversaries because the weapons transfer signaled it has the political support of the sender.<sup>56</sup>

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<sup>55</sup> Bell, 97.

<sup>56</sup> Receivers do have to be careful, however, that their more aggressive policies do not go so far as to squander the support of the sender. States will be unlikely to jump out of the gate aggressively after the first upgrade signal –

Because upgrade signals enable proactive foreign policies, states are cautious about sending them. The sender might now know just how aggressive the receiver will become, or how this aggression will manifest. Upgrade signals should be the least common type of signal because suppliers rarely want to endorse aggression or risk being dragged into conflict.

### **Downgrade Signals: Reactive Foreign Policy**

By contrast, downgrade signals worry the receiver about the future health of its relationship with the supplier, and will lead it to focus in on its core foreign policy issues. Downgrade signals lead to a reactive foreign policy, where the receiver is acting to secure its current position before it is too late. Fear for the future leads the receiver to take steps to protect itself. Rather than feeling in control and in the driver's seat, the receiver is reacting to the changes in its alignment with the sender, and the consequences this will hold for its future.

The first reactive action a state should take is to take measures to show the sender that it is in fact a good partner. This could mean foregoing actions the receiver wanted or taking actions that it didn't if such actions would demonstrate alignment with the sender on core policy issues. Because losing the support of a sender can be so costly – both in terms of the loss of political support and the cost of finding an alternate source of weapons – states' first responses should be to get back into the good graces of the sender.

If repairing relations with the sender is improbable or going poorly, one of the steps states can take after receiving a downgrade signal is to search for an alternate partner. The downgrade signal means that change is on the horizon, and the receiver should not count on alignment and as much support from the sender. The ideal alternate partner is one that can provide both political support and take over as the receiver's primary source of arms. However, not all states are able

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they'll want more evidence of political support before standing strong, or else the risk imperiling future transfers and the political relationship.

to find an alternate partner. States that are loosely incorporated into a group of states should find it easier to seek an alternate partner than states that are more tightly tied. For example, during the Cold War, Pakistan was loosely incorporated to the West – all of its ties ran through the United States. This made China a feasible partner, especially because of previous conflict between China and India (Pakistan's rival). The shared rival and flexibility in Pakistan's relations presented China as a feasible alternate. Israel, on the other hand, was, by the 1960s, squarely incorporated into the Western bloc. It repeatedly stated its interest in joining the NATO alliance, had received political and military support from the US, France, and the UK, and all of its major conventional weapons came from the West.<sup>57</sup> These strong ties made pursuing alignment with China and Russia a non-starter, unless Israel was willing to effectively start over from zero.

When realignment is less feasible, the reactive foreign policy will seek to preserve as much of the status quo as possible before the changes indicated by the downgrade signal are cemented. This can manifest in one of two ways, depending on the receiver's analysis of its adversaries. One form of a reactive foreign policy is to search for compromises with their adversaries.<sup>58</sup> Compromise is most likely in cases where the receiver feels at a relative power disadvantage, and believes that disadvantage will persist. For example, US downgrade signals in the form of denied weapons transfers and the removal of US troops caused West Germany to pursue *Ostpolitik* as a form of compromise in the late 1960s. Though West Germany wanted to pursue reunification with East Germany, the downgrade in its relationship with the US led West

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<sup>57</sup> W. M. Dobell, "Ramifications of the China-Pakistan Border Treaty," *Pacific Affairs* 37, no. 3 (1964): 293; Wolfinbarger, "Motivations and Symbolism in Gift-Giving Behavior"; David Rodman, *Arms Transfers to Israel: The Strategic Logic behind American Military Assistance* (ISBS, 2007); Yair Evron, "French Arms Policy in the Middle East," *The World Today* 26, no. 2 (1970): 83.

<sup>58</sup> Bell, "Beyond Emboldenment," 99.

Germany to normalize relations with the Eastern bloc to ensure it did not become the target of Soviet or East German aggression.<sup>59</sup>

A final form of a reactive foreign policy is preventive action. This is most likely in cases where the receiver feels it currently has a relative power advantage but that this advantage will decrease over time. Preventive action is also more likely when the receiver feels it has no feasible options for compromise. The downgrade signal is disappointing in the present, and while preventive action is risky, it is one way to avoid an even more disappointing future. Preventive action should be relatively rare, however, because of the risks of blowback and the difficulties of ensuring success.

### **The Complexities of Symbolic Signaling**

The preceding section is the ideal-type explanation of symbolic signaling. There are, however, additional complications and complexities that play out in practice. While these complexities do not affect the underlying logic of symbolic signaling and its effects, they do add nuance to the meaning of signals.

### **The Knock-On Effects of Multiple Audiences**

An important nuance to the symbolic signaling project concerns multiple audiences. So far, this chapter has discussed symbolic signaling as a communication mechanism between a sender and receiver. That certainly happens, but there are third party states watching and drawing

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<sup>59</sup> Ronald J. Granieri, "Odd Man Out? The CDU-CSU, Ostpolitik, and the Atlantic Alliance," in *The Strained Alliance: US-European Relations from Nixon to Carter*, ed. Matthias Schulz and Thomas Alan Schwartz (Cambridge: Cambridge University Press, 2009), 95; William E. Griffith, *The Ostpolitik of the Federal Republic of Germany*, Studies in Communism, Revisionism, and Revolution ; 24 (Cambridge, Mass: MIT Press, 1978).

their own inferences from each weapons transfer. It is extremely difficult to keep conventional weapons transfers secret, so the complication of third-party perceptions is ever present.<sup>60</sup>

The issue of multiple audiences has significant knock-on effects. First, states need to be aware of the inferences adversaries will make about their arms transfers. Anticipated adversary reactions can constrain what both senders and receivers are willing to do. Jordan, for example, asked the US for weapons as a way to forestall offers of political support from the Soviet Union. While Jordan was moderately interested in a political relationship with the US, it was more interested in using the signals from US arms transfers to create more distance between itself and the Soviet Union. Similarly, China has, since normalization, been very sensitive to arms transfer signals from the US to Taiwan. Anticipated Chinese reaction has been both a motivation for Taiwan asking for weapons (to demonstrate its independence from China) and has constrained US arms sales (for fear of angering China). This sort of meta-signaling still follows the logic of symbolic signaling, but introduces third parties as actors whose expected reactions and inferences matter.

Third parties also mean that receiving states have a reference group they look toward. The NATO allies gauge which weapons transfers are appropriate and which weapons transfers (or lack thereof) are downgrade signals based on what the other allies receive from one another. Being excluded from transfer that most other allies have is a significant downgrade signal; being included is an important maintenance signal. This is why Turkey's purchase of the S-400 Russian air defense system in 2019 was such a notable political statement: it went outside of the NATO alliance for this weapon, and over the objections of the NATO allies. In response, the US

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<sup>60</sup> On secrecy and conventional arms transfers, see Diana Wueger, "Strategic Secrecy and the International Politics of Arms Transfers," paper presented at the American Political Science Association Annual Meeting, Montreal, Canada, September 2022.

removed Turkey from the F-35 fighter jet program, signaling a significant rift between Turkey and the US.

Complications over the meaning of a signal can happen when states differ over the relevant reference group. Israel, for example, wanted to create an environment where it was comparable to the NATO allies. The US saw Israel as a more distant partner. These disagreements over standing and position, especially as it relates to reference group, can mean that states disagree over the meaning of the transfer. In this scenario, *not* receiving the same arms as the NATO allies was a downgrade signal to Israel, but was perfectly in line with US expectations of its relationship with Israel.

The social and symbolic nature of this type of signaling means that there can be differences and disagreements about (a) what types of transfers are expected or unexpected, and (b) attempts to use rhetoric or other types of signals to shape how the arms transfer signal is understood. On the former, the receiver might consider itself a close friend of the sender, whereas the sender views the receiver as an acquaintance. This can occur because divining one's place in hierarchies is rarely done explicitly and overtly; as a result, states can misperceive how others view them.<sup>61</sup> Disagreements about where a state stands can complicate the expectedness of a transfer. Sender-receiver pairs do not have to agree on their relationship, either, and a mismatch in perceptions can lead to disagreements about what types of arms are expected and what types of arms transfers are off the table. Crucially, states might not even know they disagree until a transfer has been initiated. A sender could think it is sending a maintenance signal, and would be baffled when the receiver says the transfer was a downgrade signal. States

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<sup>61</sup> See Robert Jervis, *Perception and Misperception in International Politics* (Princeton, NJ: Princeton University Press, 1976).

that become aware of a mismatch will take steps to correct this mismatch – often by using arms transfers alongside other types of signals.

Disagreements about the meaning of the signal can also happen when states have differing perceptions on what category a weapon fits in. A state might think it is sending a boom weapon, but the receiver might perceive it is backbone. There is no inherent or objective meaning to arms transfers, and a weapon that is viewed as Boom at one point in time can be viewed as Bling at a later point.

States will sometime seek to shape how their transfers are understood, by making public or private statements about their relationship (this can be done by the sender or the receiver). Using statements to try to clarify or shape expectations and signals makes sense, but often fails. States care more about facts on the ground (weapons transfers) than they do about grand pronouncements or even private reassurances. However, this does not stop states from trying to use rhetoric to affect others' understanding of the signal. They can, for example, try to downplay an upgrade signal by saying it is a one-time transfer and will not happen again (or will not happen again for a certain number of years). Or they can try to inflate a maintenance or even a downgrade signal by stating that it is just the first of many planned or in-process weapons transfers. States can even try to manipulate perceptions about the type of weapon, by saying that a Boom weapon really has limited uses, or is a widely-available (and thus less prestigious) weapon.

Another nuance in sending symbolic signals comes from the number of weapons involved in a transfer. Stealth fighter jets are a prestigious, Boom weapon. But is there a difference between receiving a squadron of jets versus just a handful? From a military perspective there absolutely is: a squadron can be used for war fighting, whereas a handful of jets

is best used at a military parade. From a signaling perspective, increasing or decreasing the number of weapons in a transfer can add additional layers to status hierarchies. In general, the more weapons included, the stronger and more positive the signal. Including a smaller number of weapons than is standard or than the receiver expected is one way to signal dissatisfaction, especially for close allies who expect to receive Boom weapons. States are unlikely to shift from close ally to distant friend in a short period of time; decreasing the number of weapons included in a transfer can be one way of indicating dissatisfaction with a close friend.

### **Comparisons to Other Signals**

Other signals are, at best, the equivalent of bling weapons transfers. Conventional weapons transfers are different because they give the receiver military power. But other types of signals, even if they involve weaponry, are temporary.

Diplomacy is a domain filled with symbolic signals. From the specific language used – whether in treaties, statements, or private conversations – to the ritual of interactions, diplomacy is largely based on symbolic communication.<sup>62</sup> Though diplomacy and diplomatic actions occur frequently, it is a less effective form of symbolic signaling. While being snubbed at a state dinner, or harsh language in a statement can signal dissatisfaction and a rift between states, it is harder to use diplomacy to send a full range of messages because many diplomatic statements and actions have taken on a ritualistic role.<sup>63</sup> Therefore the absence of diplomatic protocol can send a message, but it is harder for diplomatic actions to send more nuanced messages because of the ritualist expectations of significant diplomatic interactions. Diplomatic signals can also be

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<sup>62</sup> Anne E. Sartori, *Deterrence by Diplomacy* (Princeton, NJ: Princeton University Press, 2005), 3; Keren Yarhi-Milo, “Tying Hands Behind Closed Doors: The Logic and Practice of Secret Reassurance,” *Security Studies* 22, no. 3 (July 1, 2013): 415, <https://doi.org/10.1080/09636412.2013.816126>.

<sup>63</sup> David I. Kertzer, *Ritual, Politics, and Power* (New Haven: Yale University Press, 1988), 104; Thomas C Schelling, *Arms and Influence* (Westport, Conn.: Greenwood Press, 1976), 50.

swiftly overridden: statements can be revoked or new statements can be issued, diplomatic staff can be recalled, and joint press conferences or other meetings can be canceled (or initiated). By contrast, weapons transfers give the receiving state something concrete that it can point to, and that has symbolic meaning for other actors in the system. The weapon persists long after state dinners have ended.

Other military-related issues can also have a symbolic signaling function. For example, Cohen suggested that demonstrations of naval power can have a repertoire of meanings and can send multiple messages.<sup>64</sup> However it's not clear which message is sent when, and if there is agreement about the different potential meanings of naval demonstrations. Even when military demonstrations are meant to more generally influence perceptions of an actor's resolve, conventional military power is often ambiguous to observers, making it difficult to understand what message is intended to be sent and what message(s) are received.<sup>65</sup> Like diplomatic statements and actions, military demonstrations are also temporary, and usually do not involve the transfer of power from one actor to another.

Overall, then, actors may try to use diplomatic actions or military moves as additional forms of symbolic signaling. However, the lack of permanency and concreteness, the often ritualistic nature of diplomacy, and the ambiguity about meanings weakens these actions as symbolic signals. When used, they should have a weaker and more temporally focused effect when compared to weapons transfers.

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<sup>64</sup> Raymond Cohen, "'Where Are the Aircraft Carriers?'—Nonverbal Communication in International Politics," *Review of International Studies* 7, no. 02 (1981): 80–81.

<sup>65</sup> Montgomery discusses the different ways states can use their military to demonstrate power and effectiveness. While this work gets closer to delineating different types of signals, it is still largely based on costs and communicating resolve. Evan Braden Montgomery, "Signals of Strength: Capability Demonstrations and Perceptions of Military Power," *Journal of Strategic Studies* 43, no. 2 (2020): 315.