Conceptual Metaphor and US Missile Defense

Preliminary Theorizing and Analysis*

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WORDCOUNT: 7,983, including notes and figures.

NOTE: This is a *very* preliminary 'ideas paper;' comments are most welcome, but please do not cite or quote without permission from the author.

ABSTRACT

US discourse around national missile defense (NMD) is structured metaphorically. Two metaphors in particular pervade NMD rhetoric. One likens missile defense to a 'shield,' while the other equates Iran, North Korea, and (until recently) Iraq with 'rogues' against whom a defensive 'shield' is meant to protect. The 'shield' and 'rogue state' metaphors have almost become literalized, 'common-sense' understandings. But there is no literal truth behind these tropes. This raises three questions. First, if the 'shield' and 'rogue state' metaphors do not map onto objective reality, then what *are* they? Second, assuming the metaphors *construct* rather than reflect reality, how exactly does this process work—at the levels of language, the mind, and the political world? And finally, what are the implications of this reality construction for NMD politics? To explore these questions, the paper first discusses a cognitive linguistics approach called conceptual metaphor theory (CMT). After using CMT to 'unpack' the 'rogue state' and 'shield' metaphors, the paper develops a more generalizable theory of metaphorical framing to show how metaphor shapes *social cognition.* It then theorizes metaphor's *political* effects by sketching two ideal-typical causal pathways between metaphor and policy decisionmaking. The paper concludes with some preliminary ideas about how the 'shield' and 'rogue state' metaphors might have shaped NMD policy.

Prepared for delivery at the Annual Conference of the Canadian Political Science Association, June 2008, in Vancouver, BC.

* I thank Steven Bernstein, Matthew Hoffmann, Thomas Homer-Dixon, David Kim, and David Welch for comments on earlier versions of this paper. Any errors or omissions are my own.

Introduction

Scholars have long noted that US discourse around national missile defense (NMD), like the discourse around strategic policy as a whole, is structured metaphorically.[1] Two metaphors in particular pervade NMD rhetoric. One likens missile defense to a 'shield,'[2] while the other equates Iran, North Korea, and (until recently) Iraq with 'rogues' against whom a defensive 'shield' is meant to protect.[3] The 'shield' and 'rogue state' metaphors have now become almost literalized, 'common-sense' understandings. But there is no stable, necessary, "big-T truth"[4] behind these tropes. The ground-based missile defense system now under construction is not a 'shield,' but a complex assemblage of radars, satellite-based sensors, computer programs, interceptors, etc.—all of which have to work together seamlessly to destroy incoming warheads. Nor is the purpose of this system inherently defensive: the Pentagon considers NMD vital to its mission of "dominance across the full spectrum of conflict."[5] It is also clear that the 'rogue state' metaphor does not refer to an independently-existing reality. Three criteria are often mentioned for membership in the 'rogue' category: 1) having an autocratic regime; 2) sponsoring terrorism, and 3) pursuing weapons of mass destruction (WMD). If the 'rogue' concept denoted reality, we would expect these attributes to be necessary and sufficient for inclusion in the 'rogue' category,[6] but analyses of US policymakers' rhetoric show that these criteria are not applied consistently.[7] However, even if 'rogue state' *had* a stable denotation, its connotative meaning would remain problematic. For example, 'rogue states' are thought aggressive,[8] but they are no more likely than 'non-rogue' states to initiate conventional militarized interstate disputes.[9] It is also unclear whether 'rogues'' WMD programs are intended for offense, as Washington argues, or for defense (i.e., to deter a US invasion). Finally, 'rogue' regimes' decisionmaking is supposedly too 'irrational' to deter them from striking the US with WMD, but descriptions of rogue states as "mad"[10] clash with Iran's sophisticated gambit at regional hegemony,[11] and even North Korea's brinkmanship in ongoing disarmament negotiations.[12]

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[1] On the role of metaphor in strategic policy generally, see Chilton 1996b; Cohn 1987; Hirschbein 2005; and Mutimer 2000. On metaphor and NMD in particular, see Bjork 1992; Bormann 2004; Chilton 1996a, 235 and 1996b, 202-6; and Masters 2005.

[2] On the 'shield' metaphor, see Bjork 1992; Bormann 2004; Chilton 1996a, 235 and 1996b, 202-6; and Masters 2005. My ongoing research also suggests that the shield metaphor is ubiquitous in US NMD discourse. Moreover, it seems to be used unconsciously and uncritically by *both* opponents and proponents of NMD.

[3] On the rogue state metaphor generally, see Caprioli and Trumbore 2005 and 2006; Heradstveit and Bonham 2005; Hoyt 2000a and 2000b; Klare 1995; Litwak 2000 and 2001; and O'Reilly 2007. The rogue state metaphor, of course, has implications far beyond missile defense. It is a conceptual lynchpin of US foreign policy after the Cold War, including the Pentagon's "two-war doctrine" (Caprioli and Trumbore 2005, 771) and the Bush doctrine of preventative war (NSS 2002, 15-6). The metaphor has also been described as a pre-text for the US military to retain its Cold War-era budget and force levels (see Klare 1995; and Litwak 2000).

[4] See Price and Reus-Smit 1998, 14.

[5] JCS 2000.

[6] See Gardner 1985, ch. 12.

[7] See Hoyt 2000a; and Litwak 2000 and 2001.

[8] See, for example, NSS 2002, 14.

[9] Caprioli and Trumbore 2005.

[10] US Defense Secretary William Cohen, quoted in O'Reilly 2007, 308.

[11] Thomas Friedman, "The New Cold War," *New York Times,* 14 May 2008. Online ed. Available at <http://www.nytimes.com/2008/05/14/opinion/14friedman.html?hp=&pagewanted=print>. Accessed 15 May 2008.

[12] See Cohen 2004.

Three questions arise from all of this. First, if the 'shield' and 'rogue state' metaphors do not map onto objective reality, then what *are* they? Second, assuming that they *construct* rather than reflect reality, how exactly does this process work—at the levels of language, the mind, and the political world? And finally, what are the implications of this reality construction for NMD politics?

For nearly a generation, cognitive linguists have argued that language—and, more controversially, human cognition itself—is deeply and inescapably metaphorical. It is unsurprising, then, that metaphor should anchor understandings of NMD. Moreover, cognitive linguists working in international relations have offered insights into the core human preoccupations that motivate metaphors like 'shield,' and how those metaphors might shape cognition.

With this in mind, the paper is structured as follows. Following a brief background section on NMD, section two discusses a cognitive linguistics approach called conceptual metaphor theory (CMT). After using CMT to 'unpack' the 'rogue state' and 'shield' metaphors, this section develops a generalizable theory of metaphorical framing to show how metaphor might shape *social cognition.* Section three then theorizes metaphors' *political* effects by sketching two ideal-typical pathways between metaphor and policy decisionmaking. The paper concludes with a fourth section containing some preliminary ideas about how the 'shield' and 'rogue state' metaphors might have shaped NMD policy.

1. Background

Why examine missile defense in the first place? Washington's decision to deploy NMD in December 2002 is a fascinating puzzle. To begin with, missile defense is expensive, in terms of money and opportunity costs. Adjusting for inflation, the Department of Defense (DOD) has spent over $140 billion on missile defense since World War II,[13] and it plans to spend $58 billion more over the next six years.[14] (By contrast, the Manhattan Project cost about $30 billion in today's dollars.[15]) Arms control and diplomatic tradeoffs add to the overall cost of NMD.[16] Interestingly, Washington accepts these costs even though the Pentagon doubts that the system now being built would actually work.[17] Most intriguing of all, perhaps, it is doubtful that missile defense is needed in the first place: for several reasons, 'rogue' regimes and non-state actors—the entities NMD is allegedly designed to

[13] This figure is from Graham 2003, xxvi, supplemented with data from Missile Defense Agency 2007.
[14] See GAO 2006, 1; and Kurlandtzick 2005, 45.
[15] Brookings Institution 1998.
[16] For instance, the recent row with Russia over US plans to station interceptors in two former Soviet satellites suggests that even an inchoate defense can seriously complicate relations with key rivals like Russia. Frosty relations with Russia and China could easily yield a net *loss* in US security. See also Glaser and Feter 2001.
[17] There are at least three reasons to doubt that the existing missile defense system can reliably intercept incoming warheads: 1) the system has not been tested in realistic conditions; 2) it is inherently easier to attack with missiles than it is to defend against them (Sessler et al. 2000, 31-3), and 3) any power capable of striking the US with intercontinental-range ballistic missiles (ICBMs) would be able to deploy relatively simple countermeasures to overwhelm the defense (ibid.). In fact, the DOD Director of Operational Tests and Evaluations has guessed that the NMD system being built has a twenty percent chance of destroying an incoming warhead (Kurlantzick 2005, 45); the head of DOD's Missile Defense Agency only acknowledges a "better-than-zero chance" (Peoples 2006, 427). Most NMD proponents are confident that DOD will *eventually* field an effective system, and such an outcome is possible. But it remains an interesting question how and why NMD has consistently bypassed the Pentagon's own criteria for weapons deployment, such as operational effectiveness and reliability.

protect against[18]—are unlikely to choose ballistic missiles to attack the US.[19] Finally, a generation ago, concerns about the cost and effectiveness of NMD, as well as its strategic rationale, led to the political internment of NMD: the 1972 Anti-Ballistic Missile Treaty (ABMT). How, then, was it possible for NMD to have been revived in the early 1980s and approved for deployment in 2002, despite the ABMT, despite the dissolution of the Soviet Union in the early 1990s, and despite continued concerns about the cost, feasibility, and necessity of missile defense?

Rather than addressing this question definitively or systematically, the paper shows how conceptual metaphor theory can be used to formulate a 'first-cut' analysis. The final section lays out the argument, but I will preview it here: NMD's revival, survival, and eventual triumph was enabled by two things: 1) missile defense advocates' ability to use the 'shield' metaphor to frame NMD as a *defensive* system, despite its profound offensive implications, and 2) advocates' use of the 'rogue state' metaphor to justify NMD after the Cold War. Advocates' success hinged on their ability to metaphorically link missile defense to core 'embodied' experiences like vulnerability to penetration, interaction with deranged and hostile individuals, and enclosure in secure containers. Advocates' rhetorical success combined with vested interests, and opportune events to yield powerful intellectual and political rationales for NMD, rationales that made it very difficult to oppose missile defense, despite its high cost, low feasibility, and questionable necessity.

2. A Theory of Metaphorical Framing

Conceptual metaphor theory informs the metaphorical framing approach developed here. This section first introduces CMT. In sub-section two, the discussion turns to the notion of 'framing' as it is used in cognitive linguistics. The final sub-section is the heart of the theory; it shows how *metaphorical* framing helps to shape actors' policy preferences. Although this theory could apply to all foreign policy decisionmaking, I discuss the approach in the context of NMD, using the 'shield' and 'rogue state' metaphors to illustrate key concepts. These examples set the stage for the substantive analysis in section four.

2.1. Conceptual Metaphor Theory

Metaphor is usually viewed as a linguistic convention likening one thing to a different thing. However, according cognitive scientists George Lakoff and Mark Johnson, "[t]he essence of metaphor" is not language but rather "*understanding* and *experiencing* one thing in terms of

[18] 'Rogue state' and terrorist threats could well be pretexts for a system aimed at China. Privately, several analysts and politicians argue that NMD is and/or should be targeted against Beijing; moreover, China is the only power that actually possesses the "tens of warheads with countermeasures" that today's NMD system is designed to defeat (Nathan and Tien 2003, 35, 39).

[19] Intelligence analysts doubt that these actors would (or even could) use ballistic missiles to strike the US, as non-missile means are cheaper, easier to execute, less identifiable, and more likely to succeed. See Hartung et al. 2005, 2, 7. See also Falkenrath, Newman, and Thayer 1998. Compared with other means of dispersal, ballistic missiles are a particularly poor delivery vehicle for chemical and biological agents (Thielmann 2003, 6-7).

another."[20] The upshot is that the study of metaphor is part of a broader theory of cognitive semantics;[21] metaphor cannot be understood apart from cognition, and *vice versa*.[22] Metaphor is not *merely* cognitive, however; it is also a, linguistic, social-cultural, neural, and bodily phenomenon.[23]

To ground the following discussion of metaphor, I will briefly discuss concepts and conceptual structure. In CMT—and cognitive semantics more broadly—concepts are *embodied*. This means concepts are cognitive structures that arise, directly or indirectly, from experiences of entities and relationships in our physical and social worlds. Concepts and their interrelationships reside in long-term memory, and much conceptual reasoning occurs subconsciously. Metaphor occurs when we project features of one 'conceptual domain,' known as the '*source* domain,' onto a second, different conceptual domain, called the '*target* domain.' Humans make these projections for one of two reasons: either the two domains are tightly correlated in our embodied experience, or we perceive (oftentimes based on bodily experience) abstract structural similarities between them.[24] In either case, the correspondences are between *entities* in the domains—i.e., 'ontological' correspondences—and/or between *knowledge* about the two domains—i.e., 'epistemic' correspondences, more commonly called 'entailments.' Both ontological correspondences and entailments are often referred to as 'mappings,' because aspects of the source domain are 'mapped' onto the target. Usually, metaphors map structure from relatively concrete, well-understood domains (like CONTAINER, BALANCE, and INTERPERSONAL RELATIONS)[25] onto more abstract, less well-understood targets (like STATE, SECURITY, and INTERSTATE SYSTEM). The point of projecting well-understood concepts onto abstract ones is to structure the latter at "human scale," that is, to re-cast intangible constructs as "situations [that] have direct perception and action in familiar frames that are easily understood by human beings."[26] It is important to note that metaphorical mappings are always incomplete—not *all* source domain structure is projected onto the target. (If it were, then the source-target relationship would be one of synonymy and not metaphor.)

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[20] Lakoff and Johnson 2003, 5. Emphasis added. Kövecses 2002 and 2005 are especially good introductions to CMT.

[21] Cognitive semantics is part of the broader field of cognitive linguistics (the latter in turn is often considered part of cognitive science). Useful introductions to both are Croft and Cruse (2004) and Lee (2001).

[22] Taverniers 2002, 107. Contra syntax-based approaches to language, cognitive semantics assumes that language use draws on the same mental faculties used in information processing and perception. It also rejects the objectivist notion that meaning derives from correspondence between a word and its referent in the world. Instead, meaning is conceptual; that is, meaning inheres in the relationship between words and the mental representations associated with them.

[23] Kövecses 2005, 26.

[24] Grady 1999. An example of the first case is the metaphor MORE IS UP (e.g., 'Inflation *rose* last year;' 'The President's popularity went *down*.'). Lakoff and Johnson (2003, 16, see also 254-5) think this metaphor stems from embodied experience with quantities of things: "If you add more or a substance or of physical objects to a container or pile, the level goes up." The rest of this sub-section gives examples of metaphors motivated by perceived structural similarities between concepts (e.g., STATES ARE ROGUES, STATES ARE CONTAINERS, etc.). For this class of metaphors, theorists do not agree on whether metaphorical mappings *create* perceived similarities or *reflect* already-perceived similarities. Rudzka-Ostyn (1996, 240) casts the issue as a chicken-and-egg problem (cited in Taverniers 2002, 120, fn. 69).

[25] CMT uses small capital letters to denote mental representations (e.g., metaphorical concepts, schemata) so as to distinguish them from their referents in the natural and social worlds. So, for instance, 'STATE' refers to an idealized concept, whereas 'state' refers to a 'real world' entity with territory, a government, etc. Of course, the degree of correspondence between idealized mental representations and their real-world referents is an open question, so it is critical to distinguish between them.

[26] Fauconnier and Turner 2002, 312.

Before moving to examples of metaphor, four additional points should be made. First, according to CMT, metaphor is pervasive, and cognition as we know it would be impossible without it. (That said, some concepts are *not* structured metaphorically, and not all reasoning is metaphorical.[27]) A second key claim is that metaphor is neurally instantiated.[28] Source and target domains correspond to distinct neuronal groups in the brain, and mappings correspond to the neural 'circuitry' between them. When we understand two domains via metaphor, the neuronal groups associated with each domain fire together. When, as is often the case, we recruit kinesthetic image schemata to flesh out abstract concepts, the source domain is found in the brain's sensorimotor system, while the target concept is in the higher cortical regions. The third point I want to stress is that members of cultural-language groups often use the *same* source domain to configure multiple target concepts. For instance, in Anglophone communities, the image schema CONTAINER[29] structures concepts as different as NATION-STATE (e.g., 'Refugees *spilled over* the border *into* Chad.') and VISUAL FIELD (e.g., 'The mountain came *into* view.'). Finally, just as one source domain can structure multiple targets, the same target can be structured by *different* source domains.[30] To illustrate, I will now show how a central International Relations (IR) concept, STATE, is constituted differently by different source domains.

The metaphorical expression 'rogue state' suggests one conceptual metaphor in foreign policy. As noted above, this metaphor has played a key role in justifying missile defense (among much else) in the US. CMT uses linguistic evidence (i.e., implicit and explicit metaphorical language) to make inferences about the conceptual projection underlying discourse. In this case, the source domain is assumed to be the concept ROGUE, or TREACHEROUS PERSON, and the target is STATE. Certain features of TREACHEROUS PERSONS, such as evil natures, malign intentions, and sudden, destructive behaviors, are mapped onto STATES, yielding the conceptual metaphor STATES ARE TREACHEROUS PERSONS. The main ontological correspondences and entailments of this metaphor are as follows:

Source: TREACHEROUS PERSON		*Target*: STATE
nefarious individual	=>	regime
actions of individual	=>	actions of regime
evil nature of individual	=>	evil nature of regime
malign intentions of individual	=>	malign intentions of regime
secretiveness of individual	=>	secretiveness of regime
instability of individual	=>	instability of regime
dangerousness of individual	=>	dangerousness of regime

Fig. 1: *Ontological Mappings of* STATES ARE TREACHEROUS PERSONS

[27] Lakoff and Johnson 1999, 61. This claim presupposes a boundary between literal and metaphorical concepts, as well as some way of identifying that boundary. The latter task is difficult for two reasons. First, the category 'metaphor' is what Lakoff (1987, 12-3, 45) would call "graded"— some metaphors are more clearly 'metaphorical' than others (see Alston 1964, 101-2; and Cameron 1999, 107). Furthermore, the 'metaphoricity' of a given phrase is relative to a discourse community. Thus, Cameron (1999) rejects the notion that analysts can list objective, necessary and sufficient criteria for metaphor; instead, her heuristic involves a graded category structure derived from abduction between criteria and data.

[28] See Lakoff and Johnson 1999, ch. 4, 569-84, 2003, 245-9; and Seitz 2005.

[29] I will discuss image schemas, including CONTAINER, shortly.

[30] This can happen because projections from source to target are always incomplete.

Source: TREACHEROUS PERSON		*Target*: STATE
rogues cannot be trusted	=>	regime cannot be trusted
rogues may harm one if given the chance	=>	regime may harm one
rogues act irrationally	=>	regime acts irrationally
rogues behave unpredictably	=>	regime behaves unpredictably
rogues collude with other rogues	=>	regime colludes with similar states

Fig. 2: *Entailments of* STATES ARE TREACHEROUS PERSONS

According to CMT, "our knowledge of the world comes … in two forms: propositional and image-schematic."[31] Therefore, metaphorical concepts can be classified as either propositional or image-schematic, depending on the type of source domain they draw on.

The metaphor above projects features from the source domain ROGUE onto the target concept STATE. This metaphor makes use of a source domain that is structured *propositionally.* Propositional domains "specify elements, their properties, and the relations holding among them."[32] ROGUE is propositional because it posits a category of entities (rogues), attributes of category members (e.g., bad intentions and unpredictable behavior), and linkages between attributes (if rogues have malign intentions and act unpredictably, they cannot be trusted).

In many cases, source domains are structured by *kinesthetic image schemata* instead of propositional knowledge. I will refer to the former as simply 'image schemata.' Image schemata arise from repeated embodied experiences in our physical environment; they are "recurring, dynamic pattern[s] of our perceptual interactions and motor programs that [give] coherence and structure to our experience."[33] These schemata, moreover, have a non-propositional, analog structure that the mind's sensorimotor system can elaborate in many different ways.[34] Three "fundamental" image schemata are BALANCE, FORCE, and CONTAINER.[35] Figure 3 below is a visual representation of the CONTAINER schema, the main elements of which include an interior, an exterior, and a bounding surface.[36] In this particular representation, the schema also features an entity that is contained.

[31] Kövecses 2005, 31; see also Lakoff 1987, ch. 4. Schemata are "the mental "theories" by whose light we perceive, construe, and remember the kaleidoscopic flow of experience" (Kuklinski et al. 1991, 1342).
[32] Lakoff 1987, 113.
[33] Johnson 1987, xiv.
[34] Johnson 1987.
[35] Taverniers 2002, 111.
[36] This schema is discussed throughout Chilton 1996a and 1996b; Lakoff 1987; Lakoff and Johnson 1999; and Johnson 1987.

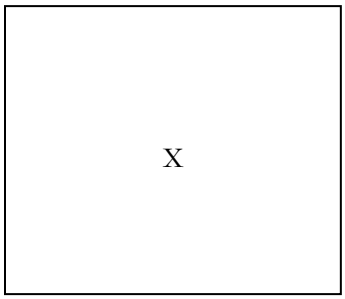

Fig. 3: CONTAINER *Schema*[37]

The examples so far suggest that STATE is constituted partly by metaphors drawing on propositional source domains. Other metaphors, including metaphors for STATE, map features of *image schemata* onto target concepts. In the case of STATE, this process yields interesting metaphors like STATES ARE ENTITIES MOVING ALONG A PATH,[38] STATES ARE OBJECTS IN A FORCE FIELD,[39] and, of special interest to me, STATES ARE CONTAINERS.[40] Figure 4 below lists some mappings of the STATES ARE CONTAINERS metaphor.

Source: CONTAINER		*Target*: STATE
interior of container	=>	territory of state
bounding surface of container	=>	borders of state
exterior of container	=>	area 'outside' state
containers protect contents	=>	states protect entities 'inside' them
open/imperfect containers may not protect contents	=>	'open'/imperfect bounding surfaces leave entities 'within' state vulnerable
containers must be secure/closed to protect contents	=>	bounding surfaces must be secured to protect entities 'within' state

Fig. 4: STATES ARE CONTAINERS *Metaphor*

Notice how this metaphor structures the abstract concept STATE using an image schema arising directly from sensorimotor experience. Notice too how the metaphor allows one to perform "construal operations"[41] on STATE that could not be performed otherwise. In particular, STATE can now be manipulated in *mental* space in ways "analogous to spatial manipulation, orientation, and

[37] I have adapted Figure 3 from Johnson 1987, 23.
[38] Beer and Boyd 2004.
[39] For examples, see the discussion of realism and the 'balance of power' in Chilton 1996a, 91-114. IR metaphors subject states to hydraulic, mechanical, and—in the security communities literature—"magnetic" forces. (Magnetic attraction metaphors are found in Adler and Barnett 1998.)
[40] Chilton 1996a and 1996b.
[41] "Construal operations" is the cognitive linguistics term for the conceptualization processes postulated by psychologists more generally (Croft and Cruse 2004, 35). Croft and Wood (2000) and Croft and Cruse (2004, ch. 3) identify four types of construal operations: attention, judgment/comparison, perspective, and gestalt structuring.

movement" in our physical environment.[42] From a CMT perspective, the STATES ARE CONTAINERS metaphor is one of many examples of the bodily basis of thought and meaning.

In this sub-section, I have shown how the cognitive semantics account of meaning and cognition centers on metaphor. Metaphor structures concepts and conceptualization by mapping propositional and image schematic structure across conceptual domains. That is what Lakoff and Johnson mean when they define metaphor as "understanding and experiencing one thing in terms of another."

2.2. Metaphorical Framing

Lakoff and Johnson's emphasis on "understanding" and "experience" suggests a concern with active reasoning, but CMT mostly ignores it, preferring to focus on the conceptual structure underlying discourse.[43] Since reasoning processes *themselves* shape policy choice, I am interested in *how* people think when they contemplate policy as well as what they think about. Therefore, it is worth venturing beyond the CMT canon to explore how metaphor may affect reasoning, and, by extension, policy selection. In this sub-section and the next, I argue that *metaphorical framing* shapes three ideal-typical aspects of decisionmaking: problem-setting, option formulation, and option evaluation.

The first step is to elucidate the concepts 'frame' and 'framing.' A *frame* is a pattern of organized knowledge, more or less shared within a social-cultural group, which is *presupposed* by word meanings and their associated concepts. (The construct 'frame' is identical to 'source domain' in CMT, and it works in the exact same way. I will therefore use the two terms interchangeably from this point on.) In discourse, "words and constructions evoke an understanding, or more specifically a frame; a hearer invokes a frame upon hearing an utterance in order to understand it."[44] Meaning, then, inheres not simply in the concept evoked by a word, but is constituted in part by the concept *and* the frame that concept presupposes.

Importantly, the same expression can mean different things to different people, depending on how the underlying concept is 'framed.' For example, for defense intellectuals, the expression 'national ballistic missile defense' evokes the concept MISSILE DEFENSE. The meaning of this expression differs dramatically, however, depending on whether the underlying concept is framed in terms of OFFENSIVE WEAPON or PROTECTION. The meaning is different in this case because each frame *foregrounds* some elements of MISSILE DEFENSE and *hides* others. The OFFENSIVE WEAPON frame conceals defensive aspects of NMD and highlights its potential to deny an adversary 'assured second strike capability.' Contrariwise, the PROTECTION frame pushes the offensive potential of NMD to the background and foregrounds the possibility of protecting populations from WMD. As one would expect from this example, if two interlocutors discussing missile defense each had these different frames, the meaning they would ascribe to MISSILE DEFENSE would be partially incommensurable.

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[42] Johnson 1987, 25. For instance, STATE can be conceptualized in a three-dimensional mental space, and within that space, STATES can be rotated, scanned to determine their features, scaled at larger or smaller sizes, and one can envision trajectories of entities 'flowing' 'into' and 'out of' them.

[43] See Chilton 1996a, 65; Croft and Cruse 2004, 95-6; Fauconnier and Turner 1998, 152; and Grady, Oakley, and Coulson 1999.

[44] Croft and Cruse 2004, 8.

2.3. Metaphorical Framing and Decisionmaking

What does framing have to do with metaphor? Oftentimes, the source domains of metaphor *constitute* the frames actors employ—consciously and unconsciously, strategically as well as haphazardly—to shape the meaning of concepts.[45] I will call this *metaphorical framing.*[46] To continue the example, the PROTECTION frame is structured by many metaphorical source domains, including ROOF, SHIELD, and SHELL.[47] The metaphors MISSILE DEFENSE IS A ROOF, MISSILE DEFENSE IS A SHIELD, and MISSILE DEFENSE IS A SHELL all entail *protecting* something. Interestingly, they all seem to entail protecting the contents of a container; thus, the concept PROTECTION is *itself* framed by the experientially basic domain CONTAINER. Since NMD is meant to protect the US *state*, this suggests that the PROTECTION frame, as used in NMD discourse, is undergirded by the metaphor STATES ARE CONTAINERS.

Assumptions about Actors

1. Bounded rationality
2. Affective bias

Assumptions about Metaphor

1. Metaphorical frames function as schemata
2. Metaphorical frames shape cognitive and affective salience of decision inputs
3. Actors draw inferences via metaphorical entailment

Aspects of Decisionmaking	**Possible Metaphorical Effects**	
	Cognitive	*Affective*
Problem-setting	Metaphor constitutes mental representations of policy problems	Metaphor influences affective salience of policy problem
Option formulation	Options cohere with metaphor	Somatic markers exclude some options from conscious consideration
Option evaluation	*Ceteris paribus,* favored options cohere with metaphor	Somatic markers draw actors toward some choices and away from others

Fig. 5: *A Theory of Metaphorical Framing*

Now that I have explained the concept of metaphorical framing, the next step is to show how and why metaphorical frames can shape foreign policy choice. To do this, it is helpful to make some simplifying assumptions about decisionmakers and the decisionmaking process [*see Figure 5*]. I begin by assuming that decisionmakers are prone to cognitive and affective biases. In other words,

[45] See Lakoff 2001; and Schön and Rein 1994.
[46] Frames are not constituted *only* by metaphor, but metaphor is an important *type* of frame.
[47] See Chilton 1996a; Bormann 2004; and Masters 2005.

the mental tasks actors perform while making decisions are constrained by "bounded rationality"[48] and influenced by emotion.[49] Next, I divide decisionmaking into three ideal-typical stages: (1) *problem-setting*, that is, forming a representation of a situation thought to be blocking the attainment of individual, group, and/or organizational goals;[50] (2) *option formulation*, or identifying ways to overcome the problem, and (3) *option evaluation,* which refers to judging the desirability of potential courses of action.

Before discussing how metaphor functions at each stage, I need to make three generic assumptions about metaphorical reasoning. The first assumption is that metaphorical frames function similar to schemata: they bias perception, information storage, and retrieval; they are relatively enduring, and they serve as 'cognitive shortcuts' actors can use to simplify decisionmaking in complex environments.[51] Second, and more specifically, metaphor influences the cognitive and affective *salience* of decision inputs. Cognitive salience is a function of metaphor highlighting parts of target domains that cohere with source domains and concealing those that do not. For example, in the PROTECTION frame, the defensive applications of NMD are foregrounded (i.e., cognitively salient) while the offensive applications are not. On the other hand, affective salience depends on decisionmakers' feelings towards the source domains that structure decision inputs. Importantly, these feelings stem from embodied experience. According to neuroscientist Antonio Damasio,[52] recurring embodied experiences induce affective states that the brain stores as "somatic markers" of those experiences. Affectively salient (or 'hot') frames evoke strong somatic images and their corresponding markers, while affectively non-salient (or 'cold') frames do not.[53] A few 'hot' frames are DISEASE, PROTECTION, and CONTAINER. When metaphors map these domains onto target concepts like STATE, they elicit "fundamental motives and feelings [linked to] survival, control, and comfort."[54] The third and final assumption about metaphorical reasoning is that when making decisions, actors draw inferences according to metaphoric entailments. The logic is aprioristic: 'If [target domain] is [source domain], then [metaphorical entailment].'[55] For instance, if MISSILE DEFENSE is a SHIELD, then 'holes' in the shield are bad (as opposed to, say, reassuring to adversaries keen on maintaining mutual deterrence).

Having made these assumptions, I can now describe how metaphor might function at each decisionmaking stage. Problem-setting is the most fundamental stage of the three. It is also the stage to which metaphor theorists have devoted the most attention, and it may be the point where

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[48] This term denotes an actor who "is limited in computational capacity, and who searches very selectively through large realms of possibilities in order to discover what alternatives of action are available, and what the consequences of each of these alternatives are. The search is incomplete, often inadequate, and based on uncertain information and partial ignorance, and [is] usually terminated with the discovery of satisfactory, not optimal, courses of action." Simon 1985, 295.

[49] There are many ways that emotion shapes cognition, including: "information gathering; information processing; calculation of cost, risk, and benefit; use of analogy; and receptivity to argument" (Crawford 2000, 137, see also 137-45; and Damasio 1994).

[50] Voss 1998, 9.

[51] Shimko 1994, 660-1.

[52] Damasio 1994.

[53] The idea of blending somatic marker theory and CMT is Slingerland's (see Slingerland 2005; and Slingerland, Blanchard, and Boyd-Johnson 2007).

[54] Gregg 2004, 62. See also Beer and De Landtsheer 2004, 27-8; Crawford 2000, 144-5; Edelman 1971, ch. 5; Slingerland 2005; Slingerland, Blanchard, and Boyd-Johnson 2007; Schlesinger and Lau 2000, 612; and Shimko 2004, 209.

[55] See Schlesinger and Lau 2000, 613; and Shimko 2004, 207.

metaphorical effects are most pronounced. At the problem-setting stage, metaphorical frames constitute decisionmakers' mental representations of policy problems. (For deeply rooted metaphors like STATES ARE CONTAINERS, actors are seldom aware that their thought is metaphorical). By highlighting and hiding potential decision inputs, frames selectively pick out certain things as 'problems.' Let us continue with the example, and assume the frame for STATE is CONTAINER (as in the metaphor STATES ARE CONTAINERS). In light of this frame, the VULNERABILITY of the CONTAINER-STATE to 'penetration' is a problem: secure containers, after all, are 'closed tightly' and do not 'expose' their 'contents' to 'penetration.' The CONTAINER frame obscures how VULNERABILITY might be beneficial (or 'stabilizing,' in the context of a BALANCE frame).[56]

Of course, frames themselves do not establish core policy problems. Instead, by making inferences from the source domain or frame, *actors* set problems. They do this by 'filling in' missing information about a policy issue.[57] Such information might include not only the basic nature of the problem (as in the last example), but perhaps also specific information about its causes, as well as who is responsible for solving it.[58] In addition to these cognitive functions, actors may also use frames to increase or decrease the affective salience of a policy issue. I would guess, in this regard, that the CONTAINER frame evokes powerful somatic markers relating to security, warmth, and comfort, and that these in turn heighten concerns about US 'vulnerability' to ballistic missiles.

Metaphorical inference may also be important at the option formulation and evaluation stages. At this point, there is a cognitive and perhaps an affective dimension at work. In the cognitive sense, metaphor is important insofar as perceived policy options *cohere* with—that is, mesh with the entailments of—the central metaphor from the previous stage. If actors reason via metaphorical entailment, they are more likely to formulate policy options that cohere with their metaphors; they are also more likely, all else being equal, to *favor* those options at the evaluation phase. So, to continue the example, if the problem is a VULNERABLE CONTAINER, then one expects both proposed and favored solutions to cohere with that frame. In this case, solutions should center on reducing VULNERABILITY through constructing a ROOF, SHIELD, or SHELL for the CONTAINER.

When frames are affectively 'hot,' emotion may also bias reasoning at the option formulation/evaluation stages. When faced with multiple options with uncertain outcomes, actors do not perform the exhaustive calculations stipulated by expected-utility maximization models. Instead, even *before* options are considered consciously, the brain biases the decision-making landscape by activating somatic markers associated with the options under consideration.[59] This eases actors' cognitive burden immensely, because instead of facing a 'flat' menu of options, their decision-making terrain is now 'lumpy,' with powerfully positive and negative somatic markers making certain choices more 'obvious' than others. The option menu may be so lumpy that some choices are not consciously entertained at all.

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[56] See Chilton 1996a, 235-7.
[57] See Schlesinger and Lau 2000, 612; and Shimko 1994, 662. Again, much of this 'filling in' may occur unconsciously.
[58] Schlesinger and Lau 2000, 612-4.
[59] Damasio 1994.

3. Political Effects of Metaphorical Framing: Two Pathways

So far, discussion has been largely limited to the socio-cognitive micro-foundations of metaphorical framing. The purpose of this section is to move to the macro level to bring the *political* effects of metaphorical framing into sharper relief. It is helpful to begin by noting four characteristics of successful metaphorical frames. 'Good' metaphors: (1) promote *understanding* by simplifying complex policy ideas into easily grasped language; (2) make policy ideas *salient* by prompting emotional responses to them; (3) promote *persuasion* by highlighting positive aspects of policy ideas while hiding unpleasant ones, and (4) by connoting shared beliefs, symbols, narratives, and experiences, make policy ideas *resonate* with audiences' existing causal and normative beliefs.

With these characteristics in mind, we can posit two pathways by which successful frames causally shape policy processes and outcomes. First, in public battles for policy legitimation, successful frames might tip the 'rhetorical balance of power' toward certain arguments, raising the costs of opposition and increasing the likelihood that policymakers will endorse positions they might otherwise oppose. Second, successful frames might directly shape (i.e., constitute) policymakers' concepts and decisionmaking processes, making it more likely that decisionmakers will support the policies that entrepreneurs favor.

The first pathway is called the 'instrumental' route. Here, boundedly rational policymakers interested chiefly in (re)election, prestige, and organizational growth, weigh the pros and cons of supporting a position. When making their decision, policymakers assess whether an issue has been or can be framed to attract political support (or at least acquiescence). If *not*, then policymakers will adopt a position based on their pre-existing perceptions of their interests. If *so*, then policymakers adopt positions *not* because of their own beliefs, but because an issue has been—or can be—publicly framed such that opposition becomes costlier than support. In this pathway, metaphor shifts the rhetorical balance of power toward successful frames; opponents are disadvantaged and put on the defensive.

The second pathway is called the 'socio-cognitive' route. In the socio-cognitive pathway, boundedly rational decisionmakers support a policy because certain powerful metaphors *constitute* the concepts they use when thinking about policy issues like NMD. Metaphor also biases policymakers' decisionmaking processes, making it more likely that they will support policies consistent with underlying metaphors. This process unfolds exactly as described in Figure 5 in the last section.

Though it is useful to distinguish between them, the instrumental and socio-cognitive pathways are not mutually exclusive—they are deeply connected. In the instrumental route, interests are ontologically primitive, and metaphor is important as a means to policymakers' ends. By contrast, in the socio-cognitive pathway, metaphor is ontologically primitive; it partly constitutes decisionmakers' policy preferences. The socio-cognitive role of metaphor, however, is crucial even when policymakers are acting instrumentally. In the instrumental route, 'metaphorical uptake' by policymakers' audiences (interest groups, other decisionmakers, and the public) is critical, and it works via the same mechanisms specified in the socio-cognitive pathway. The socio-cognitive power of metaphor is still important, in other words, but in the instrumental route, it is policymakers' *perception* of metaphor's power that actually drives policy choice. The two pathways are connected in other ways. From a CMT perspective, metaphor is ubiquitous, and it is unlikely that policymakers

would support a policy without subscribing to the underlying metaphors that justify it—even if they are acting instrumentally. Moreover, it is unlikely that policymakers who subscribe to these metaphors would not *also* make decisions based on interests that have nothing to do with metaphor.[60]

4. Metaphor and US Missile Defense: Preliminary Analysis

This final section uses a brief narrative of NMD policymaking to suggest how the metaphorical framing approach could be used to explain the success of missile defense advocates since the early 1980s. As a 'first cut,' the analysis is not conclusive, but rather a point of departure for further research.

I begin by revisiting the question asked in section one: How was it possible for NMD to have been revived in the early 1980s and approved for deployment in 2002, despite the Anti-Ballistic Missile Treaty, despite the dissolution of the Soviet Union in the early 1990s, and despite continued concerns about the cost, feasibility, and necessity of missile defense?

The quick answer is as follows: NMD's revival, survival, and eventual triumph was enabled by two things: 1) missile defense advocates' ability to use the 'shield' metaphor to frame NMD as a *defensive* system, despite its profound offensive implications, and 2) advocates' use of the 'rogue state' metaphor to justify NMD after the Cold War. Advocates' success hinged on their ability to link missile defense to core embodied experiences like vulnerability to penetration, interaction with deranged and hostile individuals, and enclosure in secure containers. Advocates' rhetorical success combined with vested interests and opportune events to yield powerful intellectual and political rationales for NMD, rationales that made it difficult to oppose missile defense, regardless of its high cost, low feasibility, and questionable necessity.

There is, of course, a longer story. It begins with supporters of missile defense. From the mid-1970s onward, NMD proponents have fallen into two camps; Bill Keller calls them "dreamers" and "schemers."[61] Dreamers believe that NMD can work and emphasize its ability to protect Americans from nuclear strikes. Dreamers, in other words, frame missile defense as a 'just-plain-defense' program, and they accept the entailments of the SHIELD metaphor. This is an instance of the *socio-cognitive* function of metaphor, in which metaphors constitute policymakers' concepts and shape their decisionmaking processes. Schemers are a more cynical group; they *talk* like dreamers—publicly stressing the defense frame—but they want NMD for reasons that do *not* directly concern defense. (I will explain schemers' motives shortly.) For their part, NMD opponents have consistently argued that missile defense will not work, is not needed, and is not worth the political and monetary cost. Crucially, opponents often—though not always—seem to have *accepted* their rivals' framing of NMD as defensive.[62]

When the Reagan administration proposed the Strategic Defense Initiative (SDI) in 1983, there were several different ways to view the program. Most opponents accepted the SHIELD metaphor but went on to deride a perfect defense as an ILLUSION—and a costly one at that. A

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[60] See Chilton 1996a, 94, 166, 170.

[61] Bill Keller, "Missile Defense: The Untold Story." *New York Times,* 21 December 2001. Online ed. Available at: <http://query.nytimes.com/gst/fullpage.html?res=9805E6D71F31F93AA15751C1A9679C8B63>. Accessed 16 May 2008.

[62] See Stevenson 2005. I have also reached this conclusion from my analysis (in progress) of NMD discourse from 1980-2003.

minority of opponents drew on strategic doctrine to frame the SDI as *offensive*.[63] At minimum, missile defense would create crisis instability by tempting each side to strike first; at maximum, it could serve as a tool for 'winning' nuclear war. Missile defense advocates fell into "dreamer" and "schemer" camps. Dreamers—apparently including Reagan himself[64]—believed that a near-perfect defense against a massive Soviet barrage could be built. In other words, they framed the SDI as a "leak-proof" SHIELD. Schemers believed a perfect defense was impossible, but thought SDI would be helpful in driving a favorable arms control deal with Moscow.[65] (And of course, there were—and still are—organizational and monetary incentives for schemers to sustain NMD programs.) The schemers nevertheless employed the SHIELD metaphor in their public rhetoric. This framing, in appears, dominated the debate over the SDI. This helped the program in three ways. First, the defense frame papered over the vast gulf between dreamers and schemers,[66] making the case for missile defense appear more coherent. Second, the SHIELD metaphor hid the SDI's offensive implications. Third, and related to the previous point, the SHIELD characterization seemed to resonate well with the public.[67] (It also helped that the concept of SHIELD is easily grasped while the counter-frame is less intuitive. It takes multiple conceptual leaps—and a basic understanding of nuclear strategy—to understand the offensive implications of NMD.) In short, the SHIELD metaphor, in conjunction with vested interests and perceptions of the Soviet threat, helped make the SDI possible.

But then the Cold War ended, pulling the rug from beneath dreamers and schemers alike.[68] Since then, opponents' objections to NMD have remained basically the same, but dreamers and schemers have found new rationales. Dreamers, again, are taking missile 'defense' at face value. This time, they are stressing NMD's potential to thwart accidental launches, terrorist ICBM strikes, and—importantly—ROGUE STATES with ICBMs and WMD. But, as before, there are schemers—who now seem to be the hard-core supporters of NMD. For today's schemers, the defensive side of NMD is far less important than its offensive implications. Unlike dreamers, they do not support NMD to defend against accidental launches (which the system could do little to counter) or terrorist strikes (terrorists are more likely to use other delivery means). Rather, the new generation of schemers wants missile defense because it could make it easier for the US to conduct military strikes against regimes with WMD and the means to deliver them.[69] In other words, for the Pentagon, NMD is about 'power projection' and "dominance across the full spectrum of conflict."[70]

Obviously, the offense frame, unlike the SHIELD metaphor, downplays the protection of people. It also raises unpalatable questions, shifting the debate from "how to best protect Americans" to a more complex and troublesome one: how to more easily attack WMD-armed countries—and, in

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[63] Stevenson 2005.
[64] FitzGerald 2000.
[65] Whether or not the SDI actually helped in this regard is inconsequential for my argument.
[66] On these conflicting rationales for NMD, see FitzGerald 2000; and Reiss 1992.
[67] See Bjork 1992; Bormann 2004; FitzGerald 2000; Linenthal 1989; and Masters 2005.
[68] The remainder of this section draws heavily on Keller's *New York Times* op-ed (see fn. 65).
[69] One scenario preoccupying the Pentagon involves China. If China invades Taiwan, Beijing could deter Washington from intervening by threatening to launch one or more of its two dozen ICBMs capable of reaching the US. (The credibility of this threat would be questionable, as a Chinese launch would ensure swift and severe retaliation. But Washington faced a similar problem *vis á vis* Moscow during the Cold War. Then, as now, prudence dictates that even dubious threats be taken very seriously.) NMD might deter Beijing's retaliation by denying Chinese missiles the chance to damage the US homeland. And NMD, if it worked, would be a backup plan in case deterrence failed. In either case, Washington would feel freer to go to war.
[70] JCS 2000. To be sure, it is also possible that schemers' talk about offense is itself a pretext masking economic motives.

the process, how to "win" a game of nuclear "chicken" when there is an excellent chance (given shaky defensive technology) that an adversary's warhead will get through if deterrence fails. For good reason, then, the offense frame is relatively hidden from public debates about NMD.[71] The schemers, perhaps deliberately, are still using the defense frame—the offense arguments are there, but they are between the lines. Schemers' talk, therefore, *appears* to be about protection but actually *means* war. Schemers might be avoiding the offense frame in part for domestic reasons: especially after Operation Iraqi Freedom, the public does not relish more foreign policy adventures. Too, the Pentagon needs to reassure NATO allies that it is not equipping itself for more unilateral invasions, and Washington must mollify the Chinese and Russians as much as it can.

In the US, NMD's offensive potential is part of the expert discussion, but not the public one. This, in my view, is one of the keys to explaining why missile defense is still chugging along—and why moderate and conservative Democrats are finding it difficult to oppose it. As was the case with the SDI, the defense frame dominates public discourse. Especially after 9/11, it is hard to oppose something that protects people. The Democrats' counter-frame—that NMD is a costly ILLUSION—leaves intact the core premise of the SHIELD metaphor, and thus does not shift the debate onto more favorable terrain. It is 'Star Wars' all over again, only this time, schemers are not out to wrest a favorable arms control agreement from another superpower, they are trying to ensure US military supremacy—and make a lot of money in the process. The success of schemers is an example of the *instrumental* function of metaphor, where, in public battles for policy legitimation, successful frames tip the 'rhetorical balance of power' toward advocates' arguments, raising the costs of opposition and increasing the likelihood that policymakers will endorse advocates' positions.

The bottom line is that NMD advocates have the rhetorical high ground. As Paul Chilton has shown, 'folk' conceptions of SECURITY hinge on the metaphor COUNTRIES ARE CONTAINERS; SECURITY comes in part from 'shielding' the country-container from 'penetration' by foreign objects, including ballistic missiles.[72] The discourse of NMD taps into the entire set of embodied experiences that form the experiential basis for the abstract concept SECURITY. Missile defense—framed in terms of the SHIELD metaphor—just makes *sense*—to 'dreamer' policymakers and laypersons alike.

[71] Again, this is a tentative finding from my ongoing discourse analysis.
[72] Chilton 1996a.

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