



An Unthinkable Problem from a Bygone Era:

How to Make Nuclear Risk and Disarmament
a Salient Social Issue

A FrameWorks Strategic Cultural Models Report

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I. Introduction

The threat of nuclear disaster—either intentional or accidental—is significant and growing, but the American public does not see the reduction of nuclear weapons as an urgent priority. On the contrary, nuclear weapons—and the serious threat they pose to humanity—rank exceptionally low on the public’s list of concerns. Americans, in other words, do not give much thought to what is, for many, an unthinkable idea: nuclear disaster and its catastrophic consequences.

To raise the salience of this issue, proponents of disarmament must understand the causes of public indifference. This indifference is not a matter of chance or accident, nor is it the fleeting result of capricious shifts in public opinion. Rather, it is the natural consequence of the deep assumptions and implicit understandings—what cognitive anthropologists call *cultural models*¹—that are embedded in American culture and that structure public thinking about nuclear issues. These cultural models shape how people think and talk about nuclear issues; they drive people’s disregard for the gravity of the problem and their reluctance to work toward solutions. To develop communications strategies that have the power to build and sustain meaningful commitment to solving nuclear problems, advocates must understand the attitudes, beliefs, and assumptions that underlie public indifference about this issue.

This report explores the thinking of both social elites (whom we refer to in this report as *influencers*) and the general public. The interest in influencers arises from the recognition that to move this issue up the national agenda, advocates must engage people who have the influence and skills to raise the profile of nuclear issues. Broader public engagement is also vital, as people’s understanding of an issue and their motivation to take action often determine whether social movements succeed or fail.²

The research presented in this report represents the first phase of a larger project, which aims to develop and empirically test reframing strategies that can build public understanding of nuclear issues, generate issue engagement, and increase support for policies that can reduce the likelihood of nuclear disaster. The findings herein will help communicators strengthen the public’s productive understandings of key concepts in the nuclear debate and avoid cuing patterns of thinking that shut down debate or lead reasoning in unproductive directions.

In this report, we address the following questions:

1. **How do influencers in particular, and the American public more broadly, think about nuclear risk and nuclear weapons?**
2. **How do influencers think about engagement with nuclear issues?** Understanding why influencers personally engage with key causes—and why they do not currently engage on nuclear issues—is critical to understanding how they might be more effectively utilized as ambassadors, disseminators, connectors, and cultural change-makers.

3. **What are the key challenges in communicating about nuclear issues?** Understanding how people think about nuclear issues, and applying findings from previous research to framing complex social and scientific issues, will help advocates identify the most difficult challenges that communicators face and help them spark real, sustained change.
4. **What can we do to address these challenges and engage the general public and key influencers in particular?** We draw on our cultural models research, framing theory, and previous FrameWorks research on social policy issues to generate an initial set of reframing recommendations and hypotheses.

It is important to highlight that this research shows that influencers draw on the same cultural models that other members of the public do when thinking about nuclear weapons and risk. This is consistent with past FrameWorks research findings.³ As such, findings from our interviews with the public and with influencers are presented together, due to the close alignment of perspectives. This report does, however, attend to concerns that are specific to influencers when discussing engagement on nuclear issues.

We begin with a brief discussion of research methods, which draw on best practices in semi-structured cognitive interviewing. Next, we review the cultural models that structure people's thinking on nuclear issues and that shape influencer engagement. Understanding how people use cultural models to think about and engage with issues allows us to outline the key challenges that communicators face and present initial recommendations that communicators can use to overcome these challenges. We conclude by proposing an initial framing strategy and laying out research questions that will be addressed in future phases of the reframing project.

II. Research Methods

The cultural models discussed below represent the key patterns of thinking that emerged from a cognitive analysis of extended one-on-one interviews with influencers and brief one-on-one interviews with members of the public.

Interviews with Influencers

FrameWorks researchers conducted a set of cultural models interviews with influencers. Influencers were defined as highly educated individuals who hold leadership positions in the fields of technology and software development; entertainment and the arts; business and finance; or strategic communications. Participants were also deeply engaged in professional associations, boards, and groups that reflect their professional interests.

In April and May 2016, FrameWorks researchers interviewed 20 influencers who were evenly distributed across the four sectors described above and across four metropolitan areas (Chicago, the Bay Area, Philadelphia, and Los Angeles). The sample included seven women and 13 men. Ten participants described their political views as “middle of the road,” eight as “liberal,” and two as “conservative.” The mean age of the sample was 47 years old, with an age range from 29 to 72.

The interviews lasted approximately one-and-a-half hours and, with participants’ permission, were audio recorded and subsequently transcribed for analysis.

The semi-structured interviews were designed to elicit ways of thinking and talking about concepts related to nuclear issues and explored participant thinking about engagement in social causes. The researchers approached each interview with a set of topic areas but left the order in which these topics were covered largely to participants. Researchers allowed sufficient time for participants to explore the topic areas of the interview in a naturalistic style, enabling researchers to identify cultural models that represent shared patterns of thinking.

Interviews with Members of the Public

FrameWorks researchers conducted a set of 10–15 minute interviews with members of the public on the streets of Brooklyn and Chicago. Participants were diverse in age, ethnicity, education level, and professional field; the goal for these interviews was to identify patterns in public thinking about nuclear issues.

In May 2016, FrameWorks researchers interviewed 32 participants. The sample included 15 women and 17 men. Twelve described their political views as “independent” or middle of the road,” 17 as “liberal,” and three as “conservative.” The mean age was 40 years old, with an age range from 19 to 80. Interviews were video and audio recorded (with participant consent) for analysis.

As with the interviews with influencers, participants were asked open-ended questions and encouraged to discuss any concepts or points that they deemed relevant to the discussion.

Analysis

FrameWorks researchers adapted analytical techniques employed in cognitive and linguistic anthropology to examine how participants understand issues related to nuclear weapons and risk.⁴ Taking a grounded theory approach⁵ to the interview data, researchers independently coded elements of participants' language to identify common, standard ways of talking to reveal shared patterns of thinking, assumptions, logical steps, and cognitive connections. Researchers then compared their analyses to identify prominent cultural models and themes.

Our analysis revealed that influencers and the public draw on the same cultural models to make sense of nuclear issues and showed no strong, patterned differences between how these two groups think about these issues. For this reason, we first discuss the models that emerged from research in general and then focus on influencers specifically in a subsequent discussion of topics related to engagement and innovation.

III. Findings

In this section, we detail the cultural models that structure thinking about nuclear issues. Our research showed that people draw upon a range of understandings and assumptions to think about nuclear issues. While some of these models conflict with each other, all are available ways of thinking and become active at different times, when different concepts come into focus. We explore this mix of cultural models below and discuss their implications for those communicating about nuclear issues.

To use the findings in communications practice, it is important to understand that:

1. There are **multiple ways of thinking** that people draw upon to make sense of nuclear issues and form opinions about what actions, if any, should be taken;
2. **not all of these ways of thinking are equally productive**—some increase the salience of nuclear issues and aid in communicating key messages, while others shut down thinking about nuclear issues and decrease their overall salience; and
3. communicators should **cue productive models and avoid activating less productive ways of thinking**. This is the core of effective framing practice.

What is “Nuclear”?

1. The *Energy and Bombs* Cultural Model. Analysis of people’s top-of-mind thoughts shows that there are strong and immediate default associations with the term “nuclear.” Two powerful prototypes—or “pictures in people’s heads”—become active in thinking: nuclear *weapons* and nuclear *power*. The following excerpt⁶ illustrates this dual focus:

Researcher: What comes to your mind when you hear the term “nuclear”?

Participant: Energy and bombs.

While people have well-established ways of thinking about nuclear energy and weapons, and these issues come easily to mind, nuclear *technology* is a “cognitive hole”—an area where people lack basic knowledge and are without underlying ways of thinking. The influencers interviewed were well informed about current events, and nuclear issues in general, but they readily and explicitly acknowledged that they did not understand issues related to nuclear technology, and their talk evidenced this lack of knowledge.

As described below, people see danger in specific *uses* of nuclear technology, including the intentional deployment of weapons and the risk of leaks or meltdowns from nuclear power plants. But they do not understand the technology itself and therefore do not recognize or understand the risks that come along with the old and sometimes defective technology of an aging arsenal.

Recommendation: Develop explanations that fill the cognitive hole around nuclear technology. The risk of defective technology is simply not on the public’s radar. While people understand that nuclear material is dangerous, they do not understand many of the risks inherent in nuclear technology. Developing clear and concise explanations of the basics of nuclear technology will enable communicators to help people see the risks that attach to the technology itself—not only its specific uses or deployments. This will lead to a fuller, more accurate understanding of nuclear issues, increased interest in addressing these issues, and more support for specific policies.

2. The *Nuclear=Danger* Cultural Model. The concept of *nuclear* is inextricably linked with *danger* in people’s thinking. The use of nuclear materials is assumed to entail a high level of risk and danger. When thinking about nuclear power, the possibility of leaks or meltdowns was top-of-mind, and participants frequently raised high-profile disasters (e.g., Chernobyl, Three Mile Island, and Fukushima) to describe the dangers that accompany the use of nuclear energy. Participants readily discussed the potential that nuclear weapons have to annihilate entire cities or countries through violent deployment and to produce harmful, lingering effects. Hiroshima was the most frequently raised exemplar of nuclear devastation.

Researcher: I wonder what you think of when you hear the term “nuclear.” What comes to mind?

Participant: I would say **danger**.

Researcher: What kind of danger?

Participant: So, you know, I think that nuclear power is a tremendous tool. It’s also **extremely dangerous**. We saw what happened in Japan, the Fukushima plant there—I think that really showed the risk that we had. Now, granted, that risk is very minimal. We’ve had nuclear power for decades with very few major accidents. But the reality is, when there is one, the effects can be **catastrophic**. So, that’s why I consider it a very **dangerous** form of power.

Researcher: What about “nuclear weapons?” What do you think about when you think about “nuclear weapons?”

Participant: Again, **extremely dangerous**.

It is important to highlight that while the public assumes that the use of nuclear materials is inherently dangerous, they do not automatically reject the use of nuclear energy or nuclear weapons. This point has important implications for communicating about nuclear issues and the value and limits of focusing on the dangers associated with nuclear weapons.

Recommendation: Go beyond the dangers posed by nuclear issues and develop messages that clearly and concretely talk about solutions. Communications that focus exclusively on the danger associated with nuclear issues are unlikely to change people’s opinions or spark engagement. Ensuring that people see the danger of nuclear weapons is an important part of effective communications, but this research shows clearly that this is not a main challenge because

people already associate “nuclear” with danger. Furthermore, messages that cue the dangers of nuclear weapons without explaining solutions risk cultivating a sense that the problems are overwhelming. When people are overwhelmed by a problem, they are less able to engage with solutions, believe in their efficacy, and take action to enact them. Others in the field have also commented on the ineffectiveness of danger-focused messages.⁷

What are the Risks of Nuclear Power?

There is a set of cultural models about nuclear power and energy that those communicating about nuclear weapons must keep in mind. If activated, even inadvertently, these models have the potential to shape how people think about weapons issues.

1. The *Accident* Cultural Model. When thinking about nuclear energy, people assume that mishaps are accidental. Notice how the participant below cites the example of an earthquake—something outside of human control—and its effect on Fukushima.

Participant: I think [risks] can be mitigated. I think right now, public perception is down, especially after the Fukushima plant and all of that. And even there, like, I think about it—that’s a 9.2 earthquake, and it handled that with some damage, but there’s not a global leak. That was pretty darn good, given that it handled a 9.2 earthquake.

The *Accident* model stands in clear contrast to how people think about the danger of nuclear weapons, which is assumed to result from intentional actions. There is a strong and highly predictable association between nuclear energy and accidents, on the one hand, and between nuclear weapons and intentional harm, on the other. Therefore, when people think about accidents in the context of nuclear issues, they are likely to assume that the discussion is about power and energy, not weapons. In this way, discussions of “accidental deployment” or mistakes in the management of defective weapons are likely to be seen as energy and power issues rather than as weapons issues.

2. The *Reasonable Risk* Cultural Model. Nuclear energy is generally assumed by the public to be a positive innovation. In particular, participants viewed nuclear power as a means to protect the environment by producing the energy we need with less pollution.⁸ Several participants asserted that cleaner, greener nuclear power could someday replace energy created by fossil fuels. Given the dangers that accompany nuclear power, participants emphasized that it must be adequately regulated—something that, in their estimation, happens some but not all of the time. On balance, though, participants concluded that using nuclear power is a risk worth taking.

Participant: Well, I think radiation is something that we don’t know that much about. It has a lot of potential, but, like anything that has a lot of potential, it also tends to be very dangerous. I think it needs to be studied more. There needs to be more safety around it. We’re going to use it for energy usage, **but maybe used in the right way**

[...] I'm not a scientist, so I don't really know that much about these things [...] but, possibly, used the right way, it could help us get way more out of what we can potentially get out of solar energy, right? **And it could help us solve, maybe, a lot of the global warming issues.**

Members of the public believe that nuclear safety is an important and serious concern, but they believe that an acceptable level of safety is attainable with the proper safeguards; with that in mind, they generally support the use of nuclear power.

Recommendation: When talking about accidents caused by nuclear weapons, communicators should make it clear that they are talking about *weapons* and not *energy*. This will prevent the public from applying positive views of nuclear *energy* to discussions of nuclear *weapons*. When members of the public think about nuclear accidents, they generally make the assumption that these accidents are related to nuclear power—e.g., plant meltdowns—*not* weapons. Once this association is made, people default to their generally positive assessment of nuclear power, which can interfere with discussions of the need to reduce the threat of nuclear weapons.

3. The *Blind Trust* Cultural Model. People consistently assign responsibility for nuclear power to scientific experts. In the case of nuclear power, they are confident that these experts understand and are capable of addressing the technical challenges and threats that accompany nuclear power. FrameWorks research has found that, on many scientific issues, public thinking is highly skeptical of scientists and their motives,⁹ but this type of thinking is absent when people talk about nuclear power issues. This assignment of responsibility to experts also appears to be a strategy that members of the public use to distance themselves from nuclear issues writ large. Participants frequently used phrases like “I hope” and “hopefully” in ways that suggested that they felt very little investment in, or ownership of, the issue and are content to entrust outcomes to “experts.”

Participant: My hope is that we have [scientists working to ensure safety] now, in this country and in Europe. I don't know all the ways it's been done, but certainly nuclear energy is being monitored by the federal government. They are licensed; I don't know how many subcontractors are involved.

Recommendation: Create a clear role for nonexperts, build a strong sense of public responsibility, and be explicit about the need for wider engagement on nuclear issues. Be clear that nuclear issues are public issues, not expert issues. When it comes to nuclear issues, the public's trust in science can be an asset for communicators.¹⁰ It suggests that well-framed scientific information can be compelling and that scientists can be effective messengers. Communicators can leverage the *Blind Trust* model to help the public understand the scope of the problem. However, there is a framing danger inherent in this strategy. People's expression of trust in science and scientists can block engagement because blind trust makes it seem like the issue is “solved” rather than in need of attention or engagement. If people think experts are managing nuclear issues well, they will see no need to take action. Communicators need strategies to leverage the public's positive view of the role of scientists in solving nuclear problems while also creating a role

for members of the general public. Scientists can be authoritative and effective messengers on these issues, but the solutions for which they advocate must entail a clear and important role for nonscientists. The balance between scientists as messengers and members of the public as actors is a promising strategy that should be tested in future research.

What are the Risks of Nuclear Weapons?

The public's understanding of nuclear weapons is shaped by a set of models that are, in essence, assumptions about the role of *human behavior* and *responsibility*.

1. The *Nation as Human* and *Human Motivation* Cultural Models. At a fundamental level, people understand nation-states in the same way that they understand individuals; they believe that state actions are driven by the same motivations that drive individual behavior. This modeling strongly influences thinking about nuclear issues; people assume that a nation's desire to acquire nuclear weapons is driven by a set of elemental, human motivations: the desire for protection, autonomy, dominance, and status. Note in the following excerpts the way that participants assume that nuclear weapons have psychological and social meaning.

Researcher: [W]hat exactly are nuclear weapons for?

Participant: I mean, they could be for a number of things: **status, power, defense, offense.** Could be—I mean, I think that's it. If you want to break it down to the simple four things, it's that.

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Participant: And like I said earlier, I don't think most of these nations would agree to being weapon-free. **I think they like the power it gives them and the sense of security it gives them.** I just think they need as many as they have to have that same sense.

People see nuclear capability as intertwined with human motivation and tightly tied to natural individual human social impulses. Whereas the dangers linked to nuclear *energy* are assumed to be *accidental*, the public sees the dangers linked to nuclear *weapons* as *intentional*.

Recommendation: Avoid messages that allow people to see motivations to use nuclear weapons as natural and thus justifiable. When people see the motivations behind acquiring or using nuclear weapons as operating at the level of basic human impulses, they will likely perceive these actions as *natural* and, to some degree, *justifiable*. Communicators must avoid messages that activate the public's tendency to see nation-states and non-state groups as being driven by motivations that align with natural aspects of human behavior. When nations are perceived as analogous to individuals, much of the behavior that advocates argue against becomes "natural" and thus impossible to counter.

2. The *Us vs. Them* Cultural Model. FrameWorks' research (and that of other social scientists) has shown a strong tendency for people to draw firm and meaningful distinctions between "us" and "them"

when thinking about social issues.¹¹ The default impulse to talk about “other” people and to classify certain groups as “like us” or “not like us” was a consistent theme in talk about nuclear issues. People expressed worry, for example, that nuclear capability will find its way into “the wrong hands”—a sentiment that implies that the “right hands” for nuclear capability do in fact exist.

Participant: And I don't know why I feel that [nuclear war is not a threat], because it's probably not far off. Because it's sort of like, you get it in the wrong hands and it could be a real reality.

This pattern of thinking was expressed subtly but consistently through the persistent use of pronouns like “we” to refer to the United States and its allies and of “they” to refer to other nation-states or groups. Participants took it for granted that the interviewer would understand whom the term “we” referred to when they used it in their talk, which further illustrates the dominance of this model in people's thinking. Participants also assumed that the interviewers understood whom they meant by the term “they,” although they were also more than willing to name specific groups (e.g., North Korea, ISIS).

Participant: It's just a different world, different beliefs.

Participant: We recognize people like ourselves, those we want to be around, the ones we trust most of all, the ones you want to marry. But I think it's a different sense of humankind to be able to recognize and have a meaningful relationship and respect for others who are very, very different than us. It's not part of our basic survival instinct.

Closer analysis showed that thinking about “us” was shaped by an underlying assumption that nuclear weapons should be restricted to countries that are rational and stable and that can be trusted to manage nuclear weapons responsibly. The exemplar of a sane, rational, stable country is clearly (to no great surprise) the United States. If anyone has nuclear weapons, it should be the United States of America because, according to this assumption, despite our mistakes, flaws, and failures, we have solid values that will prevent us from misusing these weapons.

Participant: I'm biased. I'm American. I was born here. **So I believe that if any single country should have more nuclear weapons than anybody else, it should be us. You know, that we tend to lean towards thinking about the greater good than most other countries.** I think, you know, a country like China is generally less concerned about the greater good. They're more concerned about making China look better. And catch up and try to take over the world. [...] But America seems to, at least on the surface, care a bit more.

“Them” thinking, on the other hand, was driven less by concerns about conventional nuclear war with an organized adversary like Russia and more by nuclear threats posed by leaders of rogue nations (e.g., Iran, North Korea) and terrorist groups (e.g., ISIS). These “others” are assumed to be impossible to understand or empathize with. They are seen as the nation-state equivalents of serial killers or twisted sociopaths

whose thought processes are unpredictable and incomprehensible to those of “us” who are sane, rational, stable, and share basic values. Participants described “others” as mentally ill, “manic depressives,” “maniacs,” and “whackos.” Because rogues—the “others,” or “them”—are not sane, not rational, and not stable, they do not respond to ordinary incentives, and they are not easily contained.

Participant: And that would, **to a reasonable individual**, perhaps serve as a deterrent against using. But when you’ve got countries that are out to make a point, or who feel slighted, who feel un-empowered or disempowered, they are rolling the dice that something is going to get them the influence and stature that they are looking for. [...] But I think the only way to balance that is to ensure countries that seek that type of nuclear leverage are assured a voice through other means, whether it’s political or economic engagement on a higher level. **But then again you will come across folks who simply are just not rational.**

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Participant: There seems to be some hope that China is realizing that North Korea is a **wild card**.

Us vs. Them thinking is, at its core, a contrast between the sane and the insane—those who can be reasoned with and trusted to act rationally and those who cannot.

Recommendation: Avoid *Us vs. Them* messages, strong rhetoric, and the tendency to “other” those who seek or have nuclear weapons. Instead, frame actors as having the capacity to be part of the solution through productive engagement. When people see those who would use nuclear weapons against “us” as beyond comprehension, they have difficulty thinking about solutions or imagining how such insanity might be reliably controlled. If those seeking nuclear weapons are assumed to be crazy and unpredictable, then it becomes impossible to understand how systems or incentives could reliably prevent the acquisition or use of nuclear weapons. Vilifying and demonizing others, in short, undermines efforts to engage people in thinking about policy solutions to nuclear issues. Instead, communicators need to suggest that there are ways—through diplomacy, intelligence, coordinated international efforts, and other means—to engage everyone, even those who are considered “rogue.” By doing so, communicators convey that there are solutions to problems that otherwise seem incomprehensible and unsolvable. The goal of communicators should be to break down *Us vs. Them* patterns of thinking and frame “us” as a larger, more inclusive group to show that practical, incremental solutions are possible.

Recommendation: Avoid relying entirely on examples of rogue actors and develop more effective strategies to explain state-level nuclear threats. While there are real risks from nongovernmental groups and outliers in the state system, the risk of conventional war between states is also real and important to address. The focus on irrational others makes it difficult for people to see the danger of nuclear deployment in state-to-state scenarios, thus masking a serious nuclear risk. Communicators need to reposition the “bad guy” in the stories they tell about

nuclear issues. They need to go beyond the “irrational other” and include nation-to-nation stories as well.

3. The *Diplomacy Deference Cultural Model*. People strongly believe that governments—both the U.S. government and stable governments around the world—are responsible actors when it comes to management of nuclear capabilities. Just as people defer responsibility to scientists when thinking about nuclear energy, they defer responsibility to governments when thinking about nuclear weapons issues. This degree of trust in government is in sharp contrast to the ways that Americans think about other domestic and international issues.¹² Note in the excerpt below that the participant opposes “big government” on issues other than this one, which clearly functions differently in his thinking.

Researcher: Who would you consider the people who are responsible for managing something as enormous as [nuclear capacity]?

Participant: Good question. Ultimately it is the federal government, the U.S. government, along with assistance from the allies from World War II, to get it to the state where we are. We do have nuclear capacity—first use is a point of destruction, but spawned from that are peaceful uses: generation of power and more resourceful uses of it. So ultimately it started there—whether it was a government person that did it, 1,000 scientists that were supported by the government that conducted the research to make it happen, **it’s one of those few things I believe that needs to stay in government control. Health care doesn’t belong there in my opinion. But something like nuclear power, that’s something that the government needs to be involved with. And with that it’s not just our government, it’s international.**

This faith in government-level institutions extends to the United Nations.

Researcher: Do international institutions currently play an important role [in containing the threat of nuclear conflict]?

Participant: Yes, they do. And I think the role they play is keeping the lines of communication open, and keeping a certain level of responsibility to nations. There’s someone somewhere calling people to task if they don’t follow the norms of human civilization.

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Researcher: And who is responsible for managing global nuclear risk?

Participant: That should be the U.N., right? You have developed countries that try and monitor global commerce and peace, I would have to guess.

Attributing responsibility solely to governmental and international institutions seems to function as a cognitive escape hatch, a way for people to relieve themselves of the necessity of thinking about the real

dangers of nuclear weapons. Nuclear weapons are, according to this way of thinking, a problem for government, not ordinary people, to worry about.

Recommendation: Foster a strong understanding of the role the public can and must play in addressing nuclear issues. While the public’s recognition of a central role for government is, in itself, productive, the simultaneous abdication of responsibility among ordinary citizens is a direct and significant barrier to public engagement on this issue.

4. The *Button Cultural Model*. People use the common, pervasive metaphor of “the button” to describe the initiation of a nuclear event. This simple metaphor models nuclear attack as a simple and decisive action—an act in which someone simply decides to “press the button.” When this model is active, people see nuclear threats to be the result of capricious, individual-level decisions that are made in an instant rather than actions that are influenced by complex institutional contexts and policies.

Participant: I think for nuclear weapon safety, it kind of means that we know **where all the buttons are that can be pushed**, and we trust everybody that’s sitting in front of each button.

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Participant: I think of **big red buttons** that are only supposed to be pushed in dire circumstances.

The *Button* metaphor is important because it frames nuclear events as 1) sudden, easy to initiate, and irreversible; and 2) driven by a particular individual who pushes the button (typically a “crazy maniac”). As such, it oversimplifies the very complex risk of nuclear war. It creates an understanding that nuclear conflict happens as the result of a moment of hot temper, hurt pride, or mania by a single individual, which has the effect of framing nuclear risk in a very narrow and specific way. In highlighting the spur-of-the-moment decision to launch, the model mutes attention to the complexities of the issue, blocking engagement with key considerations, such as improper storage of nuclear materials, defective weapons, and out-of-date technology. Inciting deeper public support of solutions to nuclear issues will require public engagement with a wide range of nuclear problems.

Moreover, foregrounding the role of individuals who might “push the button” (for example, insane leaders who capriciously decide to launch a nuclear attack) characterizes the threat as the launch of weapons. In so doing, this model obscures attention to a wide range of other longer-term, everyday problems caused by nuclear weapons, such as improper storage or deterioration with age. This model also makes it difficult for the public to recognize the importance of systems in protecting against risk, such as those that safeguard against storage and deterioration hazards and help prevent attacks.

Recommendation: Avoid language that frames nuclear threats as momentary crises (e.g., **finger on the button, answer the 3:00 a.m. call, etc.**). Focus instead on explaining how existing systems and institutions do or can work to protect against nuclear threats.

While the *Button* metaphor may have some utility in communicating about the importance of getting nuclear weapons off “hair-trigger alert” and injecting a sense of urgency into discussions, communicators need ways to get beyond this mode of thinking. Whether the *Button* model can be used to create a sense of urgency and then expanded to include other concerns is an important research question. Previous research suggests that this model’s cognitive salience makes it hard to get people to think beyond the button metaphor and engage in other aspects of nuclear issues that must be addressed. A comprehensive, long-term nuclear disarmament communications strategy requires helping the public to see that *the Button is not the only threat*. The public must understand that nuclear threats unfold in other ways, and every type of threat requires a suitable, clear, and realistic solution.

What Should Be Done about Nuclear Threats?

There is a set of especially powerful cultural models that structure thinking about what to do about nuclear weapons in general and disarmament in particular. These models are related to patterns of thinking described above.

1. The *Ideal vs. Real* Cultural Model. The public’s thinking about global security generally, and nuclear weapons in particular, often breaks down into a set of aspirations that people can envision—the ideal—and a set that they believe to be actually possible—the real.¹³ When asked to consider the likelihood of a secure world, a peaceful world, or a world free of nuclear weapons, almost every participant expressed his or her hope that this ideal would someday become reality, but all pivoted quickly to acknowledge that this future is simply not a reality. In fact, the ideal was so unattainable that it became a running joke in many interviews.

Researcher: What comes to your mind when you think about nuclear disarmament?

Participant: A peaceful world with all of the children holding hands around the globe.

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Researcher: What would it mean to live in a peaceful world?

Participant: Uh, unicorns and rainbows—that’d be nice. No, I would thoroughly enjoy it, you know.

While people do not disagree with the idea of disarming, they consistently distance themselves from this ideal and align themselves with what they perceive as reality.

Participant: I don’t think [disarming is] really possible. There’s always someone who is going to be hiding it, saying, “We are just keeping these, no one will know about these,” so that’s the issue. But yeah, **I wish that would happen, just realistically, I don’t see that as reality.**

While people view complete disarmament as impossible, they do see reduction as possible, if difficult, to achieve. Reduction is understood as the realistic alternative to full disarmament.

Participant: [Nuclear disarmament] will never happen, but I think that the best is nuclear reduction and control.

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Participant: Maybe we could *reduce* it, but it's not going to zero, right?

The *Ideal vs. Real* model is deep and difficult to maneuver. People acknowledge that, in an ideal world, no one should have nuclear weapons,¹⁴ but there is a powerful and ever-present recognition that we do not and will not ever live in an ideal world. Even those participants who described themselves as optimists did not see any chance of realizing the ideal of total disarmament. People assume that, in reality, the best we can do is manage the problem, primarily by restricting who has the weapons (to “sane,” “rational” nation-states with whom we can negotiate) and reducing the number of weapons.

Ideal vs. Real thinking is thus *highly fatalistic*.¹⁵ The problem is overwhelming and one that the ordinary person feels powerless to affect.

Participant: Nuclear issues tend to be one of those issues that you unfortunately are inclined to **just throw your hands up and say, “I can’t fix it. I’ve got no ability to affect the kind of outcome that I want.”** [...] **At some point you’ve got to just realize there are some things you can fix and some things you can’t.** And the things you can fix start here at home. Getting your kids educated, helping them develop a right moral compass, helping them develop what is an uncommon trait called “common sense.”

The contrast drawn by the participant in the excerpt above—between the helplessness he feels about nuclear issues and the agency he feels about a variety of other goals—is important and discussed in greater detail in the section below on engagement.

One of the reasons why this *Ideal vs. Real* pattern of thinking is so strong is that it is supported by two, more specific ways that people have of thinking about what can and should be done to address nuclear issues.

2. The *No Going Back* Cultural Model. Reinforcing fatalistic *Us vs. Them* thinking is people’s sense that it is impossible “go back” to a nonnuclear era. Participants used a variety of metaphors to talk about the unidirectionality of the development of nuclear weapons. For example:

“The genie is out of the bottle” (or “jar”).
It’s a “slippery slope.”
“The cat is out of the bag.”
“The horse is out of the barn.”

We can't "turn back the clock."
"That train left the station long ago."

And some participants were more direct:

Participant: I don't know how we get rid of your nuclear weapons once you have them.

There was a strong and pervasive assumption that the development and existence of nuclear weapons is something that cannot be undone. Global disarmament is modeled as *moving backward*, not forward. In our culture, we hold deep metaphors for thinking about time, and life, as a linear progression;¹⁶ people believe that our world cannot move backward because it simply isn't logically possible.¹⁷ Now that nuclear technologies are available, there's no way *not* to have them. Under a linear model of progress, the only way something can disappear is if it is replaced by something better. While other weapons became obsolete as they were replaced by new, better weapons, this linear, forward trajectory is simply not possible with nuclear weapons; we would destroy the world before we invented a better weapon.

Participant: I think, like any kind of technology, it's about the use. So, when catapults were invented, there was a bunch of use of it. And it could cause much bigger destruction than anything before it. And on and on. And we, up until that point, had used just about every technology, you know—mustard gas in World War I—things that could make bigger and bigger impacts. **And I think the difference there is we got big enough in impact that we couldn't use it. There wasn't, "Oh, let's try it a few times. We'll learn, and then we'll stop doing that." You couldn't do that. Two or three nuclear wars away would be bad.**

3. The *Deterrence Cultural Model*. Another model that supports and strengthens *Us vs. Them* thinking about nuclear issues is people's sense that nuclear weapons are a necessary deterrent for "us" to have because "they" have nuclear weapons. The public believes that everyone knows what the devastating consequences of a nuclear event would be, and everyone is eager to avoid those consequences at all costs. Hence, they believe that nuclear weapons have great value as deterrents.

Participant: Well, **I think they're more of a deterrent than anything else.** You know, peace through overwhelming nuclear superiority. So [...] you know, it's just like anything else in life, if you think that poking a sleeping bear is going to cause you to end up dead, you're not gonna poke that sleeping bear, right?

Participant: Truth be known, we shouldn't have any more [weapons] at all now. But I don't think we'll give them up. I wouldn't necessarily mean to give them up, and in a lot of ways there is this security of potential confrontation with, "Yeah, I could kill you, but you could kill me." And there is a mutual respect there, I think, because of that.

The *Deterrence* model leads to the conclusion that, in the real world, nuclear weapons must be maintained and explains why people assume that global disarmament is impossible. In order to keep peace and avoid disaster, no one can disarm—otherwise, an enemy may perceive vulnerability and decide to strike. As a result, people believe that in the real world, where there are nuclear weapons, we must have nuclear weapons to deter their use. The mere existence of nuclear weapons makes their elimination an idealistic and highly improbable ideal.

Researcher: Why do you think other people would not want to get rid of [nuclear weapons]?

Participant: Well, you don't want to get rid of yours unless the other guy's already got rid of his.

Researcher: Right.

Participant: So, it's kind of a challenge to **see who goes first**.

—

Researcher: Would our government be able to effectively work to [take on the cause of nuclear disarmament]?

Participant: Not by ourselves, only one government. Some others would think of it as a **sign of weakness**. A sign that they've lost their might, they've lost their power, they've lost their stature. So I think it would be very difficult. I wouldn't recommend to go it alone. It needs to be a union with others.

Recommendation: Counter fatalism by developing a stronger sense of efficacy and pragmatism. *Ideal vs. Real* thinking and the *No Going Back* and *Deterrence* models reinforce a powerful sense of the impossibility of disarmament. Building engagement on nuclear disarmament will require strategies to help people see that disarmament is, in fact, possible. Overcoming fatalism is one of the biggest challenges facing proponents of disarmament.

Recommendation: Stop asserting that disarmament is good and instead explain how it would work and why it would produce favorable outcomes. In order to increase public support for disarmament, communicators need to interrupt the default assumption that nuclear weapons are necessary to *deter* devastating actions and replace this model with a concrete way of thinking about how disarmament avoids danger. Given the public's current dominant understandings, simply asserting that nuclear weapons are *not* deterrents is an ineffective strategy. Communicators need strategies to explain *how* disarmament can, contrary to common assumptions, actually increase safety and security. Communicators also need to go beyond the simple assertion that disarmament will create better outcomes and develop explanations of *how* this set of actions would do so.

Recommendation: Develop messages that link disarmament with progress and innovation, messages that reframe disarmament as progress rather than as a reversion to a pre-nuclear past. People's understanding of time as forward-moving and linear makes disarmament akin to going back in time—an impossibility that is hard support. This model makes it difficult for

communicators to get the public to see that: 1) it is possible to lessen our nuclear stockpiles and disarm, and 2) that innovative ideas could create a safer future.

Recommendation: Use people’s sense of the possibility of reduction as an initial engagement and potential way to increase support for complete disarmament. People’s view of the possibility of *reducing* nuclear stockpiles as an attainable goal can be leveraged and expanded. While messages that have the elimination of nuclear weapons as their sole proposal are likely to cue fatalistic thinking, people *are* able to think about weapons reduction. Disarmament proponents could potentially leverage and expand these messages to help people understand that complete disarmament is an achievable goal. Research is needed to test this hypothesis, but the current research suggests that there is promise in this strategy.

4. The *Nuclear Weapons as Guns* Cultural Model. People have a strong tendency to compare nuclear weapons to guns.¹⁸ Several participants drew explicit analogies between nuclear weapons and guns; sometimes they extended the analogy, comparing nuclear controls and disarmament to gun control.

Participant: I just think [nuclear disarmament] puts us at a disadvantage. Where if someone threatened us or we are just at a disadvantage to protect ourselves, or if someone has the capability of wiping out cities at a time where we don’t have the capability of doing that back [...] to say that nothing can stop it. **It’s going to a gun fight with a knife.**

—

Researcher: How does a weapon like a nuclear weapon create security?

Participant: **I guess it’s like owning a gun.** You can threaten people with it. And they know you have it. Everybody wants it.

People see a number of parallels between nuclear weapons and guns. First, many people see guns and nuclear weapons as useful for protection and self-defense. People also assume that we cannot get rid of guns for the same reason that we cannot get rid of nuclear weapons: We cannot go back in time. People also assume that police should have guns and that certain governments should have nuclear weapons for the same reason: to keep the peace. And finally, while our shared humanity may make us hesitant to use either guns or nuclear weapons, we must nevertheless be prepared to act in self-defense against criminals or “unstable maniacs.”

The gun metaphor was most frequently used to argue *for* nuclear weapons, but some participants used it in the other direction—to argue against nuclear weapons.

Participant: For me, **the issue is similar to gun control.** The more guns you have, the more dangerous they are. And the more people that are running around in the streets of Texas waving them, the more other people feel threatened and respond by doing

the same. So, I would like to see reduction programs. And I would like to see the United Nations taking it on as a global initiative for the next decade.

In this application, the metaphor has profoundly different implications. Our analysis shows that this is a “slippery” metaphor and that communicators should use it with great caution.

Recommendation: Research is necessary to test the potential for the *Nuclear Weapons as Guns* metaphor to be deployed as a part of effective arguments for nuclear controls and disarmament. As noted, the gun metaphor is generally evoked to explain the value and necessity of nuclear weapons. However, our research shows that there is a potential entry point in the metaphor for bringing gun control arguments to bear in people’s thinking about nuclear weapons. This strategy has significant dangers, since gun control is itself hotly debated. However, relatively high levels of public support for gun control¹⁹ suggest that there may be potential in harnessing some of the arguments for gun control in messages about nuclear disarmament. Using the gun metaphor to argue *for* disarmament is worth exploring but requires careful empirical testing to determine its effects.

Why Engage on Nuclear Issues?

One of the primary goals of this research is to determine how to spur engagement on the issue of nuclear disarmament. More specifically, it seeks to understand why influencers who are well suited to become change agents on this issue do not currently engage with it. Exploring this question is a critical step in developing strategies that could be used to mobilize this group as part of a larger effort to move nuclear issues up the public agenda.

To better understand what motivates influencers to engage on social issues—and what obstructs engagement—researchers asked participants to talk about their involvement in social issues and initiatives and specifically about their thinking on involvement with nuclear issues. The findings revealed clear patterns of thinking and decision-making around these issues.

The models below suggest that numerous ways of thinking about nuclear weapons and disarmament prevent people from engaging on this issue. Several of these models are closely related and yield similar recommendations. For this reason, we describe these models first and then lay out a set of recommendations that emerge from them.

1. The *Not the Social Issue of Our Day* Cultural Model. When thinking about engaging on nuclear issues, influencers drew clear contrasts between the present and the past. People associate nuclear dangers with the past—roughly the second half of the 20th century. Participants expressed a clear sense that nuclear disarmament is a relic of bygone era. They described it as “old-fashioned” and dated—a cause for “California hippies.”

Participant: In the '80s, nuclear war was a big, HUGE conversation, a hot topic.

—

Participant: I think that growing up you always thought like the big threat was like Russia, you know what I mean? **But I feel like I don't see them as a threat anymore.**

—

Participant: And it's been frighteningly easy the last 15 years or so to forget they [nuclear weapons] exist.

Many participants assumed that the threat disappeared when the Cold War ended. While rogue actors were seen as posing a current nuclear threat, influencers reasoned that the danger of conventional nuclear war and the threat of nuclear weapons has diminished dramatically.

Researcher: Do you think that nuclear war is a threat today?

Participant: **I don't think so, no.** I think the world moved beyond that. [...] For nuclear war to really be viable, you have to have the two powers that could really fight it out. And there's not really a need for that. It's pretty much the US controls the arsenal. Yes, Russia has a lot of nukes still, but it's an order of magnitude fewer than we had at the height. And the propensity to use them—it's just not up in anybody's mind.

—

Participant: And I think it's been fairly benign, I think, through the Reagan years coming to terms with the Soviet Union and effectively the falling apart of the Soviet Union to Russia. I don't lose sleep over that. Putin is not that crazy, no one is that crazy. I think it's the rogue nation that you have to worry about.

2. The *Unthinkable* Cultural Model. Even though the level of concern about nuclear issues was low, influencers did concede that nuclear threat does in fact exist. The typical response to these perceived threats was *denial and avoidance*. People saw the consequences as so unthinkable that they psychologically distanced themselves from the threat by glossing over the dangers and “hoping” for the best.²⁰

Participant: I don't have any concern. I think we are pretty safe, but I could be blinded. Since I don't see any issues in front of me, and maybe they are hidden, but I don't have any concerns. **Hopefully I'm right.**

Participant: Yeah. I would go as far as to say **I hope they don't blow us all up.** But I don't give it much more thought than that.

This denial and avoidance is illustrated in the following excerpt. The participant initially says he is “absolutely not” worried about a major nuclear event and, when confronted with the possibility of such an

event, explicitly puts it out of his mind (“I try not to think about it”). This leads him directly into fatalistic, passive thinking about how he would manage the situation.

Participant: Do I worry about [nuclear events] every day, that something is going to happen, or World War III? **No, absolutely not.** But when you hear some conflict, you say, “What if this did happen?” and that’s a scenario that runs through your mind. A bigger picture, not [an] everyday thing, kind of bigger picture stuff.

Researcher: I’m curious, when a scenario like that does run through your mind on those rare occasions, what goes through your mind? How do you make sense of it?

Participant: **I try not to think about it.** But something like that would be pretty awful. But you know you play the cards, you know the hand you are dealt and the cards you are dealt, and if that’s what happens, that’s what happens. That’s not the road everyone wants to go down, but you kind of make the best of the situation, and if that was presented, you know, you do what you have to do.

3. The *Tipping Point* Cultural Model. In reasoning about involvement in nuclear issues, influencers explained that meaningful action on nuclear issues will require “something truly terrible to happen.” For engagement in this issue to increase, there would need to be an event so horrible and life-changing that its importance and relevance would be impossible to deny. The assumption here is that a meaningful move toward disarmament requires the severity and immediacy of the issue to hit a “tipping point.”

Researcher: [D]o you think that even if things are moving slowly, they could move to the point where we would see kind of a world that’s safer in terms of nuclear capability?

Participant: Something bad has got to happen before I think we’d see that. Um, boy, you’d have to have a nuclear disaster on a global scale worse than, was it Fukushima? Where that was, from a global perspective, a pretty limited incident. You would have to have something that would result in a radioactive cloud that circles the globe. **So unfortunately, I think humans have to learn the hard way.**

The *Tipping Point* model also reinforces fatalistic attitudes. If global action to get rid of nuclear weapons can only happen after a major catastrophe, then, people wonder, what is the point of engaging now?

4. The *Bread and Butter* Cultural Model. People think of nuclear issues as too big and specialized for ordinary people to affect; experts and world leaders, they think, must take the lead in regulating and controlling them. As a result, influencers rarely thought of nuclear issues as a cause that was worth their effort, and they assigned nuclear issues a very low priority ranking compared to other issues.

Researcher: [A woman’s right to choose, gay marriage, ending the drug wars, reforming student debt] are all big issues, for sure. How would you rank nuclear disarmament in relation to those?

Participant: [Laughter]

Researcher: I can guess your answer, but—

Participant: **So, if I rank all of those in rank of importance of 1 through 5, then put nuclear disarmament at 20.**

—

Researcher: So, compared to these issues of education and technology, how would you rank nuclear disarmament in importance?

Participant: I guess I'd rank it somewhere lower, because **I think it's already trending the right way. I feel like we can leave it alone, and it'll end up in a good place.** I don't think we can leave global education and information proliferation alone. That's not happening quickly enough. It needs some world help.

Influencers give nuclear issues a low rank for reasons related to the cultural models discussed above. They also believe that their energy is best spent on “bread-and-butter” issues where their involvement stands a chance of changing outcomes. They assumed that their energy and influence is best used on issues that affect people's everyday lives in tangible ways and where there are clear steps they can take to make a difference. This latter assumption is explicit in the following excerpt.

Participant: I guess the difference is that the other issues I feel that I can contribute to. **Nuclear disarmament is so far outside of what I feel I can influence.** And I'm sure if I were more educated on the topic, I could give a different answer. Uh, but for me, you know, the environment is really the top priority.

Recommendation: Communicators must frame disarmament as a current issue across communications. People have a strong tendency to situate the danger of nuclear war and, in turn, of nuclear disarmament, as a cause that has lost its relevance. Communicators must find ways to position these issues as *current* and contemporary. This will likely require explaining that the threat of conventional nuclear war has not disappeared and helping people see how disarmament would actually work in today's world. Outlining the innovative steps that are possible *today* will help people see nuclear disarmament as a real option today. Communicators should avoid historic examples or messages that look back in time or chart the course of nuclear issues through history to prevent inadvertent activation of this way of thinking.

Recommendation: Communicators should place a high priority on building a sense of urgency and efficacy around nuclear issues. They must communicate that these issues are pressing, but solvable, problems. There are multiple cultural models that come together to structure and reinforce disengagement. This lack of engagement does not appear to result from a lack of awareness. Rather, it appears to be caused by a lack of interest and low levels of personal efficacy. Communicators, therefore, need to take a two-pronged approach: They need to help people see the urgency of this set of issues and, at the same time, foster the belief that involvement

can lead to serious change. Further research is needed to fully understand how to make the dangers of nuclear weapons real and tangible without triggering psychological distancing. In addition, they must lay out clear action steps—pathways for engagement that help people recognize that public action on this issue *is* possible and that it *can* make a difference.

This research shows that influencers are ready and willing to take on many of the most complex and overwhelming challenges of our time—issues like income inequality, equity in education, and climate change. Yet they are unmotivated to take up the cause of nuclear disarmament. This unwillingness is a natural extension of the cultural models discussed in this research. Without major shifts in how influencers understand nuclear issues, it will be difficult to encourage them to take up this cause.

IV. An Emerging Framing Strategy and Questions for Future Research

The research described here yields a set of implications and recommendations for those communicating on nuclear issues. It also generates specific questions that must be empirically tested in order to create a more comprehensive strategy for building public demand for nuclear disarmament and driving the willingness of influencers to engage on these issues.

We end with a distillation of the initial recommendations that emerge from this research and the most pressing questions that communications research must answer. It is important to note that, as is evident in the questions that follow, these strategies require additional testing.

- **Avoid description; develop explanation.** Communicators need to go beyond describing the problem and explain *why* nuclear disarmament is an important issue and *how* solutions can improve outcomes.
- **Avoid problem-based messaging; focus on solutions.** While communicators should not give up on communicating the problem posed by nuclear issues, they should focus on developing strong solutions messages. People need to be able see this issue as both urgent and solvable.
- **Avoid assigning responsibility exclusively to government and state actors, and instead build the case for public responsibility and the need for wide engagement.** Responsibility on nuclear issues is easy to assign to government. But such assignments allow people to easily push these issues out of mind and disengage. Turning nuclear issues into public issues will require that people have a more robust and detailed understanding of their responsibility and role in addressing these issues.
- **Avoid history and the past; make nuclear issues current issues.** Forward-facing values such as innovation and progress hold particular promise in overcoming one of the main impediments to engagement: people's sense that nuclear concerns ended with the Cold War.
- **Avoid the trap of framing individual leaders as maniacs and irrational agents; instead, communicate that nation-states are part of an international system with rules and regulations and where rationality drives action.**
- **Avoid crisis and disaster talk; foster efficacy through pragmatism.** As with other social issues, overusing a crisis frame increases fatalistic attitudes and nurtures "crisis fatigue."

- **Avoid leading with total disarmament; open the door with a conversation about weapons.** People’s unwillingness to envision complete disarmament suggests that, despite the importance of this goal, beginning conversations with this idea will shut down thinking and prevent engagement with messages and the nuclear issue more generally. Consider opening the door with discussions about the importance of and our ability to reduce nuclear weapons, and then progress to discussions of complete disarmament.

The following questions emerge directly from the cultural models research. Conducting empirical work to answer these questions is an important next step in developing a comprehensive and effective communications strategy.

1. **Does focusing on the “danger” of nuclear weapons and energy backfire by reinforcing fatalism and undermining engagement?** People already recognize that nuclear weapons and energy are dangerous, and the typical responses to this are either despair or avoidance and denial. Messages that focus on the devastating effects of nuclear events may simply reinforce these responses.
2. **Does talk of “rogue” regimes and actors increase fatalism and undermine engagement?** Because the public thinks of “rogue” actors as irrational and incomprehensible, triggering this way of thinking in conversations about nuclear threat is highly likely to reinforce fatalism. After all, how can maniacs be managed? This language lowers people’s concern about the issue, since it reinforces the assumption that nuclear threats only arise from rare and exceptional outliers in the state system.
3. **Does talking about incentives and motivations help people think constructively about solutions?** Focusing on the motivations and interests of relevant parties should suppress unproductive thinking about “crazy” people and help people reason constructively about how possible solutions might achieve disarmament by engaging key actors.
4. **Do frames that highlight the moment of launching nuclear weapons (e.g., “pressing the button”) make it hard for people to understand solutions?** The focus on the instantaneous decision is likely to divert attention from both the everyday harm caused by nuclear weapons (e.g., deteriorating weapons, toxic waste) and the ability of systems and policies to protect against risk.
5. **Does explaining how institutions might help coordinate disarmament shift perceptions of the feasibility of disarmament?** Providing people with a concrete understanding of the types of steps that can be taken should help people see that disarmament is viable and should shift thinking into a problem-solving mode.
6. **Do explicit assertions that nuclear weapons are not deterrents change public thinking?** People are likely to resist such assertions given the existence of a strong, consistent, and deep model of deterrence, which is reinforced by common use of the *Nuclear Weapons as Guns* model.

7. **Does explaining how disarmament will improve safety and security increase support for disarmament?** This could help people overcome the assumption, grounded in the *Deterrence* model, that disarmament would undermine security and is thus unwise.
8. **Does framing nuclear disarmament as a current issue and linking it with progress help counter fatalism?** Countering the widespread assumption that we cannot “turn back the clock” on nuclear proliferation will require positioning the issue in the present and helping people see the possibility of new, innovative ways of addressing it.
9. **Does reframing nuclear disarmament as a “bread-and-butter” issue help generate engagement?** Identifying effective ways to help people see the significance of nuclear weapons and practical steps they can take to mitigate nuclear threats will generate influencers’ engagement.

V. Conclusion

The public does not consider nuclear disarmament a pressing social concern. People are alternately disinterested, scared, in denial, and fatalistic about the threats nuclear weapons pose in today's world. Proponents of nuclear disarmament must overcome these challenges if they are to raise the salience of this issue. The good news: There is a clear path forward.

The recommendations and questions that emerge from this research provide the contours of an initial strategy to more effectively engage the public and involve influencers in this important cause, and they offer a clear starting point for future research. Empirical prescriptive framing research can develop and test specific framing tools to generate greater understanding of nuclear issues, increase concern, boost public support for possible solutions, and motivate people to take action to advance the cause and come up with new solutions.

Nuclear issues are not of the past. They are very much of the present and the future, and they deserve the full attention of creative and influential activists. Changing the story we tell about them will enable us to take the first step toward reinvigorating the public's commitment to a safe and secure world.



About the FrameWorks Institute

The FrameWorks Institute is an independent nonprofit organization founded in 1999 to advance science-based communications research and practice. FrameWorks conducts original, multi-method research to identify the communications strategies that will advance public understanding of social problems and improve public support for remedial policies. FrameWorks' work also includes teaching the nonprofit sector how to apply these science-based communications strategies in their work for social change. FrameWorks publishes its research and recommendations, as well as toolkits and other products for the nonprofit sector, at www.frameworksinstitute.org.

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Endnotes

¹ On cultural models, see Quinn, N., & Holland, D. (1987). Culture and cognition. In D. Holland & N. Quinn (Eds.), *Cultural models in language and thought* (pp. 3–40). Cambridge: Cambridge University Press. The cultural-cognitive perspective of this report is intended as a complement to the years of historical research, political analysis, and cultural criticism that have illuminated many aspects of this important issue (see, e.g., Ward Wilson’s important work on understanding disengagement over time).

² See Polsby, N., & Wildavsky, A. (1988). *Presidential elections* (7th ed.). New York, NY: The Free Press; Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. Chicago, IL: University of Chicago Press.

³ See, for example: Bostrom, M. (2005). *Educating, not advocating: An analysis of qualitative research exploring public and policymaker views of early childhood policy: Arizona case study*. Washington, DC: FrameWorks Institute.

⁴ See Quinn, N. (Ed.). (2005). *Finding culture in talk: A collection of methods*. New York, NY: Palgrave Macmillan.

⁵ See, for a useful introduction: Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage.

⁶ The excerpts included in this report have been lightly edited to improve readability. Researchers worked with the original, verbatim transcripts. Also, it is important to note that the excerpts included here are intended simply to help illustrate the cultural models discussed—the analysis was conducted based on hundreds of pages of interview data, including thousands of utterances. Cultural models were determined based on evidence across this large set of data—not a single quote.

⁷ On this point, our research dovetails cleanly with Ward Wilson’s argument (“Why are there no big nuke protests?”) that emphasizing dangers is likely to be an ineffective strategy to pursue.

⁸ In the interviews, participants were asked about both nuclear “energy” and nuclear “power.” Generally, participants understood “power” and “energy” to mean the same thing: a resource that facilitates modern life.

⁹ See, e.g., FrameWorks’ work on climate change: Volmert, A., Baran, M., Kendall-Taylor, N., Lindland, E., Haydon, A., Arvizu, S., & Buntin, A. (2013). *“Just the Earth doing its own thing”: Mapping the gaps between expert and public understandings of oceans and climate change*. Washington, DC: FrameWorks Institute.

¹⁰ In other words, the ability to avoid the skepticism that is so problematic on myriad other social issues (e.g., climate change) is an advantage.

¹¹ FrameWorks’ research has, for example, found strong *Us vs. Them* patterns in public thinking about immigrants, older people, and stigmatized populations (e.g., people suffering from addictions, mental health issues, etc.). In addition, a 2009 report produced by the Topos Partnership for the Union of Concerned Scientists (*From asset to liability: Developing a Message Strategy on Nuclear Weapons*) similarly found *Us vs. Them* thinking to be strongly active in the public’s understanding of nuclear issues.

¹² See FrameWorks’ work on government, e.g., Davey, L. & Bales, S. (2010). *How to talk about budgets and taxes: A FrameWorks message memo*. Washington, DC: FrameWorks Institute; Aubrun, A., & Grady, J. (2004). *Mind and monolith: Findings from cognitive interviews about government*. Washington, DC: FrameWorks Institute.

¹³ FrameWorks’ research has documented this pattern of thinking across multiple issue areas.

¹⁴ Although some participants thought that having nuclear weapons for protection makes sense, see also the *Deterrence* cultural model, which structures thinking on this topic.

¹⁵ The public’s fatalism has been noted in other work on nuclear issues. See, e.g., Wilson, W. (2013). *Five myths about nuclear weapons*. New York: Mariner.

¹⁶ See Lakoff, G., & Johnson, M. (2008). *Metaphors we live by*. Chicago, IL: University of Chicago Press.

¹⁷ See also Wilson, W. (2013). *Five myths about nuclear weapons*. New York: Mariner.

¹⁸ Interestingly, the 2009 report produced by the Topos Partnership for the Union of Concerned Scientists (*From asset to liability: Developing a Message Strategy on Nuclear Weapons*) found a similar analogy to guns, with similarly expressive quotes (e.g., “knife at a gun fight”), though our interpretation and recommendation of the use of this model differs from that offered in the 2009 report.

¹⁹ See Pew Research tracking data: <http://www.pewresearch.org/data-trend/domestic-issues/gun-control/>

²⁰ For additional work on the public’s avoidance of issues that represent major threats, see for example: van der Linden, S. (2012). *Understanding and achieving behavioural change: Towards a new model for communicating information about climate change*. London, England: London School of Economics and Political Science, Grantham Research Institute on Climate Change and the Environment.