The Game Theory of Terrorism: How ISIS Radicalizes Others

Jacob Olidort

Foreign Affairs

December 10, 2015

Washington has an abundance of information about the group's ideology, targets, and media campaigns, but the challenge lies in figuring out what to do with all the data, both strategically and militarily.

At what point does an extremist become a violent extremist? As the world -- wakened by the recent terrorist attacks in Baghdad, Beirut, Paris, and now in California and London, too -- struggles to defeat the Islamic State (also called ISIS), the answer is more important than ever.

For his part, U.S. President Barack Obama has tried to solve the puzzle by introducing a new ingredient to the counterterrorism recipe. In February 2015, he gathered the world's top experts for a summit on countering violent extremism, a new strategy designed to address the process of radicalization -- in particular, ISIS' apparently unmatched ability to recruit across linguistic, cultural, and geographic boundaries through social media.

Countering violent extremism is different in approach from the one that analysts and policymakers took with al Qaeda. Where they once hunted down operatives and leaders in the top echelons of terrorist organizations, they now also look for so-called influencers and study how, precisely, they incite individuals to violence. Consequently, U.S. counterterrorism has moved from a purely operations-centered strategy -- for example, assassinating al Qaeda leaders or what the media calls "cutting off the snake's head" -- to analyzing what the Department of Homeland Security describes as "the dynamics of radicalization to violence" or the reasons why some individuals associated with violent extremism commit violence and others do not. This new perspective has roped in government bodies, activists, and data scientists who not only analyze terrorist social networks and messaging patterns, but also transmit counter-extremist narratives.

As a result, Washington certainly has an abundance of information about ISIS' ideology, targets, messages, and media campaigns. But the challenge, it seems, is figuring out what to do with all the data. The Washington Post recently revealed that the U.S. State Department's Center for Strategic Counterterrorism Communications is rethinking its counter-messaging strategy after an outside panel gave it poor marks on effectiveness. Although the White House's summit on countering violent extremism in February admirably paved the way for the U.S. State Department and other agencies to begin collaborating with regional partners to tackle locally bred extremism -- cultivating grassroots knowledge and empowering local, moderate voices -- the local focus risks overlooking the possibility of more salient transregional ideologies that radicalize to violence. Similarly, although they deserve much credit for building partnerships with local communities, domestically oriented programs for countering violent extremism tend to focus disproportionately on mental health and economic factors. These may account for some degree of social estrangement, but they too overlook the exceptional nature of ISIS' ideological radicalization to violence. In short, our countering violent extremism policies do little, if anything, to address the very root cause and means of ISIS' radicalization to violence -- its ideology.

To enhance the countering violent extremism project and stop ISIS recruitment, Washington should look to game theory.

THE SCHELLING POINTS OF RADICALIZATION

In 1960, at the height of the Cold War, Nobel Prize-winning American economist Thomas Schelling introduced the world to his "theory of strategy," an adaptation of game theory to the world of international relations. In his book The Strategy of Conflict, Schelling coined the concept of a "focal point" (now known as a "Schelling point") to describe how individuals and nations reach an agreement when bargaining with each other. The process involves anticipating what the other person or country might do. To demonstrate, in the 1950s, Schelling asked a group of students to pick a place in New York City where they could meet a stranger without having coordinated a place and time beforehand. Without knowing what any of the other students said, most of them not only picked the information booths at Grand Central Station, but nearly all chose to arrive at noon.

Schelling later conducted a second experiment. He gave a group of people sheets of paper with 16 squares. He promised a prize if they all checked the same box. Statistically speaking, only six percent should have checked the same one. In reality, 60 percent checked the top left square. This means that people can reach the same conclusion when properly motivated without having even spoken to one another.
Although Schelling certainly could not have foreseen the application of this idea to defeating ISIS, it is eerily appropriate. If we apply the 16 squares scenario with radicalization, what we are trying to prevent is, in effect, this "psychic moment," as Schelling calls it, when likeminded individuals all come to check the same box: engage in terrorism. Around 20,000 plus foreign fighters, many of whom grew up in prosperous, democratic countries, have already done so.

In Schelling's theory, these individuals would have made their decision through "rational behavior...based on an explicit and internally consistent value system." For jihadists, that value system is Salafism. Given the fact that most of the world's Salafis are not violent, however, it cannot be the Salafi ideology alone that encourages violence. Moreover, given that ISIS disseminates a good deal of nonviolent messaging -- it recently released its own set of textbooks on geography, history, and Arabic poetry for a course to "educate" future jihadists -- it is not violence alone that attracts individuals to its worldview.

It is, rather, ISIS' ability to sell and validate its worldview in light of distinct circumstances that Muslim communities either experience or observe. Specifically, for both those socially and economically disenfranchised by life in the developed world, as well as for those experiencing or witnessing the violent unrest in Syria, ISIS offers the promise of a tranquil and authentic Islamic state, full of opportunity for those who accept its authority. The brutality and sectarian nature of the Shiite-Alawite regime of Syrian President Bashar al-Assad further buttresses ISIS' cause because it validates its claims that only its Sunni worldview is just and fair. Indeed, the group's carefully curated magazine, *Dabiq*, consistently juxtaposes pictures and stories of ISIS providing for its people (i.e., medical care to children, repairing bridges and roads, etc.) with profiles of fighters who were killed, allegedly in defense of such projects.

Essentially, those who buy into ISIS' worldview opt for terrorism not as an ends, but rather as a means for joining a cause in which they can find both physical and spiritual fulfillment. Schelling himself noted in 1980 that "terrorism is contagiously suggestive and furthermore looks easier the more there is of it." In addition, as terrorism grows locally, Schelling asserts, "the easier it is to get away with it because counterterrorist forces are overextended and 'saturated.'"

**DECONSTRUCTING THE RADICAL FRAME**

But ideology alone doesn't draw recruits to Syria. If the West is serious about preventing a "focal point of radicalization" from ever being created, it will not be enough to counter the ISIS narrative. That is because theoretically, focal points need a foundation -- after all, to check the same box among 16, there first needs to be a grid, or what British economist Michael Bacharach calls a "frame." He has contributed greatly to game theory by explaining how frames lead to the creation of Schelling points. He defines a frame as "the set of concepts or predicates an agent uses in thinking about the world." In the case of ISIS recruitment, then, the task at hand is not simply to refute ISIS propaganda, but to prevent a potential recruit from setting up this frame.

ISIS helps construct this frame in two ways. It offers material enticements (concubines, money) and ideological ones -- the promise of a society based on a highly rigid strand of Sunnism whose principal appeal is its claim of truly representing the vision of the Prophet Muhammad. It has shown it can deliver on both. It has quickly overtaken large swaths of territory in Iraq and Syria and enacted its version of sharia. It has earned hundreds of millions of dollars through oil sales, ransoms, the selling of looted artifacts, and taxes, just to name a few of the group's methods.

However, when this frame fails, it also becomes the principal catalyst for driving potential recruits away from ISIS. Indeed, the *New York Times* recently revealed in an article titled "Promise of Statehood Falling Far Short" that former "citizens" of the Islamic State were disgruntled by the group's excessive taxes, inability to pay its fighters, and the closure of hospitals and schools since they were "stresses [that] could provide opportunities for the group's many enemies." If we consider the promise of a functioning and fair Islamic state to be a frame for recruits to arrive at the focal point of terrorism, then the West could chip away at this frame by further crippling ISIS' governance abilities. From the perspective of countering violent extremism, this objective can be achieved operationally rather than rhetorically, by stopping cash flow and disrupting access to natural resources.

Essentially, these tactics increase the "stresses" on the functions of the state and prevent the realities on the ground from validating their narrative.

But the Western world also helps in erecting frames. In 2013, Obama put a red line on Syrian President Bashar al-Assad's use of chemical weapons. When it was discovered a few months later in August that Assad had, in fact, used chemical weapons, the United States decided not to do anything. Salafi-jihadists perceived the move as tacit approval of Assad's oppression of Syrian Sunnis. In the fourth issue of *Dabiq*, released in September 2014, the group featured a lengthy story on Washington's support for the Shiite-majority Iran titled "The crusade serving Iran and Russia." The article also cited how the Assad regime has "managed to 'hide' chemical weapons from the developed world, as well as for those experiencing or witnessing the violent unrest in Syria, ISIS offers the promise of a tranquil and authentic Islamic state, full of opportunity for those who accept its authority. The brutality and sectarian nature of the Shiite-Alawite regime of Syrian President Bashar al-Assad further buttresses ISIS' cause because it validates its claims that only its Sunni worldview is just and fair. Indeed, the group's carefully curated magazine, *Dabiq*, consistently juxtaposes pictures and stories of ISIS providing for its people (i.e., medical care to children, repairing bridges and roads, etc.) with profiles of fighters who were killed, allegedly in defense of such projects.

Essentially, those who buy into ISIS' worldview opt for terrorism not as an ends, but rather as a means for joining a cause in which they can find both physical and spiritual fulfillment. Schelling himself noted in 1980 that "terrorism is contagiously suggestive and furthermore looks easier the more there is of it." In addition, as terrorism grows locally, Schelling asserts, "the easier it is to get away with it because counterterrorist forces are overextended and 'saturated.'"

**DECONSTRUCTING THE RADICAL FRAME**

But ideology alone doesn't draw recruits to Syria. If the West is serious about preventing a "focal point of radicalization" from ever being created, it will not be enough to counter the ISIS narrative. That is because theoretically, focal points need a foundation -- after all, to check the same box among 16, there first needs to be a grid, or what British economist Michael Bacharach calls a "frame." He has contributed greatly to game theory by explaining how frames lead to the creation of Schelling points. He defines a frame as "the set of concepts or predicates an agent uses in thinking about the world." In the case of ISIS recruitment, then, the task at hand is not simply to refute ISIS propaganda, but to prevent a potential recruit from setting up this frame.

ISIS helps construct this frame in two ways. It offers material enticements (concubines, money) and ideological ones -- the promise of a society based on a highly rigid strand of Sunnism whose principal appeal is its claim of truly representing the vision of the Prophet Muhammad. It has shown it can deliver on both. It has quickly overtaken large swaths of territory in Iraq and Syria and enacted its version of sharia. It has earned hundreds of millions of dollars through oil sales, ransoms, the selling of looted artifacts, and taxes, just to name a few of the group's methods.

However, when this frame fails, it also becomes the principal catalyst for driving potential recruits away from ISIS. Indeed, the *New York Times* recently revealed in an article titled "Promise of Statehood Falling Far Short" that former "citizens" of the Islamic State were disgruntled by the group's excessive taxes, inability to pay its fighters, and the closure of hospitals and schools since they were "stresses [that] could provide opportunities for the group's many enemies." If we consider the promise of a functioning and fair Islamic state to be a frame for recruits to arrive at the focal point of terrorism, then the West could chip away at this frame by further crippling ISIS' governance abilities. From the perspective of countering violent extremism, this objective can be achieved operationally rather than rhetorically, by stopping cash flow and disrupting access to natural resources.

Essentially, these tactics increase the "stresses" on the functions of the state and prevent the realities on the ground from validating their narrative.

But the Western world also helps in erecting frames. In 2013, Obama put a red line on Syrian President Bashar al-Assad's use of chemical weapons. When it was discovered a few months later in August that Assad had, in fact, used chemical weapons, the United States decided not to do anything. Salafi-jihadists perceived the move as tacit approval of Assad's oppression of Syrian Sunnis. In the fourth issue of *Dabiq*, released in September 2014, the group featured a lengthy story on Washington's support for the Shiite-majority Iran titled "The crusade serving Iran and Russia." The article also cited how the Assad regime has "managed to 'hide' chemical weapons from the developed world, as well as for those experiencing or witnessing the violent unrest in Syria, ISIS offers the promise of a tranquil and authentic Islamic state, full of opportunity for those who accept its authority. The brutality and sectarian nature of the Shiite-Alawite regime of Syrian President Bashar al-Assad further buttresses ISIS' cause because it validates its claims that only its Sunni worldview is just and fair. Indeed, the group's carefully curated magazine, *Dabiq*, consistently juxtaposes pictures and stories of ISIS providing for its people (i.e., medical care to children, repairing bridges and roads, etc.) with profiles of fighters who were killed, allegedly in defense of such projects.

Essentially, those who buy into ISIS' worldview opt for terrorism not as an ends, but rather as a means for joining a cause in which they can find both physical and spiritual fulfillment. Schelling himself noted in 1980 that "terrorism is contagiously suggestive and furthermore looks easier the more there is of it." In addition, as terrorism grows locally, Schelling asserts, "the easier it is to get away with it because counterterrorist forces are overextended and 'saturated.'"
As Bacharach explains this “is a story of the progressive internalization of these externalities.” This internalization, as Bacharach explains, could involve “a tendency to feel shame at failing to do the acts in question, especially when the failure is observed by others.” When the Assad regime used chemical weapons against its own people, this may have led potential jihadists in internalizing this situation. When ISIS entered the scene, it provided a Sunni call to arms and enabled potential recruits to externalize their frustrations.

A policy of striking at the heart of ISIS recruitment should involve not only countering the ideology, but rather, rewriting the narrative of events. The aim in doing so should be preventing two “psychic moments” from taking place among would-be jihadists: first, the framing of regional conflicts in sectarian terms and, second, the perception that ISIS is the solution to these conflicts. To accomplish both, the West must form a strategy that empowers local actors who want to rebuild stable, inter-sectarian states (and these voices do still exist) and, simultaneously, continue to destroy ISIS’ infrastructure and state capabilities. Doing both would show not only that ISIS’ narrative is inauthentic, but also that in practice, it is unrealistic. While no partnerships should be made unconditionally, and while no effective strategy on the ground will definitively eliminate the threat of terrorism, an inclusionary approach -- one that engages local groups committed to defeating ISIS -- may be the most vivid, if not realistic way to eliminate ISIS’ focal points of radicalization.

Jacob Olidort is a Soref Fellow at The Washington Institute. All statements of fact, opinion, or analysis expressed are those of the author and do not reflect the official positions or views of the U.S. government.

This article was originally published on the Foreign Affairs website.