# The Unified Strategy of Religious Extremists: Military Power and Ideological Appeals

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#### Abstract

Religious extremism is the dominant ideology among contemporary violent non-state actors. However, we know little about religious extremists' strategy in making ideological appeals. This paper studies jihadi groups' ideologies as reflected in propaganda and shows that these groups shift on a "religious vs. secular" spectrum according to the waxing and waning of their military power. Weaker groups must prioritize their core fanatic believers and foreground a more radical religious ideal, while stronger groups seek broader support from more moderate individuals and thus pitch themselves more secularly. I illustrate this dynamic with an original database of 84 magazines published regularly by 38 jihadi groups from 1984 to 2019. Further, I leverage approximately 6 million tweets from 21,000 ISIS-related accounts in 2015 to examine the jihadists' mobilization efforts regarding different audiences. Overall, in sharp contrast to the prevailing view that radical jihadi ideology and violence are bound together, I demonstrate that groups rhetorically emphasize religion when they carry out fewer attacks.

**Word Count:** 11,606

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Religious extremism is prevalent in contemporary civil conflict and has ignited the current wave of terrorism on a global scale, causing more deaths than their non-religious counterparts (Gaibulloev and Sandler 2019; Piazza 2009a; Toft 2007; Walter 2017b). Radical Islamists, in particular, call for a transnational caliphate ruled by Shari'a law and have garnered the response of fanatical believers from around the world (Mitts 2019). This extreme religious outlook concerns many, to whom it is an ideological challenge to secular societies as well as a driver of violence (Gomaa 2013). These popular concerns highlight the importance of studying extremists' ideological promotion efforts. Correspondingly, scholarly knowledge regarding these religious sectarians has shifted from assuming they are single-minded believers who persistently advanced their religious agenda to regarding them as political entrepreneurs who strategically exploit their religious identity (Carvalho 2019; Walter 2017a). This shift, however, has left a more important question: given that religious extremists are notorious for their violent attacks, how does their ideological emphasis change in relation to their military fortunes?

This paper examines jihadi groups' ideological appeals in the form of propaganda and theorizes that weaker military power necessitates more religious messaging while stronger military power brings more tolerance of secularism.<sup>2</sup> Groups with limited resources or facing setbacks appear to be steadfast in their theological doctrines because they need to secure their core members by stoking their beliefs in, for example, "afterlife" and "immortality." Conversely, groups of higher capacity resort to more secular narratives to appeal to a wider and more moderate audience. Therefore, jihadists promote their extreme religious doctrine in a somewhat counterintuitive manner: they display their religious brand as a "weapon of the weak" but move away from this ideological standpoint as they become stronger and more

<sup>&</sup>lt;sup>1</sup>The current wave is considered the fourth. The first was anarchist (1878-1919), the second anti-colonial (1920 to 1960), the third Marxist or new left (1960-1979), and the fourth religious (1979-present) (Rapoport 2004).

<sup>&</sup>lt;sup>2</sup>In this paper, the term "jihadi" exclusively refers to Sunni extremists. Shi'a extremists are termed as "muqawamist," and they generally have a less violent impact than Sunni extremists.

<sup>&</sup>lt;sup>3</sup>While beliefs in afterlife and immortality are common among many religions, jihadi groups attach these beliefs to a set of tyrannical rules. The vast majority of Muslims reject the heterodox version of Islam they espouse.

visible.<sup>4</sup> In the spirit of Walter (2017a), I regard a group's adoption of a certain ideological position as a mix of strategic choice and sincere belief. I also go one step further and connect two essential parts of group strategy—violent attacks and ideological propaganda—within a unified framework, while existing literature mostly studies one of the two in isolation.

I illustrate the unified strategy of religious extremists using an original database of jihadist periodicals, which covers 84 regularly released magazines from 38 jihadi groups in 11 different languages, with dates of publication spanning 1984 to 2019 (mostly after 2010). To measure groups' ideological appeals, I develop a customized dictionary of religious and secular words and scale each magazine page on a "religiosity vs. secularism" spectrum. To measure groups' military power, I first integrate group-specific violent events from the Uppsala Conflict Data Program-Georeferenced Event Dataset (UCDP-GED) and the Global Terrorism Database (GTD) as suggested by Donnay and coauthors (2018) and then derive several indicators of group power—total violent events, state-based battles, and casualties caused by the group—each validated against territorial control data. I then tie the religious appeal measure calculated from propaganda to the measures of military power and show that group weakness subsequently leads to a higher proportion of radical religious rhetoric in groups' propaganda, and vice versa. This negative relationship between group strength and religious rhetoric holds cross-sectionally across groups as well as within specific groups over time. These findings do not hold, as expected, in the placebo tests where I use a group's future military power to predict its past ideological appeals. To further substantiate the argument that the change in groups' ideological appeals is their strategic move relative to their external audience, I leverage a collection of jihadist leaked internal documents to conduct an additional placebo test. These documents were circulated within the leadership communities of 10 jihadi groups from 1990 to 2011 but later captured by US forces and declassified by the Combating Terrorism Center at West Point. I match these internal documents with the magazines by group and time and show that groups change ideological positions only in

<sup>&</sup>lt;sup>4</sup>The term "weapon of the weak" was originally introduced to conceptualize terrorism (e.g., Crenshaw 1981).

their public propaganda (i.e., magazines), not in their non-public documents (i.e., internal documents). Moreover, I supplement these results with a sentiment analysis. This analysis directly measures the attitude in the propaganda materials and shows that a jihadi group's secular narrative becomes more positive as it grows stronger, implying more tolerance of secularism.

While analyses of jihadist magazines show that groups emphasize their religious nature more when they are weaker, I further analyze the groups' social media to show how different group propaganda strategies connect to their core members or more moderate potential members. Specifically, I use a database containing more than 6 million Twitter posts in 2015 from over 21,000 unique accounts associated with the Islamic State of Iraq and Syria (ISIS), arguably the most influential extant jihadi group. Using the dictionary developed above, I again calculate a "religiosity score" for each tweet. Apart from illustrating that ISIS made different ideological appeals according to its military power, I further show that ISIS more actively reached out to people outside of its existing network (measured by "@", i.e., explicit mentions) when stronger. This effort of coordinating with more moderate potential members, then, associates with more secular rhetoric. Additionally, I confirm that those reading the tweets who are core members are much more likely to retweet messages with higher religiosity scores than those who are peripheral or non-members.

This paper makes several contributions to the large and long-standing literature on political violence and civil conflict, as well as the small but growing literature on jihadi propaganda. While scholars have started to analyze the rationale behind radical organizations embracing extreme ideologies (Berman 2011; Iannaccone 1992; Walter 2017a), I further theorize over these ideological decisions in relation to the battlefield realities. In sharp contrast to popular views that bind Islamism and violence together, I provide systematic, quantitative evidence that religion is most emphasized when radicals commit the least attacks. This finding then highlights an urgent need to shift scholarly and policy attention from a unique focus on extremists' violent activities to a more balanced strategy that takes into

account their ideological appeals, particularly through media. Although this paper focuses on radical Islamists, the theory that these groups shift rhetorical emphases on their ideological spectrum has profound implications for studies on other radical and violent movements, particularly those having a religious root, such as Aum Shinrikyo in Japan and the far-right white supremacists in the United States.

# Islamism and Jihadist Movements

Jihadist movements demand a unified Islamic society where Shari'a is the constitutional foundation. This utopian outlook follows a long tradition of Islamic thinking stemming at least from the Ottoman Empire (Feldman 2012). In the Islamists' ideals religion rules almost every aspect of society, from building a global Islamic caliphate to praying for inner peace at home (Bonner 2008). While it seems a totalistic world order to many, this utopia is considered the solution to all existing societal problems by its advocates. Therefore, voices calling for a return to Islam have never stopped throughout the twentieth century (Feldman 2012, 20). Since 1979, with the Iranian Revolution, these calls have been increasingly answered with violence due to the intensified conflict between Islamism and Westernization and that between Shi'a and Sunni (Hegghammer 2010).<sup>5</sup> The religious principle of takfir (i.e., excommunication from Islam of one Muslim by another) became an authorization for some jihadists to kill dissenters of their movements and thus, simultaneously, the word "jihad" took on the connotation of "fighting" (Stern and Berger 2016). These ideological impulses drove individuals to join a jihadist revolution, which quickly expanded to a global scale and characterized the fourth (i.e., the most recent) wave of terrorism (Rapoport 2004, 2006; Shughart 2006). Religiously oriented violent groups and, particularly, jihadi groups are not only the most common type to emerge after 2001 but also the most lethal (Berman 2011; Gaibulloev and Sandler 2019; Piazza 2009a; Toft 2007).

<sup>&</sup>lt;sup>5</sup>Besides the Iranian Revolution, the new Islamic century and the Soviet invasion of Afghanistan are also catalysts for the bulk of religious violent movements.

At the core of jihadism is the tension between religiosity and secularism (Blaydes and Linzer 2012). In principle, jihadist movements place religiosity over secularism and even dichotomize the world into "one of faith [and] the other of unbelief" (Bin Laden 2005, 103). For that reason, jihadists explicitly fight against democracy because they believe the idea that people—rather than God—rule a nation fundamentally challenges Shari'a (Rapoport 2004). Jihadism as a radical religious ideology has become particularly inciting since Osama bin Laden reframed *jihad* as an individual obligation (fard'ayn) (Bin Laden 2005, xvi). According to him, fighting against infidels is a permanent and personal duty and, subsequently, martyrdom (i.e., sacrifice for faith) will reward each fighter in their afterlife. Martyrdom further justifies a variety of violent tactics, including suicide attacks—none of which is in the Quran, yet they are all built-in components of jihadism. This approval and even encouragement of violence pushes the jihadi version of religiosity to the ideological extreme and fundamentally distinguishes jihadists from the larger Muslim community (Nielsen 2017). Jihadists fight proactively against other Muslims as well as members of other religions, condemning them as heretics and apostates (Gerges 2017).

In reality, jihadi movements always blend their stringent religious tenets with secular components because they also pursue worldly goals like any other political actors (Feldman 2012, 3). In doing so, these groups have reconstructed a set of concepts that were originally absent from the Islamic doctrine to accommodate their secular needs. For instance, a nation-state defined by territory is a secularized version of ummah (Roy 1994, 17) and jihadists have accepted the secular notion of state, switching from fighting for a utopia without territory to fighting for territory. Al Qaeda's claim that "America will not enjoy security until we live it in Palestine" is one example showing jihadists' territorial ambition (AQAP 2010). Likewise, the idea of an Islamic economy has also been constructed (Roy 1994, 133), because the economy is not regulated by Shari'a but is important for political power. Indeed, the fact that jihadi leaders and foot soldiers rarely literally adhere to their religious doctrines has been substantiated with many empirical observations (McCants 2015; Nasiri 2007).

A balanced public statement between religiosity and secularism serves as an ideological hook for jihadi organizations to mobilize, recruit, and exercise control over members. Achieving this balance is an important part of jihadi leaders' political agenda. With this goal in mind, jihadi leaders act as strategic actors when portraying their groups in propaganda. In fact, strategically choosing an ideological position is not a unique practice of jihadists but common to almost all violent organizations (Carvalho 2019; Costalli and Ruggeri 2015; Tokdemir et al. 2020; Walter 2017a). As Camus (2012, 14) nicely argued: "Not every value entails rebellion, but every rebellion tacitly invokes a value." More importantly, violent groups' ideologies closely associate with their behaviors, including member selection and attack patterns (Piazza 2009b; Sanín and Wood 2014; Wood and Thomas 2017). While these prior studies mostly focus on the ideological differences between violent groups, scholars have recently started to pay attention to the shift in ideology reflected in the public statements of a given military organization (Tokdemir et al. 2020). Building upon this research, I theorize that jihadi groups' ideological appeals are strategic choices—particularly along the "religious vs. secular" spectrum—contingent on their military power.

# A Unified Theory of Military Power and Ideological Appeals

This paper offers a theory that unifies jihadi groups' military and ideological strategies, examining their actions and words within the same framework. This unification is critical because violent organizations indeed think of their militant exercise and their propaganda together, which is evident in a letter from Osama bin Ladin to other al Qaeda leaders: "We are now in a new phase of assessing Jihad activities [...] in two areas, military activity and media releases" (Bin Laden 2005). I argue that weaker organizations are more likely to make religious appeals while stronger organizations adopt more secular rhetoric. In that

<sup>&</sup>lt;sup>6</sup>The US Department of Defenses' Harmony Database (Harmony), AFGP-2002-600178.

sense, jihadists strategically play their religious identity, as explained by Carvalho (2019), and, more specifically, use their religious identity as a "weapon of the weak." I highlight a key mechanism that lies in the groups' needs to maintain different sizes of coalitions: While small groups prioritize securing the most committed believers, larger groups expand their appeal beyond this core group to a broader audience with more heterogeneous preferences.

While the theory described here concentrates on jihadi groups, it should be at least applicable to most organized religious extremists. Religious extremists overall are considered as extreme relative to the mainstream, often represented by the government. Jihadi groups are good examples to demonstrate the relative ideological position of an extreme to the mainstream, as many of these groups explicitly fight against a secular government. Compared with the latter, these groups are generally in disadvantaged positions and have more stringent religious preferences. Most jihad groups are not the only force in the region opposing a government and smaller jihadi groups commonly pledge allegiance to larger groups, as is the case of the Haqqani network and its umbrella organization, the Taliban. This paper treats a group as independent as long as it maintains a distinct command and control. Therefore, importantly, these groups all define their own population and build their own coalitions. On this basis, I jointly study these groups' military power and ideological appeals to their target population with three premises: First, the waxing and waning of military power and the moderation and extremity of ideological appeals are defined relatively among jihadi groups. That means the strongest jihadi group might still be weaker than the government it confronts and, likewise, its most secular ideological stance could still be more religious than the government. Second, military power in this context is defined exclusively by "hard power," or battlefield visibility, and does not consider "soft power" such as social welfare, although the latter is important in non-conflict settings. Third, ideological appeals refer to the groups' announced positions, which are not necessarily their sincere preferences.

<sup>&</sup>lt;sup>7</sup>For example, this paper treats Islamic State of Jammu and Kashmir as a distinct group from, not a branch of, ISIS. Therefore, editors of propaganda materials are mostly fully informed of their groups' military power as they do not have to keep track of battlefield events in other parts of the world. Treating these jihadi groups separately is common in existing databases.

A weak military organization's priority is to secure its base and survive. Due to the lack of material resources, providing spiritual services to a small group of core members becomes particularly important. These members are the core jihadists in the sense that they are often more committed to spiritual rewards while being less committed to worldly benefits, and thus, they are mostly isolated outliers of secular societies. These relatively fanatical believers would respond to a group's religious calls even if that group was unlikely to win in the short run (Tokdemir et al. 2020) because, for them, religion is an identity, not an optional facet of their life (Roy 2004, 35). From the group's perspective, signaling religious purity gives it legitimacy and credibility (Walter 2017a). This legitimacy, though not enough to convince a large population, could effectively prevent the group from perishing. As such, religiosity functions as a "weapon of the weak." A religious appeal emphasizing individual obligation also echoes the psychological needs of many lonely fighters who are physically separated from one another. Although marginalized by their nation-state, these jihadists are now connected to an imaginary ummah (i.e., a Muslim community) (Roy 2004, 42). Weak jihadi organizations are thus able to "buy" fanatic believers with a low "price" (Berman 2011; Sanín and Wood 2014; Weinstein 2005). Moreover, by moving further down to an extreme version of religiosity, groups more easily differentiate their brands from other competitors and more precisely target their unique constituents (Conrad and Greene 2015; Walter 2017a). The potential competition with other similar groups gives a jihadi group an additional incentive to emphasize religiosity while facing setbacks.

Weak groups focus on their core members not only because it is harder to target a larger audience but also because it is strategically optimal for them to confine the coalition to only the most committed and loyal members. Organizationally, managing a military organization is costly and thus screening fighters—admitting sincere believers and keeping out opportunists and free-riders—is particularly important for groups with limited administrative capacity (Bueno de Mesquita 2005; Weinstein 2005). Screening requires sacrifice. It is very common for small and strict religious groups (also known as "sects" in the literature)

to ask their followers to sacrifice—from giving up certain dietary options to giving up their lives (Berman 2000; Iannaccone 1992; Iannaccone and Berman 2006). Sacrifice is particularly meaningful in the context of violent organizations because their members need to be prepared to literally give up their lives. This requirement is even more relevant for weaker groups because their military actions often require higher individual commitments due to their less-developed weaponry. While the advantage of recruiting higher quality members is evident, keeping the organization at a controllable size could also be beneficial for groups that stay underground most of the time (Rapoport 2004). More specifically, a small organization with only committed members largely lowers its transaction costs and avoids potential principal-agent problems (Shapiro 2013).

Strong groups, on the other hand, appeal to broader audiences—a more heterogeneous pool that tolerates more secularism. These stronger groups carry out larger scale military activities and thus demand more troops and supplies, in which circumstances they have to be a more inclusive organization rather than an exclusive sect. This argument is in line with Polo and Gleditsch (2016)'s empirical finding that violent groups that are able to directly target government officials are more inclusive regarding member selection. Secular narratives are more effective in engaging with and retaining a more peripheral group of sympathizers because these sympathizers are less committed to the religious ideal and the emphasis on individual obligations is insufficient to convince them to pay the costs of collective action. Thus, jihadi leaders foreground more earthly goals and portray a magnificent outlook in achieving them in order to win potential supporters who demand more tangible benefits than a rewarding afterlife. These stronger organizations' advertising of material rewards is anything but cheap talk, because they can indeed afford to pay well. To maintain a large supporting bloc, stronger groups display higher tolerance of secularism and sometimes even acquiesce to behaviors that are considered sinful by their religion, including drinking and rape (Mashal 2020; Verini 2017). These unreligious behaviors occur when a group stresses religious regulations less. The upside of these behaviors, for a violent organization, is that they boost morale, consolidate support, and attract more followers (Cohen 2013). Therefore, the group accommodates a larger group beyond its most hardcore supporters in a bid for more resources and members.

Targeting a wide audience does not necessarily imply that leaders of a large group are going to deploy all supporters for battles but rather signals that the non-state organization is resolved to be a government, representing a large constituency in the region. This is particularly the case when a group is large enough to hold territory, which means whoever is located within the realm of that group is ruled by it. In reality, most groups start out weak and as they grow they want a seat at the table. A recent example is the Taliban, which took over Afghanistan immediately after the withdrawal of US troops. Strategically, the Taliban would benefit from pitching itself at an ideological position closer to the median voter in the hope that more people would vote with their feet and support its new regime. This phenomenon indeed happened, as the Taliban publicly claimed, for example, that women are permitted to receive an education, which is considerably more moderate than the group's policies in the early 2000s (Osman and Gopal 2016).<sup>8</sup> From an international perspective, by taking a more moderate quasi-state position a group more easily conducts "rebel diplomacy" and wins the recognition of foreign governments (Huang 2016). For instance, the Syrian rebel group Ahrar al-Islam started as an extreme jihadist organization but rebranded itself as a more liberal and moderate group in 2015 after months of military advances, seizing the northwestern province of Idlib and pushing the front almost to the Mediterranean coast (Mroue 2015). Analysts believe that Ahrar al-Islam's reasoning behind this ideological shift was to prompt Turkey and the United States to see them as a legitimate option to replace al-Assad's government (Walter 2017a). For similar reasons, although generally opposing Western standards, many jihadi groups once they are stronger became cautious and demonstrate their compatibility with "universal values" such as human rights and religious freedom as long as these values

<sup>&</sup>lt;sup>8</sup>Notably, the Taliban's moderate claim may still sound too extreme to most audiences in the secular world. More importantly, most activists and analysts suggest that the Taliban's ideological stance remains extreme but what has changed is the organization's strategy (BBC 2021).

help justify the groups' legitimacy (Roy 2004, 132).

Taken together, weaker groups have more incentives to emphasize their religious nature, while stronger groups show their secular side. This dynamic also applies to a single group that experiences changes in its military capacity across time: As a group gains or loses power, its communication strategy shifts accordingly. Therefore, the religious identity of jihadi groups, and likely other religious extremists, serves as a handy weapon for the weak. This paper is not the first to theorize about the strategic advantage of adopting an extreme ideology for religious organizations (Berman 2011; Carvalho 2019; Walter 2017a). It is, however, innovative in considering these groups' ideological strategies together with their varying military and political needs. Given that the bulk of literature on violent sub-state groups focuses exclusively on violence, this connection is particularly important. Groups' ideological strategies of moving along a "religious vs. secular" spectrum are reflected in their propaganda (i.e., public statements). To fully control their propaganda materials, jihadi leaders constantly update their media branches with the latest battlefield news and give them at least monthly instructions. Timely coordination is particularly important in the internet age because the internet and instant communication allow an organization to quickly disseminate its public discourses through online magazines and social media (Piazza and Guler 2019; Walter 2017b). While both the military and propagandist tactics are integral parts of these groups' toolkit, military actions are more resource-demanding and more constrained by reality. For that reason, this paper focuses on how groups strategically use words to match guns. I empirically examine the relationship between groups' military power and ideological appeals:

Hypothesis 1: Military power is negatively associated with religious rhetoric.

I have emphasized that groups' ideological appeals are strategic. Thus, violent groups retain relatively stable preferences but work to manipulate their audience through public propaganda. An ideal counterfactual observation to propaganda would be similar ideolog-

<sup>&</sup>lt;sup>9</sup>Harmony, NMEC-2007-637116.

ical materials produced by jihadi groups but not intended to target a public audience. To substantiate the assumption that these groups' changing propaganda does not necessarily reveal their sincere preferences, I will compare a few groups' propaganda with their leaked internal documents to assess the following theoretical implication:

Corollary 1a: Hypothesis 1 holds in groups' public propaganda but not in their internal documents.

As a group grows stronger, it signals a more moderate position to the audience by displaying more tolerance of secularism compared with its weaker past or weaker counterparts. Conversely, as it loses power, it adopts the opposite strategy, rejecting secularism in its public statements. My theory implies that when groups shift ideological positions to the more secular side, they refer to more secular concepts in a positive way, not criticizing the secular world. To provide further evidence on this point, I will examine groups' religious and secular words together with their attitude when using these words:

Corollary 1b: When a group is militarily stronger, its secular rhetoric is associated with more positive expressions.

Jihadi groups' media rhetoric hinges on their military situation because these groups tailor their propaganda to maintain a coalition size that best serves their military actions. It is crucial for jihadi groups to keep in mind their target audience because the main purpose of their propaganda is to mobilize, recruit, and exercise control over members (Ugarriza and Craig 2013). As I explained above, weaker groups primarily speak to their core members while stronger groups try to appeal to potential supporters on a larger scale. Sometimes the latter even expand their reach beyond their controlled region to inspire an international audience, which is reflected in ISIS and al Qaeda's effort in publishing magazines in English and other Western languages. Therefore, I put forward the hypothesis regarding groups' needs to maintain different sizes of coalitions:

Hypothesis 2: Military power is positively associated with outside coordination effort; outside coordination effort is negatively associated with religious rhetoric.

Groups use different types of rhetoric to coordinate different types of audiences because these audiences have different rhetorical preferences. This underlying assumption leads to another corollary:

Corollary 2a: More moderate members are more likely to welcome secular rhetoric.

The dynamic that organizations become more ideologically extreme when they are weaker is a generalizable rule that has been discovered with other types of political actors<sup>10</sup> By theorizing a similar strategy for violent organizations, this paper responds to the urgent need to bring ideology into conflict studies (Staniland 2015).

# Military Power and Ideological Appeals of Jihadi Groups

I now illustrate religious extremists' unified strategy by empirically showing the relationship between 38 jihadi groups' military power and ideological appeals. I first introduce the measurements of the main dependent and explanatory variables and then provide several pieces of evidence for hypothesis 1, as well as its corollaries 1a and 1b.

# Measuring Ideological Appeals from Jihadist Magazines

To begin investigations of jihadists' propaganda efforts, I built an original database of 84 magazines in 11 different languages published between 1984 and 2019 from 38 jihadi groups. 

These periodicals were originally circulated in pdf format on communication platforms like WhatsApp and Telegram and were collected from all possible sources via the internet at the time of collection. I first collected these materials from three major online repositories of

<sup>&</sup>lt;sup>10</sup>See, for example, Groseclose (2001) for political candidates' position-taking strategy contingent on their valence in the American context.

<sup>&</sup>lt;sup>11</sup>The Appendix provides a full list of the groups and magazines covered by this study.

radical periodicals (i.e., the TRAC database, Jihadiligy.net, and Jihadi Document Repository) and then—in case of any censored or lost issues—supplemented the collection with a systematic search of individual blogs and web pages, tracking the historical posts using the WayBackMachine internet archive. I further conducted an extensive internet search and expert interviews and coded a series of covariates associated with each magazine issue including the specific group in charge, publishing language(s), publishing date, and gender of the target audience. In protantly, I noted the self-claimed mission of each public periodical and excluded from this study any newsletters that only intend to report battlefield news because they are less ideological. The remaining 84 publications contain a wide range of content and reflect the highest quality of jihadi groups' statements. Figure 1 presents a few examples of the magazines (covers and inner pages) included in this study. The easy-to-circulate format makes them the most prevalent official propaganda materials. Compared with battles and other violent tactics, propaganda release as a non-violent tactic is less constrained by equipment and is conducted more regularly.

Figure 1: Examples of Jihadist Magazines



Note: The DABIQ magazine (i and ii) published in English by Islamic State of Iraq and Syria (ISIS) and the Ibnat al-Islam magazine (iii and iv) published in Arabic by al Qaeda in the Arabian Peninsula.

 $<sup>^{12}</sup>$ Some magazines are specifically designed to address feminine issues. An example of such women's magazines is Beituki (Your Home) released by al Qaeda, which is still active at the time of writing this paper.

I digitized the entire magazine archive and documented each magazine issue at the page level using tesseract, an optical character recognition (OCR) engine. This machine learning program utilizes pre-trained neural networks to recognize characters in each language. It can almost always accurately identify words from printed materials, although it is not particularly good at grouping words into articles given the unconfined layouts of the magazines studied here. I thus primarily use a page as the unit of analysis, as was the choice in Karell and Freedman (2019). In most cases, one page corresponds with one article. The current setup yields more than 50,000 magazine pages from 1,072 issues (unique magazine and unique publishing time). <sup>13</sup> To assist further analyses, I translated all these documents into English using the Google Cloud Translation application programming interface (API), which practice is the present industrial standard. While machine translation might not be as sophisticated as human experts, this inaccuracy has only marginal effects on text analyses with the "bagof-words" assumption. That is, even if the translation returns words in reverse order, it will not affect my keyword-based measurement presented below. This argument is explained in detail by Lucas and his colleagues (2015) and further validated by de Vries, Schoonvelde and Schumacher (2018).<sup>14</sup>

To measure jihadists' ideological appeals on a "religious vs. secular" dimension, I use a customized dictionary approach, which is a text-as-data method that scores documents using a dictionary (i.e., a collection of keywords) developed specifically for this study. This dictionary contains two key categories, "religiosity" and "secularism," defined based on three fundamental questions: (1) What is the ideal social order? Religious rhetoric regards divine powers as the supreme law and advocates organizing the society based on religious order (i.e., frequent references to words such as "prophet," "ummah," and "sharia"), while secular rhetoric emphasizes humanized power, modern nation-states, and political institutions (i.e., frequent references to words such as "citizenship," "democracy," and "government"); (2) How

<sup>&</sup>lt;sup>13</sup>Results presented below are robust with different units of analysis: paragraph, page, or issue.

<sup>&</sup>lt;sup>14</sup>For examples of translation for this project, see the Appendix.

<sup>&</sup>lt;sup>15</sup>For a thorough discussion of the tension between Islamic religion and secularism, see Roy (2007), particularly p37-64.

should individuals behave? Religious rhetoric emphasizes obedience to Allah (i.e., frequent references to words such as "loyalty," "pray," and "fasting"), while secular rhetoric values individual welfare (i.e., frequent references to words such as "vote," "rights," and "freedom"); and (3) Why should people participate in jihad? Religious rhetoric attributes the reasons to benefits in the afterlife and the evilness of nonbelievers (i.e., frequent references to words such as "paradise," "martyrdom," and "apostasy"), while secular rhetoric highlights material benefits and strategic needs (i.e., frequent references to words such as "compensation," "recruitment," and "strategy"). Expanding on these three questions, I developed an itemized codebook and compiled a customized dictionary by manually categorizing each word that appears more than 30 times in the text corpus. 16 Finally, I use this dictionary to calculate a Religiosity Score for each magazine page, which is the difference between the number of religious keywords and the number of secular words that page contains. Figure 2 shows a comparison of religious and secular keywords included in the dictionary. The nearer a word is positioned to one of the ends, the more it discriminates the document from one type of rhetoric to another. Overall, this measure captures the extent to which jihadists resort to their religion, but it is important to keep in mind that their interpretation of religion largely deviates from the main Islamic community's interpretation.

# Measuring Military Power

Although military power is a frequently addressed concept in conflict studies, it is a non-trivial task to measure it at a fine-grained level. Because these extremists in large part stay underground, many of their organizational details like membership are not public information. So far, scholars' best attempt along this line is to classify group power into rough categorizations, which do not vary much over time (Cunningham, Gleditsch and Salehyan 2013). For that reason, existing literature considering violent groups' military power relies heavily on their battlefield performance. The scholarly consensus is that stronger military

<sup>&</sup>lt;sup>16</sup>The codebook and extensive validation of this measure are available in the Appendix.

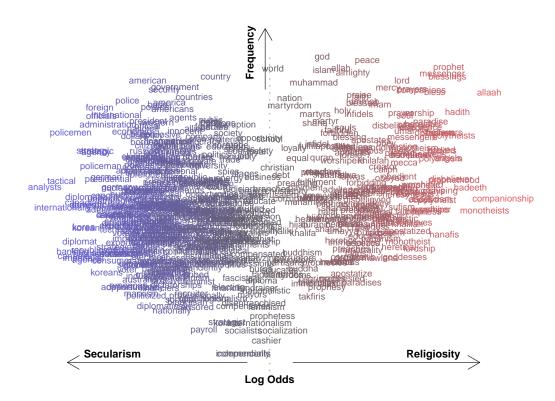


Figure 2: Comparison of Religious and Secular Keywords

*Note:* The x axis reflects the log odds of each word conveying religious meaning as opposed to secular meaning, or vice versa. The y axis reflects the frequency with which they appear in the corpus.

groups are capable of carrying out more attacks and causing more casualties (Enders and Sandler 1993; Wood 2014), directly confronting states more (Byman 2005; Carter 2012), and controlling more territories (Sánchez-Cuenca and De la Calle 2009). These measures pretty well gauge the military power conceptualized by this paper, which primarily refers to groups' ability to carry out violent actions. Therefore, I now derive three time-varying indicators of military power for each group based on its battlefield performance and will also use a territorial control measure later in the paper.

I first collect jihadi groups' violent activities from two widely-used databases: Uppsala Conflict Data Program (UCDP-GED) and Global Terrorism Database (GTD). The former source mainly counts violent events during large-scale civil conflicts resulting in at least 25 battle-related deaths while the latter source records a greater variety of terrorist attacks. To

get more comprehensive information on each group's military activities and minimize the reporting bias in a single source, I merge the event data from both sources following Donnay and coauthors (2018). Specifically, I harmonize the event types across the two sources into three major categories: state-based event, 17 non-state event, 18 and one-sided event. 19 I then regard two records from different sources as the same event if they fell into the same major category, happened within a five-day window, and happened within a ten-kilometer window, where the flexible time/space windows accommodate inaccuracy in the raw data to avoid double-counting events. The resulting combined dataset contains 73,114 violent events involving jihadi groups concerned in this study, where GED contributes 48,874 unique events, GTD contributes 19,205 unique violent events, and the two sources overlap on 5,035 events. GED provides more events than GTD because the jihadi groups studied here mostly act within civil conflict zones, which is GED's focus. Next, I attribute the group-specific events to their propaganda by groups and dates. Specifically, for each unit of observation (i.e., magazine page), I construct three metrics for the group in charge of the magazine and 60 days prior to the publication of that specific magazine issue: Total Violent Events, Total Deaths, and State-based Battles, which generally imply groups' military strength. I choose a 60-day window between the military power measure and the ideological appeal measure because a group would take some time to design its propaganda materials while considering its military power.<sup>20</sup> Because this paper considers a jihadi organization with its distinct command as an independent group, the group leaders are well informed about their group's battlefield fortunes.

I further validate these measures by comparing them with another group power indicator, namely territorial control (Sánchez-Cuenca and De la Calle 2009), for ISIS, one of the largest

 $<sup>^{17}\</sup>mathrm{GED}$  coded as "type 1" violence; GTD coded as attacks on Government (General), Government (Diplomatic), Police, Military, Utilities, Maritime, Transportation, Telecommunication, or Airports & Aircraft.

<sup>&</sup>lt;sup>18</sup>GED coded as "type 2" violence; GTD coded as attacks on Terrorists/Non-State Militia or Violent Political Party.

<sup>&</sup>lt;sup>19</sup>GED coded as "type 3" violence; GTD coded as attacks on Private Citizens & Property, Business, NGO, Journalists & Media, Transportation, Telecommunication, Religious Figures/Institutions, Educational Institution, Tourists, Food or Water Supply.

<sup>&</sup>lt;sup>20</sup>Results are robust to alternative time windows of counting these events, as shown in the Appendix.

groups in my dataset. This ISIS territorial control data is calculated on a daily basis using a geographical information system with the raw data reported by liveuamap.com. This crowdsourcing map contains the most disaggregated data, marking the specific locations where ISIS troops are present. Figure 3 shows the changes of these indicators over time. Territory control and battlefield activities roughly correspond with each other, and this pattern is particularly telling after 2016. Because the territorial control data is not available for most of the 38 groups covered here, I prioritize the battlefield performance measures in this section.

200 150 **Total Violent Events** State-based Battles 100 Total Deaths/10 50 20 Territory 10 2 2015 2016 2017 2018 2019 2020 Weeks: from 2015-01-01 to 2019-12-31

Figure 3: Comparing ISIS Battlefield Activities and Territorial Control

Note: All indicators are aggregated at the week level.

# How Military Power Changes Ideological Appeals

I empirically examine jihadi groups' unified strategy using ordinary least squares (OLS) models, where *Religiosity Score* is the dependent variable and the three military power measures, *Total Violent Events*, *State-based Battles*, and *Total Deaths* are the explanatory

variables. I include three page-level or issue-level covariates: Front Page indicates whether the magazine page is the cover or preface; Total Issue measures the longevity of the magazine; and Target Women indicates whether the magazine is designed for female readers.

More importantly, I leverage three-way fixed effects to help with identification: The Language Fixed Effects ensure that the comparisons are made only between magazines originally published in the same language. Controlling for languages accounts for the fact that, for example, English expressions might generally contain more secular words than Arabic expressions. Moreover, language in large part indicates who is the intended audience. Thus, these fixed effects also help to control for the type of reader. The Year Fixed Effects absorb any time trend over the 36 years examined in this study. Finally, I fit models both with and without Group Fixed Effects. Models with group fixed effects make comparisons only within groups and thus reveal how these groups change strategies over time as their strength waxes or wanes. Models without group fixed effects, on the other hand, make both across- and within-group comparisons, depicting also the cross-sectional relationship between military power and ideological appeals. Below I report the results where military power was measured within the 60-day window prior to the magazine releases. The Appendix shows that the results are robust to alternative models using different windows, as well as those using magazine issues as the unit of analysis.

Table 1 confirms the expected negative relationship between military power and religious appeals. Models (1), (3), and (5) do not contain group fixed effects and thus identify coefficients from the variance both across and within groups. The fact that the coefficients of Total Violent Events (log), State-based Battles (log), and Total Deaths (log) are all negative and significant suggests that stronger groups such as Tehrik-i-Taliban Pakistan generally disseminate less religious narratives than smaller groups such as Hay'at Tahrir al-Sham. Once group fixed effects are controlled for in models (2), (4), and (6), the magnitudes of these coefficients attenuate by about a third, but the estimates are still negative and significant. That means, for an average fixed group, that it changes its rhetoric and talks more secu-

larly when gaining military power and vice versa. These group fixed effects help me to rule out the possibility that my results are completely driven by the difference between smaller and larger groups because, for example, some hardcore groups simply prefer small groups of known supporters, or that they are more heavily targeted by the state(s) and thus find it easier to survive as smaller units. Instead, what we learn from the empirical results is that these groups do not have a fixed preference for group size or a fixed style of communication but change according to the waxing and waning of their military power. Overall, weak military power pushes groups to more extreme religious positions, where they emphasize their religious brand to make up for their limited organizational capacity. Somewhat ironically, these groups portray a wonderful outlook under Shari'a law and encourage soldiers to sacrifice for the holy war when they are less active in fighting for these goals. Conversely, they talk more like a secular organization in correspondence with more violent actions. Recall that the data used in these regressions excludes newsletters with only battlefield reports. This pre-processing step makes the effects more telling because groups talk more secularly when they are more militarily active, not simply because they have more news to report on the ground. Rather, group members in charge of these media outlets intentionally adopt more moderate narratives on the "religiosity vs. secularism" spectrum to accommodate a more heterogeneous audience.

The direction and significance of other covariates are consistent across models (1)-(6). Front Page is negative and significant, meaning that magazine covers and prefaces are less likely to include lengthy religious preaching than subsequent pages. Total Issue is negative and significant, suggesting that periodicals that survive longer generally contain more secular rhetoric. Finally, Target Women is positive but not significant, indicating that masculine and feminine propaganda materials do not systematically differ with regard to the amount of religious component.

In the above regressions, religious appeals are measured after military actions to allow for the correct time sequencing because groups should design their rhetoric according to the

Table 1: Military Power and Religiosity Score in Magazines

			D 1: : :			
	(4)	(2)	. ~	ity Score	(~)	(0)
	(1)	(2)	(3)	(4)	(5)	(6)
Total Violent Events (log)	$-0.82^*$	-0.64*				
	(0.15)	(0.30)				
Total Deaths (log)			$-0.64^{*}$	-0.64*		
			(0.11)	(0.22)		
State-based Battles (log)					$-0.90^{*}$	$-0.59^{*}$
					(0.15)	(0.30)
Front Page	$-1.95^*$	$-2.31^*$	$-1.96^*$	$-2.31^*$	$-1.95^*$	$-2.31^*$
	(0.32)	(0.32)	(0.32)	(0.32)	(0.32)	(0.32)
Total Issue	$-0.03^*$	-0.03	$-0.03^*$	-0.03	$-0.03^*$	-0.03
	(0.01)	(0.03)	(0.01)	(0.03)	(0.01)	(0.03)
Target Women	$0.92^{'}$	$1.24^{'}$	0.89	1.33	1.10	1.26
	(1.34)	(2.00)	(1.34)	(1.92)	(1.35)	(2.01)
Group Fixed Effects	No	Yes	No	Yes	No	Yes
-						
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Language Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
$\overline{\mathbb{R}^2}$	0.09	0.13	0.09	0.13	0.09	0.13
Observations	55477	55477	55477	55477	55477	55477

Note: Robust standard errors clustered at the issue level.  $^*p < 0.05$ 

revealed battlefield situations and not future ones. To substantiate this basic assumption, I design a placebo test where the model specifications are the same as above except that now a group's violent activities are calculated 60 days *after* it published its ideological position in a magazine. As shown in Table 2, the significance goes away in this "future predicting past" setup. Although not a definitive causal identification strategy, this additional analysis brings me more confidence in the proposed theory.

Table 2: Placebo Test: Future Military Power and Past Religiosity Score in Magazines

	Model 1	Model 2	Model 3
Total Violent Events (log)	-0.11		
, ,	(0.27)		
Total Deaths (log)		-0.14	
		(0.18)	
State-based Battles (log)		, ,	-0.07
, <u>, , , , , , , , , , , , , , , , , , </u>			(0.27)
Control Variables	Yes	Yes	Yes
Group/Year/Language Fixed Effects	Yes	Yes	Yes
-, , , ,			
$\mathbb{R}^2$	0.13	0.13	0.13
Observations	55541	55541	55541

*Note:* Robust standard errors clustered at the issue level. \*p < 0.05

#### Leaked Internal Documents as Placebos

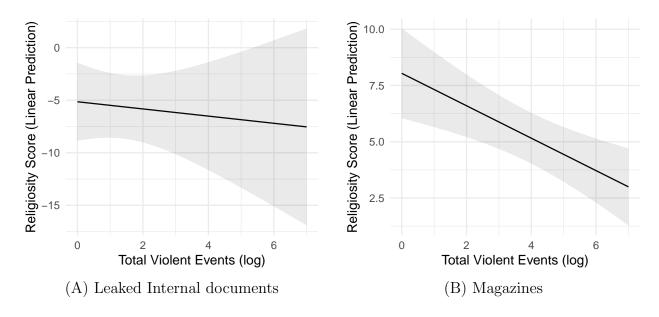
Are the changes in jihadi groups' religious appeals indeed their strategic moves? In order to demonstrate that these groups intentionally change their ideological positions while engaging with their audience, I compare their public statements, as reflected in magazines, with their non-public statements. If these groups strategically manipulate the content in their propaganda to control their rank and file members and appeal to prospective sympathizers, then we should not observe the same rhetorical pattern in their documents meant for more private use.

To gain knowledge of jihadists' non-public statements, I further collected the internal documents from 10 out of the 38 groups analyzed above from August 1990 to March 2011 as recorded in the Harmony Documents Archive launched by the Combating Terrorism Center at West Point. Unlike the magazines, these internal documents were intended to circulate only among jihadi leaders but, unexpectedly, were captured by US intelligence agencies. Most of these documents are letters to group leaders, correspondence between organizational units, and administrative documents addressing a variety of organizational issues. They are comparable to the magazines in terms of the topics covered. Thus, these files serve as ideal placebos in examining jihadi groups' strategies of designing rhetoric for public consumption. To ensure the public and non-public samples are comparable, I matched internal documents and magazines by groups and dates. In this way, I am able to compare a certain group's public rhetoric at a given time to their non-public rhetoric around the same time. I use weighted least squares (WLS) models to account for the fact that these documents vary substantially in length and fit the regression Religiosity Score, Total Violent Events,  $\epsilon$  for internal documents and magazines separately.

Figure 4 compares the marginal effects of *Total Violent Events (log)* on *Religiosity Score* in internal documents with those in public magazines. While the groups' predicted religiosity scores in magazines significantly decrease as their military power increases, as was also depicted in Table 1 above, their predicted religiosity scores in internal documents largely remain constant across various levels of military power. This contrast suggests that jihadi groups intentionally change positions while addressing the public and behave less strategically when talking privately. As discussed earlier in this paper, jihadists' public statements are audience-oriented and might not speak openly of their true preferences.

<sup>&</sup>lt;sup>21</sup>These 10 groups are al Qaeda, al Qaeda in Iraq, Ansar al-Islam, Haqqani network, Islamic Army in Iraq, Islamic Emirate of Afghanistan, Islamic Movement of Uzbekistan, Islamic State of Iraq and Syria, Jaysh al-Islam, and Naqshbandi Army.

Figure 4: Contrasting the Effects Estimated from Leaked Internal Documents and Magazines



*Note*: The negative association between military power and religious rhetoric is significant in groups' public propaganda but not in their non-public documents.

# More Evidence from Sentiment Analyses: Tolerance of Secularism

Because my measure of Religiosity Score is derived from a dictionary-based method and does not explicitly indicate the attitude of a magazine article, a skeptical reader might question whether stronger groups are more tolerant of secularism or if they simply criticize the secular world more. The latter scenario, if true, implies that these groups do not necessarily shift positions on a "religious vs. secular" spectrum but rather adopt a more negative campaign strategy when stronger. To rule out this possibility, I now turn to explicitly examine jihadi groups' sentiments in their magazines to substantiate the idea that a stronger group welcomes more secularism. I measure the sentiment embedded in each magazine page using the Linguistic Inquiry and Word Count text analysis program. The Sentiment score is defined by the difference between positive and negative word counts and, thus, a higher score indicates a more positive attitude. I then fit another set of regression models using Sentiment as the dependent variable. The goal here is to examine how the relationship between secularism (as

indicated by *Religiosity Score*) and attitude (as indicated by *Sentiment*) changes according to military power.

Table 3: Military Power and Tolerance of Secular Values

	Sentiment (Positive - Negative)		
	(1)	(2)	(3)
Religiosity Score			$-0.16^*$
× Total Violent Events (log)			(0.04)
Religiosity Score		3.98*	$4.40^{*}$
		(0.11)	(0.17)
Total Violent Events (log)	-3.77	-1.21	-0.55
	(4.15)	(3.74)	(3.75)
Target Women	75.89	70.94*	71.44*
-	(38.96)	(32.58)	(32.46)
Front Page	41.72*	50.91*	51.74*
-	(8.54)	(8.37)	(8.36)
Total Issue	$-1.69^*$	$-1.59^*$	$-1.62^*$
	(0.37)	(0.29)	(0.29)
Group Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Language Fixed Effects	Yes	Yes	Yes
$\overline{\mathbb{R}^2}$	0.22	0.28	0.28
Observations	55477	55477	55477

Note: Robust standard errors clustered at the issue level. \*p < 0.05

Model (1) from Table 3 depicts the baseline relationship between military power and attitude in propaganda and the insignificant coefficient of *Total Violent Events (log)* suggests that a group's overall sentiment does not change meaningfully as its military power changes. Model (2) adds *Religiosity Score* as a regressor and its significant positive coefficient suggests that overall, jihadists' tone is more positive in religious narratives than in secular narratives, which is not surprising considering the religious root of their movements. In model (3), I examine the relationship between religious/secular rhetoric and sentiment conditional on military power by interacting *Religiosity Score* and *Sentiment*. This interaction term appears

to be negative and significant, meaning that the positive effect of religious rhetoric on tone diminishes when military power increases. Therefore, as a group grows in power, it becomes more tolerant of secular values in rhetoric. Conversely, once the group is thwarted militarily, its attitude is likely to be critical when referring to secular concepts. Taking al Qaeda's declining process as an example, at the beginning of 2014, the group was still technically combating the United States in Afghanistan and displayed high tolerance of non-Muslims by stating its aim as "forming a just Islamic society in which there is no oppression against anyone, including the disbelievers" (magazine: Resurgence). Later, ISIS completely seized leadership of the jihadist movement from al Qaeda and the latter almost disappeared from the public eye. This waning group, correspondingly, adopted a much harsher position and claimed in 2017 that "any group that fights under the banner of democracy and secularism has fallen into apostasy [...] Democracy is therefore a system of Tughyan (transgression); hence it is compulsory upon every Muslim to disbelieve in it and to reject it" (magazine: Al Risalah). While these quotes are just a glimpse of jihadists' propaganda, they depict a change in their ideological positions.

# Mechanism: Evidence from ISIS Tweets

While the analyses of magazines depict the negative correlation between the military power and ideological positions of jihadi groups, they do not explicitly show the mechanism accounting for this association. In this section, I examine the proposed mechanism that weaker military power incentivizes a group to secure its base and stronger power motivates it to make broader appeals, providing evidence for hypothesis 2 and its corollary 2a. I use a large dataset of 6,630,731 original tweets from 21,278 unique accounts associated with ISIS—or 18,040,532 tweets and retweets from 21,959 accounts—in 2015 collected by Alfifi and coauthors (2018). This dataset identifies Twitter users as ISIS members or sympathizers if their accounts have been reported by crowdsourcing platforms and eventually suspended, which

procedure is also adopted by other research of this kind (e.g., Mitts 2019). <sup>22</sup>For ISIS members or sympathizers defined this way, these authors put together all their tweets through private access to the Twitter firehose. ISIS is one of the most influential jihadi groups that is currently active, having taken the dominant place of al Qaeda around 2014. Focusing on ISIS has the additional advantage that the US intervention in 2015 exogenously brings large variance in ISIS military power.

In this analysis, I measure the religiosity score in each tweet using the same dictionary as was described for the analyses with magazines. Most tweets were originally posted in Arabic and then translated into English, and the measure is based on the English translations. I measure ISIS military power primarily using territorial control, quantifying the amount of Territory controlled by ISIS on a daily basis calculated with the maps from liveuamap.com. Alternative measures of military power using violent activities are reported as robustness checks in the Appendix. I calculated the covariates that could potentially confound the proposed relationship: Followers Count measures the number of followers a user has at the time of tweeting, which is a proxy for the user's popularity; Friends Count measures the number of accounts that a user is following (i.e., their "followings"); Favorites Count is the number of tweets that a user has marked as favorite, which reflects how active the user is on the Twitter platform; Statuses Count is the number of tweets and retweets posted by the user, which also reflects the user's overall activity; and Account Length is the age of the account calculated since the creation of the account until the creation of each tweet. I also put together several other tweet-level variables: Media is a binary indicator of whether the tweet has a picture, audio, or video attached to it—the presence of these visual contents might correlate with the extremity of the corresponding narratives; similarly, *Urls* indicates whether the tweet has a url attached to it; Hashtags indicates whether the tweet contains a hashtag, which implies whether the post speaks to a large event or movement. Additionally,

<sup>&</sup>lt;sup>22</sup>Alfifi and coauthors (2018) only retain eventually suspended accounts to exclude false reports from anonymous users. The remaining accounts cover about 88% of the original report list. Because the Twitter spam control team only suspends accounts retrospectively, many of these accounts remained active for a long time before being taken down, allowing me to examine their online activities.

I calculated Days to Islamic  $Holidays^{23}$  using each tweet's timestamp.

In order to track down ISIS's coordination efforts using its Twitter posts, I leverage the difference in engagement between ISIS members (i.e., users whose Twitter accounts were eventually suspended) and non-members (i.e., users whose Twitter accounts were not suspended but had interacted with ISIS members).<sup>24</sup> Among ISIS members, I further define core and peripheral members based on two distinct criteria: popularity (i.e., users whose numbers of followers are among the top 5% are core members and the remaining 95% of the users are peripheral members, as defined in Steinert-Threlkeld (2017)) and geography (i.e., users whose revealed time zones are in Iraq, Syria, and three other geographically proximate countries—Qatar, Saudi Arabia, and Turkey—are core members and users with revealed time zones in other places are peripheral members).<sup>25</sup> This former criterion defines core members as the more influential ones while the latter defines core members by their geographic locations. These taxonomies can be written as:

proximate countries—Qatar, Saudi Arabia, and Turkey—are core members and users with revealed time zones in other places are peripheral members). This former criterion define core members as the more influential ones while the latter defines core members by their geographic locations. These taxonomies can be written as: 
$$\begin{cases} \text{core,} & \text{if } PR(f) \geq 0.95 \\ \text{peripheral,} & \text{if } PR(f) < 0.95 \end{cases}$$
 (popularity) 
$$\text{user} \in \begin{cases} \text{core,} & \text{if } time \ zone \in core \ zones \\ \text{peripheral,} & \text{if } time \ zone \notin core \ zones \end{cases}$$
 (geography) 
$$\text{non-members,} & \text{if } S = 0, \end{cases}$$

where S is an indicator of account suspension and PR is the percentile ranking of the tweet

<sup>&</sup>lt;sup>23</sup>The Islamic holidays concerned in this paper are Mawlid 1436, Lailat al Miraj, Laylat al Bara'at, Beginning of Ramadan, Night of Destiny (Laylat al-Qadr), End of Ramadan (Eid ul-Fitr), Festival of Sacrifice (Eid al-Adha), Islamic New Year, Ashura, and Mawlid 1437.

<sup>&</sup>lt;sup>24</sup>Non-members are usually those who were mentioned by or retweeted a tweet from ISIS members but are not themselves on the anonymous blacklist.

<sup>&</sup>lt;sup>25</sup>Overall, about half of the total users revealed their time zones. The core time zones include "Asia/Baghdad," "Asia/Riyadh," "Baghdad," "EET," "Europe/Istanbul," "Istanbul," and "Riyadh."

based on the number of followers.

From here, I code whether a tweet mentioned (@) non-members as a proxy for the user's effort to coordinate people outside of the ISIS network (as of December 31, 2015). I then restructure the data into a user-by-date panel. The Appendix shows analyses similar to those presented below but at the tweet level and the substantive results remain robust.

## Power, Ideology, and Targeted Mobilization

I examine the logic chain "military power  $\rightarrow$  mobilization effort  $\rightarrow$  ideological appeals" using OLS models. The goal here is to show the relationship between military power and ideological appeals, the relationship between military power and mobilization effort, and the relationship between mobilization effort and ideological appeals, respectively, after controlling for confounders.

Table 4, model (1) shows the relationship between ISIS power and religiosity score, which analysis is analogous to those in Table 1 except that it uses the Twitter data. Importantly, the model includes a lagged dependent variable to deal with the potential time dependencies because the dependent variable Religiosity Score is best predicted by the same user's rhetoric on the previous day. The coefficient of Territory is negative and significant, showing again that religious rhetoric is a weapon of the relatively weak. In model (2), the dependent variable becomes Mention Non-member and Territory yields positive effects on it, meaning that the larger the group's power, the more likely its members will reach out to someone not yet in the organization. In model (3), the outside mobilization indicator (i.e., Mention Non-member) is negatively correlated with Religiosity Score, meaning that ISIS tends to use more secular rhetoric when trying to coordinate with people outside. This effect is substantively large compared with other factors also affecting religious rhetoric. For example, tweets containing web links (i.e., Urls) often introduce news or others' opinions and thus are generally less religious. This Urls effect, however, is only about one-fourth of Mention Non-member's effect. Another interesting finding is in the predictor Days to Islamic Holidays. While

the proximity to religious events usually positively correlates with the amount of religious rhetoric in the text,<sup>26</sup> even this effect gets washed away due to the inclusion of the lagged dependent variable. Therefore, overall, the proposed mechanism regarding mobilization is indeed connecting group power to its public rhetoric.

## Observable Implication: Responses from Different Audiences

Finally, I approach this dynamic from the perspective of people reading these tweets. The goal here is to examine how religious and secular rhetoric affect the probability that a tweet gets retweeted among different types of audiences. Correspondingly, the dependent variable is *Member - Non-member* (i.e., differential retweet numbers between members and non-members) and *Core - Peripheral* (i.e., differential retweet numbers between core and peripheral members). *Religiosity Score* is now the main explanatory variable. Group power measured by *Territory* and the series of covariates introduced above are also included in the regressions as control variables.

Table 5 presents the results. Religiosity Score is positively associated with both Member - Non-member and Core - Peripheral. This pattern means that a tweet with a higher religiosity score is more likely to be retweeted by ISIS members than by non-members and more likely to be retweeted by core members than by peripheral members, regardless of whether "core vs. peripheral" members are defined by their popularity or geography. This finding thus confirms the expectation that more committed members favor more religious rhetoric. As a result, jihadi groups, when weak, incorporate more religious narratives to secure support from these fanatic believers.

<sup>&</sup>lt;sup>26</sup>This is empirically true when looking at just the bivariate relationship between *Days to Islamic Holidays* and *Religiosity Score*. See the Appendix for more discussion.

Table 4: Group Power, Mobilization, and Religiosity Score

	Religiosity Score	Mention Non-member	Religiosity Score
	(1)	(2)	(3)
Mention Non-member			-0.513**
			(0.017)
Territory	-0.459**	0.166**	-0.320**
	(0.116)	(0.020)	(0.115)
Religiosity Score (lag)	0.348**		$0.337^{**}$
	(0.008)		(0.008)
Mention Non-member (lag)		$0.429^{**}$	
		(0.013)	
Days to Islamic Holidays	-0.494	-0.285	-0.616
	(1.842)	(0.333)	(1.833)
Followers Count	-0.247	-0.005	-0.259
	(0.149)	(0.011)	(0.158)
Favorites Count	-0.596	$0.051^{'}$	-0.543
	(0.524)	(0.076)	(0.555)
Friends Count	-0.895	$0.112^{'}$	-0.761
	(0.762)	(0.105)	(0.772)
Statuses Count	-0.291	-0.044	-0.336
	(0.161)	(0.034)	(0.180)
Account Length	1.050**	$-0.235^{**}$	0.872**
0	(0.226)	(0.034)	(0.225)
Media	$-0.267^{**}$	$-0.034^{**}$	$-0.290^{**}$
	(0.020)	(0.003)	(0.021)
Urls	$-0.087^{**}$	$-0.058^{**}$	$-0.128^{**}$
	(0.018)	(0.004)	(0.017)
Hashtags	$-0.174^{**}$	$-0.065^{**}$	$-0.216^{**}$
0	(0.021)	(0.002)	(0.021)
Constant	0.761**	0.100**	0.847**
	(0.024)	(0.004)	(0.026)
Observations	265,241	265,241	265,241
$\mathbb{R}^2$	0.150	0.224	0.162
Residual Std. Error	0.977	0.203	0.970
	(df = 265229)	(df = 265229)	(df = 265228)

Note: Robust standard errors in parentheses clustered by users. \*p < 0.05; \*\*p < 0.01

Table 5: Retweets by Different Types of Members

	Member - Non-member	Core - Peripheral		
		defined by	defined by	
		popularity	geography	
	(1)	(2)	(3)	
Religiosity Score	$0.641^{*}$	0.038**	0.137**	
	(0.325)	(0.010)	(0.038)	
Territory	-39.134**	0.676**	3.283**	
	(15.043)	(0.194)	(0.742)	
Days to Islamic Holidays	242.544	-34.100**	-80.202**	
· ·	(292.870)	(7.488)	(25.028)	
Followers Count	$-370.754^*$	-2.784	-9.113	
	(154.214)	(1.639)	(5.206)	
Favorites Count	$-14.751^{'}$	1.918**	6.292**	
	(36.084)	(0.681)	(1.954)	
Friends Count	178.821	-6.850	-7.456	
	(737.363)	(12.514)	(32.710)	
Statuses Count	30.173	-0.137	$0.259^{'}$	
	(35.896)	(0.396)	(1.132)	
Account Length	$0.292^{'}$	3.096**	10.875**	
C	(14.670)	(0.376)	(1.300)	
Media	$-3.999^{'}$	$-0.540^{**}$	$-2.037^{**}$	
	(2.989)	(0.040)	(0.164)	
Urls	$0.333^{'}$	0.258**	0.752**	
	(1.023)	(0.032)	(0.124)	
Hashtags	$1.484^{'}$	$-0.271^{**}$	$-0.947^{**}$	
0	(2.928)	(0.043)	(0.150)	
Constant	5.488	$-0.562^{**}$	$-2.259^{**}$	
	(3.719)	(0.085)	(0.249)	
Observations	394,954	394,954	394,954	
$\mathbb{R}^2$	0.050	0.030	0.023	
Residual Std. Error	157.112	2.476	9.547	
	(df = 394942)	(df = 394942)	(df = 394942)	

Note: Robust standard errors in parentheses clustered by users. \*p < 0.05; \*\*p < 0.01

# Conclusion

This paper examines jihadi groups' ideological appeals in relation to their military power and presents a theory that unifies these propagandist and violent strategies: Weaker military power drives jihadists' public statements to a stricter religious position on a "religious vs. secular" spectrum and vice versa. That is, these groups use their religious doctrine as a "weapon of the weak." An original data collection of 84 jihadist magazines, together with some leaked internal documents, illustrates this theory. I analyze the reason underlying the groups' unified strategy: Small groups prioritize their core members, who are mostly fanatical believers, while larger groups need broader support from the more secularized world. Evidence drawn from ISIS tweets supports this mechanism.

These empirical analyses present a paradox about most jihadi movements: These movements' ultimate goal is to rule society religiously, but they move away from that goal as they advance militarily. The key reason accounting for this phenomenon is that the religion advocated by jihadi groups—and thus examined in this paper—is extreme, fundamentalist, and violent and is by no means accepted by the larger Muslim community. Therefore, any negative consequences caused by religious extremism should not be attributed to the religion of the larger population. In that sense, the current paper is in line with some recent work that debunks the relationship between violent movements and the Islamic religion more generally (Cottee 2017; Shapiro and Fair 2010).

Overall, this paper is part of our discipline's effort of bringing ideology back into conflict studies. Much of the existing quantitative literature on political violence and civil conflict treats ideology as fixed brands—Islamist, leftist, and separatist, among others, leaving out the nuances in groups' ideological appeals. Instead, I examine jihadi ideology by looking beyond the common brand and into each group's specific statements. These statements develop as the conflict process evolves. They thus provide a window into understanding the comprehensive strategies of militant organizations.

Finally, I center this study on what violent organizations say because words and rhetoric matter increasingly more in an information era: Hate speech against ethnic minorities results in violent crimes; misinformation on the pandemic leads to unnecessary deaths; and extremist propaganda radicalizes individuals. These examples all demonstrate the power of propagation for ideas. Regarding global violent movements in particular, ideas in propaganda are the key for conflict mobilization. Hence, understanding the roots of these ideas becomes the key for conflict prevention.

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