**Seeing is Disbelieving: The Depths and Limits of Factual Misinformation in War**

*Daniel Silverman,*

*Carnegie Mellon University*

*Karl Kaltenthaler,*

*The University of Akron/Case Western Reserve University*

*Munqith Dagher,*

*IIACSS Research Group*

**Abstract:**

Misinformation, lies, and fake news are pervasive in war. But when are they actually believed by the people who live in warzones, and when are they not? This question is key, as their spread can spark greater violence and spoil efforts to make peace. In this study, we advance a new argument about lies in war. In contrast to intuitive ideas of people thinking whatever they want about the fighting, we argue that the accuracy of people's wartime beliefs depends on their exposure and their proximity to the relevant events. While war is rife with lies, those close to the action have the means and the motives to see through them. We test this argument with a unique combination of survey and event data in contemporary Iraq, finding support for our theory. Ultimately, these results help enhance our understanding of the dynamics of modern armed conflict and the reach of misinformation in contemporary world politics.

*"The truth is not half so important as what people believe to be true"* – Napoleon

*"You can't cover up the sun with a finger"* – Pashtun saying

*There are no Russian troops fighting in Ukraine. The repeated chemical weapons attacks in the Syrian civil war have been perpetrated by the West. The U.S. drone program in Pakistan is killing all – or almost all – civilians.* These are all key pieces of misinformation in conflict zones around the world. But when are they actually *believed* by the people living there, and when are they not? This question is critically important: if embraced, such misinformation can generate or escalate violence, trigger refugee flows, and block attempts at lasting peace and reconciliation. In other words, the proliferation of false beliefs can initiate, exacerbate, and extend armed disputes. In Myanmar, for example, pervasive rumors about provocation and aggression by the Rohingya minority have fueled a ruthless crackdown against the community since 2017, sending more than 600,000 people fleeing into neighboring Bangladesh.[1]

Despite these consequences, the problem of lies and misinformation in war has received relatively little attention from scholars. Moreover, the emerging picture from the few studies that examine it is a bleak one (Greenhill and Oppenheim 2016, Silverman 2019) dominated by ideas of "motivated reasoning" and threat perception distorting people's understanding of the dispute. In this picture, *bias* and *fear* lead civilian populations to believe whatever makes them feel good about the fighting, regardless of what is actually true. In other words, misinformation runs amok in conflict environments, even – and perhaps especially – among the communities most exposed to the actual fighting on the ground.

In this paper, however, we argue that this emerging view is missing an important part of the story. While people in warzones do often believe lies about the disputes, they do not always

---

[1] See, e.g., Annie Gowen and Max Bearak, "Fake News on Facebook Fans the Flames of Hate against the Rohingya

cling to such risky self-delusions. In particular, we argue that the accuracy of people's beliefs in war is based on their *proximity* and *exposure* to the relevant events. The core logic is as follows. On the one hand, war is rife with lies, many of which are widely accepted as populations rely on their motivated biases and partisan information sources to form beliefs about what is happening. On the other hand, those closest to the action have both the most need to thoroughly understand what is taking place and the greatest access to first-hand information about it. This combination of a powerful "accuracy motive" (Kunda 1990) with high-quality local information makes them far more likely to understand events on the ground accurately. For these reasons, when it comes to misinformation and lies in war, *seeing is the key to disbelieving*.

In order to test these claims, we examine a unique national survey of Iraq fielded in 2016 amid the U.S.-led Coalition air campaign against the Islamic State of Iraq and the Levant (ISIL) in the country. Critically, the survey contains items on Iraqis' factual beliefs about the campaign, as well as questions about whether they have lived under ISIL rule – where the vast majority of strikes have actually occurred. Moreover, we pair the survey with geo-located data on Coalition airstrikes from *Airwars* – an NGO that tracks civilian casualties in the anti-ISIL campaigns – in order to exploit an observed measure of proximity to the strikes. Overall, the results support our contentions: both self-reported experience in the targeted areas as well as observed proximity to Coalition airstrikes significantly *reduce* factual misperceptions about the nature of the campaign, including beliefs about its targeting and its consequences. The findings survive a rich set of tests designed to check their robustness and rule out alternative explanations. Overall, the paper thus shows that – as in peace – misinformation, propaganda, and "fake news" are pervasive in war, but are sharply limited by high stakes and personal proximity to what is going on. This has key

implications for both our understanding of the dynamics of modern armed conflict as well as the role of facts and lies in contemporary world politics more broadly.

**Literature:**

What drives the accuracy of people's beliefs – and their vulnerability to misinformation – in conflict zones? While there is a substantial literature on the micro-dynamics of armed conflict, it focuses largely on belligerents' *actions and behaviors* – their patterns of violence, cooperation, and governance (e.g., Kalyvas 2006, Condra and Shapiro 2012, Schutte 2015) – within a dispute. Recently, a handful of analyses have deviated from this trend and investigated civilians' *loyalties and attitudes* in armed conflicts (e.g., Jaeger et al. 2012, Lyall, Blair and Imai 2013, De Juan and Pierskalla 2014). However, neither strand of research investigates people's *factual beliefs* – what they even think is going on – in war. This omission is notable given that civilians' factual beliefs shape their ensuing opinions and actions – in other words, people react not to what is happening, but to what they *believe* is happening in war. In addition, this gap is particularly surprising given the ongoing wave of attention to the spread of false and unsubstantiated beliefs – such as rumors, factual misperceptions, conspiracy theories, and fake news – throughout the social sciences more broadly (e.g., Nyhan and Reifler 2010, Swami et al. 2011, Jolley and Douglas 2014, Garrett and Weeks 2017). Do these processes work the same in wars as they do in other "normal" situations, such as mainstream democratic politics?

While the relative neglect of this issue in the literature is suprising, there are a few recent efforts to examine it. Overall, these studies present a bleak picture of people's thinking about the facts on the ground in war, one in which lies spread freely and real world events have little role. In one such effort, Silverman (2019) examined Pakistani beliefs about a mock counterinsurgent

airstrike in the country using a nationwide survey experiment. He found that participants formed deeply biased beliefs about the attack, perceiving it as indiscriminate largely based on who did it rather than what was done. In another study, Greenhill and Oppenheim (2016) explored people's willingness to buy rumors about the fighting in two conflict-wracked societies in Southeast Asia. They found that people believed the rumors if they fit their prior views of the dispute. Together, these studies highlight dynamics of "motivated reasoning," in which people process information about the world in ways that defend their prior worldviews (Taber and Lodge 2006). Moreover, Greenhill and Oppenheim also show that such tendencies are exacerbated among people who are afraid for their own safety. They attribute this finding to the psychological dynamics of fear and anxiety which – while adaptive in certain situations – can also backfire in others (Albertson and Gadarian 2015), leading to "low-road thinking" and the spread of unverified beliefs (Greenhill and Oppenheim 2016, 663-64).

In sum, the implication of these studies is that people are essentially free to indulge in lies and misinformation in conflict environments if they have ideological or emotional appeal, with little to no room for the real world and the actual behavior of combatants around them to act as a constraint. Moreover, they suggest that those most facing risks to their own safety and mortality may even be *more* vulnerable to such self-delusion – that the "fog of war" may be thicker close to the front, or among those most at risk from the relevant events.

**Theory:**

We argue that the emerging view of these dynamics is indeed missing an important part of the story. While lies are pervasive in war, they can be effectively punctured by proximity and

4

exposure to the events in question. Below, we walk through the logic underlying this argument, laying out both the *motivational* and *informational* reasons why it occurs.

*The Role of Motivation:*

Perhaps the force seen as most central in shaping people's beliefs about the world is their *psychological motivation* about a given issue. In particular, a vast literature in social psychology suggests that people do frequently engage in motivated reasoning in the face of new information – thinking directed toward getting the answers they want, rather than those that are most correct or defensible in any objective sense (Kunda 1990). Indeed, studies reveal that when people hold strong "directional biases" about an issue, they not only reach self-serving answers, but actually process and access information distinctly in doing so. These dynamics have been observed across a wide range of social, economic, and political contexts, from legal disputes (Braman and Nelson 2007) to political campaigns (Taber and Lodge 2006) to economic markets (Benabou 2013) and armed conflicts (Lyall, Blair, and Imai 2013). In fact, many social science results in recent years indicating that citizens process information about the world in a *biased* way are attributed to this kind of motivated or defensive thinking.

Yet people do not always, or unconditionally, hold self-serving beliefs. Indeed, scholars applying these ideas from motivational psychology throughout the broader social sciences have often forgotten that just because reasoning is "motivated," that does not make it biased – rather, that depends on *what an individual's motivation is.* Specifically, there is an essential distinction made in social psychology between two types of motives: (1) "directional motives," or thinking toward a specific desirable conclusion, and (2) "accuracy motives," or pursuing the right answer regardless of how it makes you feel (Kunda 1990). The logic behind the latter is that it hinges on

5

the situation: when the stakes are high enough, people will process information more thoroughly and carefully in the pursuit of accuracy rather than relying on biased and inaccurate conclusions. In practice, psychologists have induced such "accuracy motives" in people by raising the rewards or stated importance of tasks (McAllister et al. 1979) or by making people publicly explain and defend their answers (Tetlock 1983). In such situations, individuals tend to take longer, rely on fewer cognitive shortcuts and heuristics such as out-group stereotypes, and arrive at more accurate and unbiased conclusions about the issue or situation at hand.

While these studies use modest economic rewards or social pressures – often in the lab – in order to motivate participants, we maintain that there is no more powerful "accuracy motive" in the real world than physical survival. When citizens think that they or their families could be killed – when their lives are "on the line" – they will expend much more effort than they would otherwise to identify and interpret useful information about the threat, adjusting (or abandoning) their past attitudes and attachments as needed when they learn something that can prove helpful. While this process may be cognitively and emotionally costly, the effort and discomfort is vastly outweighed by the motive to survive. Thus, we argue that the idea of an accuracy motive applies outside the lab in a powerful and oft overlooked way to people who are proximate to high-stakes stimuli, such as violent events.[2]

Anecdotal evidence of these dynamics in war abounds. Consider the ongoing U.S. drone program in Pakistan, which has actually been very precise and discriminate in nature despite the pervasive claims to the contrary (Plaw and Fricker 2012). While there is a widespread perception throughout "Pakistan proper" that the drone attacks are indisriminate in nature (Silverman 2019),

---

[2] In this sense, the argument helps add to our knowledge of a small but growing set of "boundary conditions" which define the limits of directionally motivated reasoning on the spread of false and unsubstantiated information, including the role of generalized trust (Miller Saunders and Farhart 2016) and perceptions of the perpetrator's capabilities (Silverman and Berger 2017).

those living in the tribal areas – where they overwhelmingly occur – largely know better. Indeed, one Pakistani journalist writing on the topic notes that the targets and results of the campaign are well understood in these areas because "for those who live the closest to the strike zones, drones are not just some abstract talking point. *Just getting through the day has become a high-stakes game*" (emphasis added).[3] In other words, the stakes of the situation are very different for people who have to make regular choices which could put them or their loved ones at risk. In this sense, civilians who actually live in or near the line of fire have a strong accuracy motive to understand what is going on around them; they have to "get it right" in order to survive, regardless of how it makes them feel about their preexisting identities and worldviews.

*The Role of Information:*

In addition to motivation, another major factor shaping people's factual beliefs about the world is the information they receive about it. From economic realities to immigration rates, we know that distinct information sources present very different factual pictures of the world, often leading to false and *biased* beliefs about various issues among their audiences. Different sources of information shape what people see in two main ways: (1) *selection bias*, or which events they report, and (2) *description bias*, or how they report them (McCarthy, McPhail, and Smith 1996). Indeed, empirical studies confirm there is wide variation in which political events earn coverage in different news outlets (e.g., Danzger 1975, McCarthy, McPhail, and Smith 1996), and in how those events are framed across sources, such as Fox, CNN, and MSNBC in the American context (e.g., Feldman et al. 2011).

This partisan media bias is at least as severe in conflict settings as it is elsewhere. Indeed, after most key incidents in war, there is an inevitable clash between the warring parties to control

---

[3] Naheed Mustafa, "Drone Lands Dispatch: Letter from Pakistan," *Foreign Affairs*, December 9, 2013.

their coverage in the news (Tugwell 1986). As noted by one scholar, "each violent event creates an 'opportunity space' into which both insurgent and state seek to inject their narrative" (Stevens 2013: 93). In other words, combatants and their backers have powerful incentives to manipulate the facts about the fighting presented in the media. They also have the tools to do so effectively, given that much of the media in conflict zones is either owned by – or at least loyal to – one side or the other in the conflict (Kalb and Saivetz 2007). In short, there are strong means and motives for biased news in war, as seen in the long and sordid history of wartime propaganda, censorship, and misinformation from WWI and WWII to contemporary disputes like Syria and Ukraine (e.g., Marlin 2002, Knightley 2004, Zhukov and Baum 2016). In other words, the production of biased or false information is thus at least as pervasive in conflict zones as it is elsewhere.

Yet, as with motivation, the impact of informational biases on factual beliefs in war also varies with proximity and exposure. While people are often deeply shaped by biased information in general – especially if it is endorsed by a trusted source – those closer to the events in question tend to know better. Civilians living close to a given type of conflict event have an advantage in learning what happened because they receive higher-quality first- and second-hand information. More proximate civilians can rely on their own lived experiences as well as the accounts of their families, friends, neighbors, and other peers who have often actually witnessed the incidents or their aftermath (or talked to someone who did). Such people will generally resist broad elite- and media-driven narratives that clash with their community's accumulated experience and wisdom. If two of your friends swear they saw the army murdering civilians a few towns over, would you trust the hollow claims to the contrary on state TV – even if you dislike the rebels? Or would you start to doubt them? Indeed, this idea builds on recent attention to the role of "citizen witnessing" in politics (Allan 2013) and the ability of more bottom-up information to help people challenge

elite cues instead of accepting them blindly (Kertzer and Zeitzoff 2017).

As before, anecdotal evidence of these dynamics in violent conflicts is often quite clear. Indeed, Davenport and Ball (2002) compare three information sources on Guatemalan violence from 1977-95: news coverage, human rights reports, and eyewitness testimony. While they find that all three have value, they conclude that civilians are the best informed on the events in their localities. Specifically, they explain that civilians "are useful for identifying what happened and who did it *within particular locales*" (emphasis added) (447). Likewise, in late WWII Germany, it was German civilian communities exposed to Allied bombing raids that first became aware of key facts on the ground – such as Allied air superiority – that had been hidden from them by the Nazis and their propaganda machine. As noted in the U.S. Strategic Bombing Survey, a massive U.S. government study of public opinion in wartime Germany and Japan: "bombing had much to do with the final discrediting of propaganda and of the Nazis because it brought home to millions the tangible proof of almost unopposed Allied air power, indisputable proof completely at variance with the familiar Nazi propaganda (1947: 1). In this way, the accumulation of more direct information among proximate civilians can help them learn what is truly happening in war, even in the face of lies, propaganda, or misinformation to the contrary.

**The Case of Coalition Airstrikes in Contemporary Iraq:**

We explore these dynamics in the context of the intervention against the ISIL insurgency in Iraq by the U.S.-led Coalition from 2014-16. In this section, we first provide a brief overview of this empirical context, and then derive the specific hypotheses that come from the literature as well as our argument as applied in this case.

In August of 2014, the U.S. began carrying out airstrikes against ISIL in order to impede its impressive territorial advance that summer and protect besieged communities in northern Iraq. Soon, leaders in Washington were assembling a growing Coalition of Western and Arab states to take offensive military action against the group. This was the start of a substantial multi-national aerial campaign against ISIL in Iraq – as of October 31st, 2016 (around the time of our survey), the U.S.-led Coalition had conducted 10,291 airstrikes against ISIL targets in Iraq, with 6,979 by the U.S. and 3,312 by its allies (Airwars 2017). In addition to conducting thousands of airstrikes against ISIL, the Coalition has also collected a vast amount of aerial intelligence and surveillance data, trained many thousands of Iraqi soldiers, and supported Iraqi military operations against the group both strategically and tactically, with U.S. special operations forces embedded with some Iraqi units. This support from the Coalition has been vitally important in turning the tide of battle in Iraq against ISIL.

Critically, while there have been a number of mistakes, overall the Coalition's campaign has been highly discriminate in nature – especially during the period under analysis. Indeed, it is essential to clarify that we are focused only on the Obama-era campaign through the fall of 2016, as the survey used was fielded in September and October 2016 and we wish to understand Iraqi beliefs about the campaign up through that point in time. Thus, while there was a vast increase in the degree of collateral damage in 2017 as President Trump relaxed Obama-era targeting rules,[4] the timing of the survey enables us to avoid the complications that would arise in characterizing the selectivity of the airstrikes now. On the contrary, the Obama-era campaign was criticized by some in U.S. and Iraqi military circles at the time for its high level of restraint and stringent rules to minimize civilian casualties. According to disgruntled U.S. pilots, well-known ISIL structures

---

[4] See, e.g., Samuel Oakford, "Coalition Civilian Casualty Claims Double Under Donald Trump." *Airwars*. July 17, 2017. https://airwars.org/news/trumps-air-war-kills-12-civilians-per-day/

were left standing due to concern over harming human shields, drones were forced to hover over targets for hours until they had "clean shots," and about three-quarters of aerial missions saw no weapons released at all due to collateral damage concerns.[5] In brief, some wished that the U.S. were *less* committed to such exceptional caution and precision.

This picture is corroborated by the available quantitative evidence. Data from *Airwars* – a British NGO which compiles the most comprehensive and transparent database of the airstrikes – shows that, even when including contested incidents, the 10,291 strikes to this point had killed an estimated 1,396 Iraqi civilians. This means that, when the survey was fielded, there was a ratio of around one civilian casualty for every 7.4 Coalition airstrikes. Given that the campaign has killed tens of thousands of ISIL fighters in Iraq and Syria, this implies a very high combatant to civilian casualty ratio. For the sake of comparison, consider that in the U.S. drone campaign in Pakistan – which, despite its controversial nature, is recognized by scholars as a very discriminate campaign (Taj 2010, Plaw and Fricker 2012, Fair, Kaltenthaler and Miller 2016, Silverman 2019) – there is about one civilian killed for every 1.6 strikes according to data from the Bureau of Investigative Journalism (BIJ 2017). Meanwhile, the same source shows that there has been one civilian death for every 1.4 American drone strikes in Yemen and for every 2.5 American airstrikes in Somalia – in other words, that other targeted killing programs have killed civilians much more frequently than the campaign in question. In sum, a close look shows that the pre-Trump Coalition airstrikes against ISIL in Iraq were not only effective in helping defeat it on the battlefield in Iraq, but also quite targeted and discriminate in nature.

Yet, unsurprisingly given our discussion of information as a "weapon" in war, there have been considerable efforts to spread rumors, propaganda, and misinformation about the campaign. To begin with, ISIL itself has been one of the key sources of such propaganda. ISIL's narrative

---

[5] See Eric Schmitt, "U.S. Caution in Strikes Gives ISIS an Edge, Many Iraqis Say." *New York Times*. May 26, 2015.

about the campaign has focused largely on claiming that it is (1) ineffective, with ISIL's forces continuing to advance despite aerial attack, and (2) indiscriminate, with the Coalition targeting or at least harming mostly innocent civilians. This information has been disseminated both virtually through ISIL's Amaq news agency, Dabiq online magazine, and affiliated Twitter accounts, and in more traditional forms in its own territory in Iraq (and Syria) through the group's radio station, dedicated propaganda centers, and other brick-and-mortar tactics.[6] To pick just one example, the 4th issue of Dabiq magazine – released on October 11, 2014 – was entitled "The Failed Crusade" and dedicated largely to the "Crusader airstrikes" and their ineffective and indiscriminate results, emphasizing their inability to prevent ISIL advances and their slaughter of innocent Muslims in both Iraq and Syria (ISIL 2014). Claims like these are amplified via ISIL's legions of affiliated Twitter accounts and can even seep into traditional media within Iraq and beyond.

Another key source of propaganda about the Coalition campaign is the *Hashd al-Sha'abi* or Popular Mobilization Forces (PMF). The PMF is a coalition of Shi'a Arab militias in Iraq that coalesced in 2014 to fight ISIL with Iranian support (although it has now been at least nominally incorporated into the Iraqi government). While the PMF has played a key role in the fight against ISIL in Iraq, it has always existed in an uneasy alliance with the Coalition due to concerns about its abuse of Sunni Arab civilians and its largely anti-American orientation and close ties to Iran. For these reasons, despite its official cooperation with the Coalition, the PMF has emerged as a major source of misinformation about the campaign. This misinformation centers around several core themes. First, it stresses how the Coalition's airstrikes are weak and ineffectual, positioning itself as the force liberating Iraqi society from ISIL's grasp (Garrison 2017). Second, it questions the Coalition's goals and has increasingly suggested that it actively helps ISIL on the battlefield,

---

[6] See, e.g., "Inside the Propaganda War for Mosul." *Journal of Middle Eastern Politics and Policy*. February 5, 2017. http://jmepp.hkspublications.org/2017/02/05/mosul-propaganda-war/

even posting photos of Western helicopters which it alleged were transporting ISIL leaders from site to site.[7] Third, it has painted the Coalition as actively targeting the Shi'a militias themselves, seizing on rare "friendly fire" incidents from erroneous airstrikes (and inventing others) in order to push this theme (Garrison 2017). Like ISIL, the PMF uses a variety of methods to spread this misinformation, most notably its official *al-hashed.net* site and *Team Media War* Twitter account (which had one million followers by the end of 2016). Moreover, its voice is often amplified by Iranian state news as well as other pro-Iranian outlets within Iraq.

Overall, there is thus a wealth of propaganda and misinformation from various sources in Iraq about the Coalition's air campaign against ISIL, suggesting that it is both (1) ineffective and even counterproductive against the organization, and (2) inaccurate and indiscriminate in nature. While these claims often originate from combatants in the conflict such as ISIL and the PMF (as well as Iran and even Russia), they often influence and infiltrate more traditional forms of media coverage in the country. For instance, analysts have noted that infographics made by combatants such as ISIL or the PMF showing reports from the battlefield "can prove particularly effective in shaping traditional media coverage: because accurate casualty figures are notoriously difficult to obtain, the government faces continual pressure to refute [such] claims."[8] This is critical for our analysis because traditional media outlets such as *Al-Iraqiyya* state TV continue to be among the most important in the Iraqi media landscape (Amos 2010). In sum, then, the Iraqi population has been exposed to a considerable amount of propaganda, misinformation, and fake news about the dynamics and consequences of the Coalition actions in the dispute.

---

[7] Ahmad Majidyar, "Iran-Supported Militia Groups Intensify Anti-U.S. Propaganda." *Middle East Institute.* May 16, 2017. http://www.mei.edu/content/article/io/iran-supported-militia-groups-intensify-anti-us-propaganda-iraq
[8] See f.n. 8.

**Empirical Hypotheses:**

The critical question then becomes: who believes this misinformation, and who does not? Existing literature on false beliefs in war (and beyond) would highlight the role of *bias* in at least two ways. First, we should see variation based on civilians' orientations toward the combatants – especially the perpetrator of the attacks. This is the idea of motivated reasoning discussed earlier: Iraqis who hold more unfavorable views of the Coalition will be more likely to embrace negative stories of its battlefield performance or behavior, as these align more with their prior worldviews. Second, we should see variation based on people's "information diets" and exposure to divergent information streams about the fighting. In particular, people who rely on sources which are more critical of the Coalition – and thus more likely to emphasize its abuses and its setbacks instead of its restraint and successes – should be more likely to believe the (negative) misinformation about the campaign as well.

Yet the main hypotheses we are interested in testing center around the *mitigation of bias*. In particular, the argument suggests that motivational and informational biases should be limited by people's exposure and proximity to the violence in question. Thus, we should see that "local" Iraqis who live under (or near) the airstrikes are *less* likely to believe negative propaganda about them than their "non-local" counterparts. As described in the theory section, this is both because such civilians can actually see the targets and results of the campaign (*informational advantage*) and because they have a psychological motivation to know what is happening (*accuracy motive*). To illustrate this point, consider the experience of civilians in Mosul, ISIL's largest stronghold in Iraq and the largest target of Coalition airstrikes in the country. Civilians in Mosul can see which buildings and neighborhoods have been hit by Coalition airstrikes and which have not. They also have a key motive to do so because they need to know how to stay safe and which areas to avoid.

Likewise, such civilians are likely to know whether the strikes force ISIL to run and hide, change its routines, or even retreat. This information, too, is essential for their survival and their decision about whether to stay, flee, or even resist. This yields the following hypothesis:

> ***H1 (Local Accuracy):*** *Iraqis who are more directly exposed to the Coalition airstrikes will form more accurate factual beliefs about them.*

In addition, another empirical implication of the argument is that we should see people's exposure and proximity to strikes shape the impact of other kinds of factors. In particular, Iraqis who have more direct exposure to the violence should be less affected by their prior orientations and their information sources in the conflict. Rather, such individuals should not only hold more accurate beliefs, but also be willing to *update* them accurately regardless of their extant attitudes or information diets in the dispute. In other words, the impact of these factors will be diminished or even disappear among more proximate civilians. This leads to a second hypothesis:

> ***H2 (Local Bias Resistance):*** *The factual beliefs of Iraqis who are more directly exposed will be less influenced by their prior orientations or information streams.*

**Methods:**

In order to explore these hypotheses, we use data from a unique nationally representative survey of Iraq administered by the Iraqi polling firm IIACSS in September and October of 2016. Fielded amid a Coalition push to reclaim remaining parts of northwest Iraq from ISIL, the survey was conducted with multi-stage stratified probability sampling of the entire adult (18+) populace of the country, excluding territory under direct ISIL control (chiefly Mosul). The survey spanned both urban and rural areas across the country; the Primary Sampling Units (PSUs) were blocks in urban areas and villages in rural areas. The interviews were done face-to-face by a mixed-gender

team of veteran Iraqi enumerators, with women interviewing women and men interviewing men. Ultimately, the survey sampled 3,500 respondents, with a 2,500 N original sample and a 1,000 N "booster sample" of Sunni Arab governorates and internally displaced persons (IDPs) from areas under ISIL control.

Great care was taken to ensure the safety of all of our respondents as well as enumerators. No interviews from ISIL-controlled territory were collected. After the interviews were complete, the survey was weighted using demographic information from the 1997 and 2010 enumeration of all households in Iraq supplemented with 2015 projections from the Iraqi Central Organization of Statistics (COSIT). To probe for falsification of responses, we used the program "Percentmatch" and found no evidence that it occurred. Analysis of these data are IRB approved (University of ███████ IRB # 20171201).[9]

Demographically, the sample is 54.2% male, with about half of the respondents under age 35 and more than half not reaching secondary school. The ethnic and sectarian distribution of the sample is 12.9% Kurd, 39.0% Sunni Arabs, and 45.4% Shi'a Arabs (the Sunni Arab percentage is slightly inflated given the intentional oversample). Overall, these demographics are similar to other leading scholarly surveys in Iraq such as the Arab Barometer as well as recent Iraqi COSIT demographic projections of the country.

Substantively, the survey contained a number of different batteries of questions, with key modules about citizens' perceptions of the major challenges that face Iraq, their levels of support for the political leaders and groups in the country, their means of acquiring political information, their views of sectarian and ethnic tensions among Iraqis, and their attitudes and beliefs about the

---

[9] While the data were first collected in the fall of 2016 by the Iraqi survey firm IIACSS for non-academic purposes (specifically on behalf of the U.S. government), the authors recognized the academic value of the survey afterwards and obtained IRB approval for its use as "found data." A university IRB then granted approval in the fall of 2017 to examine the de-identified survey data in order to study Iraqi conflict beliefs and attitudes.

ongoing violent conflict with ISIL. We also collected a wealth of demographic information about each respondent, notably their socioeconomic background, experiences in the conflict, and ethnic and sectarian affiliation. In this sense, the survey offers a rich source of information about Iraqi wartime atittudes, beliefs, and experiences in which to explore our hypotheses.

*Measurement:*

As our dependent variables, we use two questions gauging Iraqis' factual misperceptions about the Coalition campaign. In particular, Iraqis were asked about their level of agreement (on a five-point scale) with the following claims: (1) *Coalition airstrikes mainly target PMF forces*, and (2) *Coalition airstrikes mainly help ISIL*.

As alluded to earlier, both of these claims are empirically false. In the first case, the U.S.-led Coalition's anti ISIL airstrikes under President Obama did not "mainly target" the PMF; they targeted ISIL. While the Coalition did on (extremely rare) occasion hit PMF troops, there was no secret U.S. policy of bombing Shi'a militias in the country. In fact, data from the strike-tracking NGO Airwars help corroborate this point, given that they contained just 55 "friendly fire" claims out of more than 10,000 airstrikes at the time of our survey. Setting aside the fact that these were undoubtedly almost all unintentional, and many did not even hit the PMF but other local proxy forces, claiming that the international anti-ISIL campaign in 2016 "mainly targets" the PMF (and not ISIL) was thus clearly untrue.[10]

---

[10] Despite its outlandish nature, this idea builds on loud allegations by the PMF and other pro-Iranian elements in the country that these rare friendly fire events were intentional, as well as the strong undercurrents of anti-Americanism within Iraqi society, making it appealing to many Iraqis. See, e.g., Jane Arraf, "How Iraqi Forces Drove ISIS From Ramadi," *Newsweek*, February 25, 2016. https://www.newsweek.com/2016/03/04/iraqi-forces-fighting-isis-ramadi-fallujah-mosul-430042.html

Turning to the second claim, the airstrikes do not "mainly help" ISIL. In fact, they have been deeply damaging to the group, destroying much of its financial and oil resources, severely disrupting its operational activities, eradicating thousands of its fighters, and ultimately helping "roll back" almost all its territory in the country since 2014 (Jones et al. 2017).[11] Despite this, a skeptical reader might wonder if – while effective against ISIL on the battlefield – the Coalition campaign could still be counterproductive if it produced sufficient resentment among Iraqis and boosted public support for the group. This idea, however, clashes sharply with observed reality on the ground. In fact, ISIL has been quite unpopular in Iraq since the start of the campaign, with no discernible rise in its support since then. Indeed, the level of Iraqi sympathy for the group was approximately 2% in fall 2014, 0.5% in fall 2015, and 1.5% in our survey in fall 2016.[12] In sum, the idea that the international anti-ISIL campaign was making the group popular or sympathetic in Iraq is belied by the available evidence.

For the primary independent variables in the analysis, we use a variety of different items. To capture Iraqis' degree of exposure and proximity to the strikes, we use two distinct measures. First, we use a pair of survey questions about the degree to which respondents have lived in areas under ISIL control – where almost all of the Coalition anti-ISIL airstrikes have actually occurred. To begin with, respondents were just asked *whether they had lived in an area while it was under the control of ISIL.* Indeed, 21.3% of the sample (N=746) reports having lived under ISIL rule at some point. Notably, this is very similar to the 19% of Iraq's population that ISIL is estimated to have presided over in Iraq at its peak in mid-2014 (Jones et al 2017). In addition, those who said

_____

[11] This idea actually taps into conspiracy theories promoted by some in the country that the Coalition is "in cahoots" with ISIL and is operationally aiding it on the battlefield; claims that have included photos of U.S. helicopters flying over Iraq on Twitter with red circles showing them allegedly "caught" transporting ISIL leaders and allowing them to escape the country's grasp. See, among other things, f.n. 6.

[12] Additionally, more indirect items in our survey such as questions asking Iraqis to estimate ISIL's level of support countrywide provide roughly similar results, with no more than 5% support for the group. Results from the authors' surveys in Iraq from 2014-16; available upon request.

yes were then asked for *how long they had lived in an area while it was under ISIL control,* with a five point scale ranging from "less than one month" to "more than a year." In our base models, we combine these two questions into a single ordinal measure of exposure to the targeted areas. Second, we also show results using an additional, observational measure of exposure – explained in more depth later – based on the respondents' distance from the nearest airstrike as recorded by Airwars, a leading NGO tracking the aerial campaign.

We measure motivational bias surrounding the Coalition's campaign in two major ways. First, we use questions about individuals' attitudes toward some of the primary combatants in the conflict – in particular the U.S. and the PMF. The question about the U.S. is a four-point measure of Iraqis' confidence in the United States' ability to responsibly deal with problems in the region. Given that the U.S. is the main perpetrator of the Coalition campaign, we expect that respondents with little confidence in the U.S. will *want to believe* the factual misperceptions about the strikes. Meanwhile, the question about the PMF is a three-point measure of Iraqi support for the group's goals and activities. Given that the PMF is a key rival of the U.S.-led Coalition in Iraq and a key source of opposition and suspicion toward it, we expect that Iraqis who support the PMF will be motivated to accept these misperceptions. Second, we use Iraqis' sub-national group identities – in particular whether they are Shi'a Arab, Sunni Arab, or Kurd – to measure motivational biases toward the strikes. In Iraq today, Shi'a Arabs tend to hold more negative orientations toward the U.S. because it has acted as a check on Shi'a (and Iranian) influence in the country, while Sunni Arabs and Kurds tend to hold more favorable orientations toward the U.S. for this reason (Kose, Ozcan, and Karakoc 2016). Given this reality, we expect Shi'a Arabs to be more likely to accept the misperceptions, and Sunni Arabs and Kurds to be relatively less likely to do so.[13]

---

[13] In the models below, we omit the Kurdish variable so that our sectarian dummies can be easily interpreted against a clear baseline category (otherwise the baseline would be Iraqis not affiliated with any of the main sects, a small

To capture informational bias surrounding the campaign, we use several items on Iraqis' "information diets" and how heavily they rely on different types of news sources in the dispute. Indeed, the Iraqi news environment is sharply polarized along sectarian and other political lines (Amos 2010), with different Iraqi media channels varying in the information they present about the activities against ISIL among other issues.[14] We focus specifically on the respondents' level of exposure to three major outlets with different sectarian orientations: *al-Iraqiyya TV*, which is the country's state TV channel and is quite influential but typically seen as pro-government and pro-Shi'a in orientation, *al-Sharqiyya TV*, a private satellite channel that is more Sunni-friendly and often quite critical of the government, and *Rudaw TV*, a Kurdish outlet closely linked to the ruling Barzani family in Iraqi Kurdistan. Due to these sectarian affiliations, we expect exposure to *Al-Iraqiyya* to boost Iraqis' belief in factual misperceptions about the airstrikes and exposure to *al-Sharqiyya* and *Rudaw* to reduce such perceptions.

Finally, we include several covariates in the models in order to account for their possible influence on the misperceptions. To begin with, we include respondents' age, gender, education, income, and urban vs. rural status in the models. These represent key socioeconomic factors that have been linked to support for conspiracist beliefs and misperceptions in the region and beyond (e.g., Gentzkow and Shapiro 2004). Additionally, we include an indicator of internally displaced person (IDP) status, as this can strongly shape conflict attitudes (Bohnet, Cottier, and Hug 2016) but is distinct from actual exposure to the fighting.[15] The base models are estimated via ordinary

---

slice of the data). Kurds can thus be thought of as the baseline group, though their inclusion does not change the substantive results.

[14] For instance, pro-Sunni sources like *Al-Baghdadiyya TV* have branded ISIL as "tribal revolutionaries," while pro-Shi'a sources like *Al-Iraqiyya TV* have employed terms like "terrorists" or "terrorist gangs." See Mohammed Salih. "Iraqi Media Divided in Coverage of IS Conflict." *Al-Monitor*. September 4, 2014.

[15] While one might initially think IDP status is a good indicator of local violence exposure, in fact IDPs in warzones often flee for social, economic, or psychological reasons rather than actual violence exposure (e.g., Adhikari 2013). Moreover, even if they are fleeing from violence, it may be other types of violence besides Coalition strikes. Thus,

least squares (OLS),[16] with dependent variables coded from 0 to 4 so that higher values indicate greater support for each factual misperception.

**Results:**

Table 1 shows the base results. Since our primary interest is in the effect of exposure and proximity to the campaign (H1), the first two columns contain naïve models with this alone, and the subsequent columns add additional sets of independent variables as described above in order to account for other key sources of the misperceptions.

**Table 1: Impact of Exposure on Iraqi Misperceptions about Coalition Airstrikes**

| | Airstrikes Target PMF | Airstrikes Help ISIL | Airstrikes Target PMF | Airstrikes Help ISIL | Airstrikes Target PMF | Airstrikes Help ISIL |
|---|---|---|---|---|---|---|
| ***Exposure*** | | | | | | |
| Time under ISIL | -0.27*** | -0.24*** | -0.13*** | -0.13*** | -0.12*** | -0.13*** |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.03) | (0.03) |
| ***Orientations*** | | | | | | |
| Shi'a Arab | | | 0.81*** | 0.93*** | 0.65*** | 0.77*** |
| | | | (0.10) | (0.10) | (0.12) | (0.12) |
| Sunni Arab | | | 0.20* | 0.43*** | 0.09 | 0.25* |
| | | | (0.09) | (0.09) | (0.11) | (0.11) |
| Confidence in U.S. | | | -0.40*** | -0.33*** | -0.31*** | -0.24*** |
| | | | (0.02) | (0.02) | (0.03) | (0.03) |
| Support for PMF | | | 0.29*** | 0.30*** | 0.18*** | 0.24*** |
| | | | (0.04) | (0.04) | (0.05) | (0.05) |
| ***Information*** | | | | | | |
| Iraqiyya TV | | | | | 0.12*** | 0.05 |
| | | | | | (0.03) | (0.03) |
| Sharqiyya TV | | | | | -0.19*** | -0.12*** |
| | | | | | (0.03) | (0.03) |
| Rudaw TV | | | | | -0.28*** | -0.29*** |
| | | | | | (0.04) | (0.04) |
| Constant | 2.62*** | 2.43*** | 1.78*** | 1.36*** | 2.21*** | 1.85*** |
| | (0.12) | (0.12) | (0.14) | (0.13) | (0.16) | (0.16) |
| Observations | 2,990 | 2,992 | 2,934 | 2,934 | 2,262 | 2,262 |
| R-squared | 0.05 | 0.04 | 0.28 | 0.26 | 0.33 | 0.31 |

*Notes: Results from ordinary least squares regressions. Demographics (age, gender, education, income, urbanity, IDP status) not shown. Standard errors in parentheses.*
*** p<0.001, ** p<0.01, * p<0.05*

---

IDP status is actually a poor measure of exposure to the airstrikes. Yet because IDPs often have especially strong grievances in disputes, it is an important covariate to account for in the models.
[16] Results are substantively similar with ordered logit (see Online Appendix, Table A5).

As can be seen, the models show that personal exposure has the expected effect – that is, Iraqis who have lived in the areas actually targeted by the Coalition's airstrikes are *significantly less likely to believe misinformation* that they are attacking their allies or assisting their enemies than those who have not. These findings hold in the naïve exposure-only models (Columns 1-2) and once we add the richer set of motivational (Columns 3-4) and informational (Columns 5-6) factors. While many of these other variables are linked quite strongly with the misperceptions as well (in the expected ways), the significant effect of personal exposure persists across the board. In other words, even after accounting for these key drivers of factual bias, we see that those who have faced the most risk of harm from the strikes are less likely to hold false beliefs about them. This offers some initial support for H1 and the idea that seeing is disbelieving in war.

Yet in order to test our hypothesis more thoroughly, we analyze several different slices or "cuts" of the data. Indeed, as discussed earlier, if our argument is correct, we should not only see that (1) Iraqis who are more exposed to the strikes hold more accurate factual beliefs about them (H1) but also (2) that their beliefs are less shaped by their broader political attachments and their information streams in the dispute (H2), since they more likely to *accurately update* their beliefs about what is going on regardless of these other key influences.

In order to test this, we explore whether some of the primary sources of motivational bias in the model are *moderated* by personal exposure. Indeed, Figure 1 reveals how the effect of both (1) confidence in the U.S. and (2) support for the PMF vary by experience living under ISIL rule. Starting with pro-American attitudes (the top two panels), we can see that confidence in the U.S. significantly reduces both misperceptions among the unexposed population, but among the more proximate populace this effect disappears or is at least substantially diminished. Turning toward pro-PMF views (the bottom two panels), we can see that the same pattern emerges – support for

the PMF significantly boosts both misperceptions about the strikes among unexposed Iraqis, but these effects disappear among those who have lived in the targeted areas. This helps drive home the argument about the power of personal exposure, showing that while factual beliefs in war are generally biased in the direction of civilians' attachments in the dispute, this bias is "disciplined" and diminished by exposure to the events in question (H2).[17]

**Figure 1: Impact of Pro-U.S. and Pro-PMF Views on Misperceptions by Exposure**
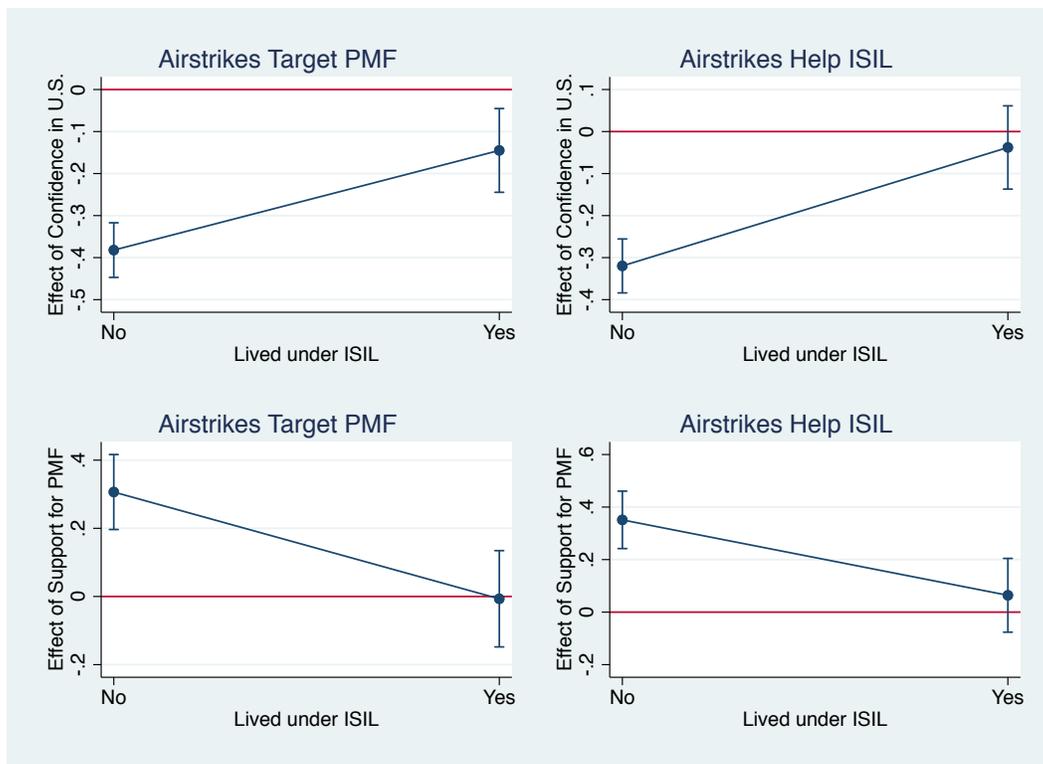


*Note: figure shows marginal effect of confidence in the U.S. and support for the PMF by experience under ISIL rule. Results from OLS regressions, with 95% confidence intervals.*

Despite the evidence presented so far, a skeptical reader might still be concerned that the measure of our main independent variable – exposure to the fighting – is self-reported in nature.

---

[17] All four effects are statistically significant for unexposed Iraqis (left side of each sub-graph), and lose their significance among exposed Iraqis (right side of each sub-graph). The difference-in-difference between them is significant in three of the four cases.

This could leave it subject to potential reporting or recall biases, among other issues. To address such concerns, we use data from the airstrike-tracking NGO *Airwars* on the observed location of all 10,000-plus Coalition airstrikes in Iraq. Premised on the model of the Bureau of Investigative Journalism's Drones Project – the most comprehensive, transparent, and reliable public database of U.S. drone warfare in countries like Pakistan (Bauer, Reese, and Ruby 2015) – *Airwars* tracks the frequency, results (civilian casualties), and locations of all reported international airstrikes in Iraq and Syria. In its effort to do so, the organization relies on a wide range of sources, including international and local media, NGO reports, social media sites (e.g., so-called "martyrs' pages"), and official statements by the combatants themselves. It then attempts to triangulate across these sources and investigate wherever possible, yielding a five-point scale of reporting quality for the alleged civilian casualties in each event, which runs from Discounted to Confirmed. Because the respondents in our survey are geolocated, we were able to match them with the Airwars data and create a measure of distance from the closest observed strike for each respondent.

To examine the impact of this measure, we add it to our base models of both false beliefs (i.e., the final two columns of Table 1).[18] The results show that proximity significantly decreases both misperceptions. To clearly illuminate these dynamics, Figure 2 plots the predicted level of each misperception by respondents' proximity to the strikes, with 95% confidence intervals. This figure shows how both misperceptions – that the attacks target the PMF, and that they help ISIL – decline substantially as one moves from areas far away to those much closer to (and ultimately underneath) an airstrike. Moreover, the figure also conveys effects that are significant in substantive terms: because the outcomes are all five-point scales coded from 0 to 4, the value "2" represents respondents precisely in the middle. Thus, the figure indicates that – for the "Targets PMF"

---

[18] We use ANOVA rather than OLS here so that the predicted values are not linearly constrained, showing the effect's functional form across the range of values of distance from a strike.

as well as the "Helps ISIL" misperceptions – those within about 50-100 km of a strike are likely to reject the claim (or at least be ambivalent), while those outside this range are likely to believe them. This provides further evidence, based on a more direct and behavioral measure of personal exposure, that is consistent with our key thesis – that seeing is in fact disbelieving when it comes to factual misinformation in war.

**Figure 2: Predicted Level of Factual Misperceptions by Respondent's Distance from Strike**
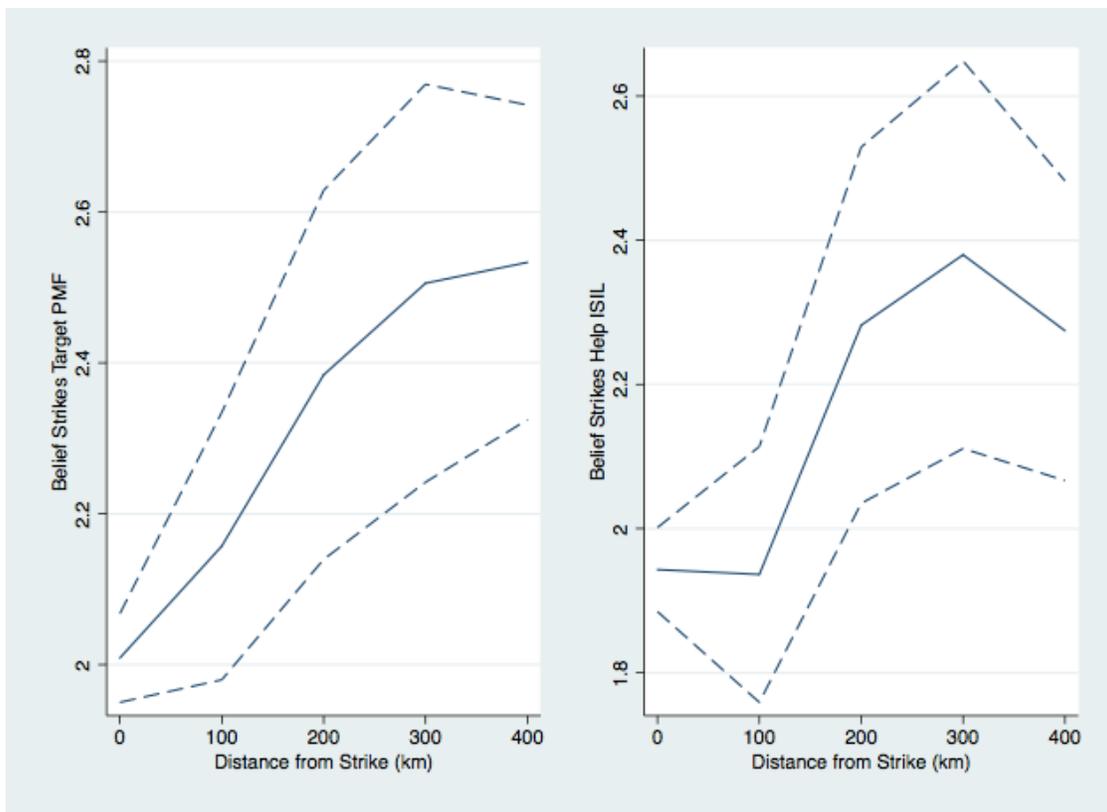


*Note: figure shows predicted level of belief in each factual misperception by proximity to closest Coalition airstrike. Results from ANOVA regressions, with 95% confidence intervals.*

*Robustness:*

We run several additional tests to bolster our reuslts. Perhaps the key confounder concern is that "local" civilians might be different in (other) ways that threaten our findings. In particular,

the primary alternative is that proximate communities might be motivated not by accuracy but by anti-ISIL bias. Local civilians might be more vehemently opposed to ISIL due to its brutalization of adjacent communities or the more immediate threat that it poses to them ("we could be next"). That could make them more supportive of any effort to eliminate it, Coalition airstrikes included (and thus skeptical of negative claims toward them). We address this concern in two ways. First, we replicate the base models with several measures of opinion toward ISIL. Second, we conduct a "placebo test" in which we examine support for *valid* claims about human rights abuses by the PMF in its anti-ISIL operations. If locals were truly motivated by a desire to expunge ISIL, they would be more likely to discount not just negative claims against the Coalition but those against the PMF as well – since the PMF has been among its most effective adversaries. Yet, the results of these tests reveal the opposite (see Online Appendix, Tables A1-A2); controlling for attitudes toward ISIL has no substantive impact on our findings, and exposure does *not* make Iraqis more skeptical of the *valid* claims about the PMF's anti-ISIL activities (as it does with the *false* claims about the Coalition's). This offers further evidence consistent with our argument, and against the notion that our findings result from anti-ISIL bias.

In addition to this, we also conduct a number of other robustness tests to boost confidence in the findings. These include: (1) restricting the sample by sectarian identity (Sunni Arabs only), (2) controlling for observed interview quality, (3) using alternate measures of motivated biases as well as experience under ISIL rule, (4) adding district fixed effects, (5) adding spatially clustered standard errors, and (6) using ordered logit models rather than OLS regressions. As shown in the Online Appendix (Tables A3-5, Figure A1), these tests all support the principal results, helping demonstrate their robustness to alternative modeling choices, measures of our primary variables, and attempts to address other potential sources of bias. These tests are described in much greater

depth in the Online Appendix; taken together, they helps substantially enhance confidence in the paper's central findings.

**Conclusion:**

From WWII to contemporary Iraq, war is rife with lies. Yet, despite their prevalence and dire consequences, there is surprisingly little work on who accepts them in warzones. Moreover, the picture emerging from existing literature is one dominated by bias and fear, in which people indulge freely in misinformation in war regardless of what is happening around them (Greenhill and Oppenheim 2016, Silverman 2019). In this paper, we greatly enrich this picture by showing how and when this bias is overcome. Drawing on oft-overlooked insights from communications and social psychology, we argue that people who are more proximate or exposed to the relevant events have the means (*local information*) and motives (*accuracy motive*) to sort truth from lies. Pairing survey and event data from a wartorn society, we examined this theory in the case of the Coalition air campaign against ISIL in Iraq. The results are broadly supportive of our argument: Iraqis' factual beliefs about the Coalition airstrikes were generally quite biased, but these biases were substantially reduced by exposure and proximity to the strikes themselves. In other words, the results confirmed that – when it comes to lies in war – seeing is disbelieving.

The results have some key implications for our understanding of modern violent conflict. Most narrowly, they illuminate the limits of misinformation in war. Indeed, while there has been much concern over the spread of wartime misinformation in recent years – for example, Russian propaganda and disinformation efforts in Ukraine – our findings show how the persuasive effect of these strategies is constrained by and conditional on their audience's proximity to the fighting. Perhaps more interestingly, however, they outline when civilians accurately recognize combatant

behavior in war more broadly. This is critical because it underpins a variety of population-centric tactics in war. Indeed, the logic behind many prescribed actions in armed conflict – such as using restraint or providing aid in warzones – is that they should be done so that the civilian population does not join or help the enemy (Sewall et al. 2007). Yet, if people do not recognize these actions and embrace lies about them, this reasoning is imperiled. If a careful U.S. drone strike is believed to be a bloody massacre, what is the strategic purpose of this precision to begin with?

This study reveals the scope conditions of these concerns, showing that they apply mostly to populations removed from the relevant events. Indeed, for both informational and motivational reasons, those who are near the "action" typically know what is happening, while who are not are vulnerable to misinformation and lies about it. This is why, in a context like Pakistan, we see that the U.S. drone campaign is quite popular and effective in the tribal areas where it actually occurs (e.g., Taj 2010, Johnston and Sarbahi 2016), while it is generally perceived as indiscriminate and deeply alienating among the rest of the country (e.g., Fair, Kaltenthaler, and Miller 2016). In this sense, there is a strategic impetus for actors to exercise restraint locally on the battlefield, but not necessarily when one zooms out beyond it. These insights can not only inform academic debates about the effectiveness of a variety of actions in conflict, but strategic ones as well. In particular, they imply that decision-makers should anticipate the divergent reactions of civilians at different levels of removal from a military campaign, and potentially search for ways to amplify the voice of the "local" populace so as to boost the supply of truth in war.

These findings should also be of interest to scholars in political psychology and political behavior more broadly. Indeed, in recent years, there has been a surge of behavioral research on the abundance of political rumors, conspiracy theories, factual misperception, or "fake news" in mainstream politics (e.g., Nyhan and Reifler 2010, Uscinski and Parent 2014, Oliver and Wood

2014, Miller, Saunders, and Farhart 2016). While debates continue to rage about the strength of these beliefs, there is a creeping image that we are mired in a "post-truth era" in which the facts exert a dwindling effect on how people form opinions. This study shows that, while rumors and lies are pervasive in wars, there are also clear boundaries to their appeal. In fact, it suggests that personal exposure is the antidote to lies and misinformation: local civilians who directly witness events and who have to make good choices to survive seek out the facts and cut through the lies. In this sense, the study offers a note of qualified optimism in the often-pessimistic debates about facts in politics – when people have enough "skin in the game" and can observe the dynamics in question, they will typically get it right regardless of their preexisting attitudes and level of fear. At the same time, it also raises the question: who else in social or political life – from those near violent crimes to natural disasters to disease outbreaks – thinks like local civilians living near the front lines of war?

Finally, the study offers key implications for us as information producers and consumers. Indeed, for information producers from war such as journalists, the project suggests that accurate war reporting requires being "on the ground" in directly affected areas and speaking to the locals about what is going on, rather than reporting from the safety of capital cities or nearby countries. Indeed, this is a major critique of reporting in conflicts like the Soviet-Afghan War in the 1980s, which were ordinarily covered "from across the border in Pakistan, from brief visits to Kabul, or from furtive interviews with guerrilla fighters who soon developed a reputation for being willing to tell the correspondent whatever he wanted to hear" (Knightley 2004: 476). Moreover, datasets that track violent events – such as the Global Terrorism Database or UCDP/Prio Armed Conflict Database – should prioritize news reports with *local* civilian sources, or at least gather meta-data on the stories they use that allow users to do so. Lastly, for consumers of information about wars

such as peace activists or ordinary citizens, they should be discerning customers of any narrative they hear about what is happening in a warzone. Scenes such as American "Code Pink" activists marching with non-local Pakistanis against U.S. drone strikes in the tribal regions of the country – while the voices of local Pakistanis are systematically suppressed – risk making these activists into tools of militant groups or intelligence agencies in the conflict.[19] In sum, we must all reckon with both the depths – as well as the limits – of lies in war.

---

[19] "US Activists Join Drone Protest in Pakistan," *The National*, October 7, 2012.

**References:**

Adhikari, P. 2013. "Conflict-Induced Displacement." *American Journal of Political Science* 57(1): 82-89.

Albertson, B., and S. K. Gadarian. 2015. *Anxious Politics*. Cambridge, MA: Cambridge University Press.

Allan, S. 2013. *Citizen Witnessing*. Cambridge, UK: Polity Press.

Amos, D. 2010. "Confusion, Contradiction, and Irony." *Joan Shorenstein Center*, Discussion Paper #D-58. http://nrs.harvard.edu/urn-3:HUL.InstRepos:4421401

Bauer, V., M. Reese, and K. Ruby. 2015. "Drone Strikes and Insurgent Retaliation." *Paper prepared for the MPSA Annual Conference, April 16-19, 2015*.

Bénabou, R. 2013. "Groupthink." *Review of Economic Studies* 80: 429-62.

Berman, E, J. H. Felter, J. N. Shapiro, and E. Troland. 2013. "Modest, Secure, and Informed." *American Economic Review* 103(3): 512-17.

Bohnet, H., Fabien C., and Simon H. 2016. "Conflict-Induced IDPs and the Spread of Conflict." *Journal of Conflict Resolution*. Online First.

The Bureau of Investigative Journalism (BIJ). 2017. *Covert U.S. Drone Warfare Investigation*. http://www.thebureauinvestigates.com/category/-projects/drones/drones-pakistan/

Condra, L., and J. N. Shapiro. 2012. "Who Takes the Blame?" *American Journal of Political Science* 56(1): 167–87.

Danzger, M. H. 1975. "Validating Conflict Data." *American Sociological Review* 40(5): 570-84.

Davenport, C. and P. Ball. 2002. "Views to a Kill." *Journal of Conflict Resolution* 46(3): 427-50.

De Juan, A., and J. H. Pierskalla. 2014. "Civil War Violence and Political Trust." *Conflict Management and Peace Science* 33(1): 67-88.

Fair, C. C., K. Kaltenthaler, and W. J. Miller. 2016. "Pakistani Opposition to American Drone Strikes." *Political Science Quarterly* 131(2): 387-419.

Garrett, R. K., and B. E. Weeks. 2017. "Epistemic Beliefs' Role in Promoting Misperceptions and Conspiracist Ideation." *PloS ONE* 12(9): 1-17.

Garrison, J. 2017. "Popular Mobilization Messaging." *International Center for Counter-Terrorism, Research Paper.* https://icct.nl/publication/popular-mobilization-messaging/

Gentzkow, M. A., and J. M. Shapiro. 2004. "Media, Education, and Anti-Americanism in the Muslim World." *Journal of Economic Perspectives* 18(3): 117-33.

Greenhill, K., and B. Oppenheim. 2017. "Rumor Has It." *International Studies Quarterly* 61(3): 660-76.

Gunther, R., P. A. Beck, and E. C. Nisbet. 2018. "Fake News May Have Contributed to Trump's 2016 Victory." https://www.documentcloud.org/documents/4429952-Fake-News-May-Have-Contributed-to-Trump-s-2016.html

The Islamic State of Iraq and the Levant (ISIL). 2014. "The Failed Crusade." *Dabiq Magazine.* http://clarionproject.org/docs/islamic-state-isis-magazine-Issue-4-the-failed-crusade.pdf

Jaeger, D. A., E. F. Klor, S. H. Miaari, and M. D. Paserman. 2012. "The Struggle for Palestinian Hearts and Minds." *Journal of Public Economics* 96 (3): 354–68.

Johnston, P., and A. Sarbahi. 2016. "The Impact of U.S. Drone Strikes on Terrorism in Pakistan." *International Studies Quarterly* 60(2): 203-19.

Jolley, D., and K. M. Douglas. 2014. "The Effects of Anti-Vaccine Conspiracy Theories on Vaccination Intentions." *PLoS ONE* 9(2).

Jones, S. G., J. Dobbins, D. Byman, C. S. Chivvis, B. Connable, J. Martini, E. Robinson, and N. Chandler. 2017. "Rolling Back the Islamic State." RAND Report.

https://www.rand.org/pubs/research_reports/RR1912.html

Kalb, M., and C. Saivetz. 2007. "The Israeli-Hezbollah War of 2006." *International Journal of Press/Politics* 12(3): 43-66.

Kalyvas, S. 2006. *The Logic of Violence in Civil War*. Cambridge: Cambridge University Press.

Kertzer, J. D., and T. Zeitzoff. 2017. "A Bottom-Up Theory of Public Opinion about Foreign Policy." *American Journal of Political Science* 61(3): 543-58.

Knightley, P. 2004. *The First Casualty.* Baltimore, MD: Johns Hopkins University Press.

Kose, T., Mesut O., and E. Karakoc. 2016. "A Comparative Analysis of Soft Power in the MENA Region." *Foreign Policy Analysis* 12(3): 354-73.

Kuklinski, J. K., P. J. Quirk, J. Jerit, D. Schwieder, and R. F. Rich. 2000. "Misinformation and the Currency of Democratic Citizenship." *Journal of Politics*, 62(3): 790–816.

Kunda, Z. 1990. "The Case for Motivated Reasoning." *Psychological Bulletin* 108(3): 480-98.

Lyall, J., G. Blair, and K. Imai. 2013. "Explaining Support for Combatants in Wartime." *American Political Science Review* 107(4): 1-27.

Marlin, R. 2002. *Propaganda and the Ethics of Persuasion*. Peterborough, CA: Broadview Press.

McAllister, D. W., T. R. Mitchell, and L. R. Beach. 1979. "The Contingency Model for the Selection of Decision Strategies." *Organizational Behavior & Human Performance* 24: 228-44.

McCarthy, J. D., C. McPhail, and J. Smith. 1996. "Images of Protest." *American Sociological Review* 61(3): 478-99.

Miller, J. M., K. L. Saunders, and C. E. Farhart. 2016. "Conspiracy Endorsement as Motivated Reasoning." *American Journal of Political Science* 60(4): 824-44.

Nyhan, B., and J. Reifler. 2010. "When Corrections Fail." *Political Behavior* 32(2): 303-30.

Oliver, J. E., and T. J. Wood. 2014. "Conspiracy Theories and the Paranoid Style(s) of Mass Opin-

ion." *American Journal of Political Science* 58(4): 952-66.

Plaw, A., and M. Fricker. 2012. "Tracking the Predators." *International Studies Perspectives* 13(4): 344–65.

Redlawsk, D. P., A. J. W. Civettini, and K. M. Emmerson. "The Affective Tipping Point." *Political Psychology* 31(4): 563-93.

Schutte, S.. 2015. "Geography, Outcome, and Casualties." *Journal of Conflict Resolution* 59(6): 1101-28.

Sewall, S., J. A. Nagl, D. H. Petraeus, and J. F. Amos. 2007. *The U.S. Army/Marine Corps Counterinsurgency Field Manual.* Chicago: University of Chicago Press.

Silverman, D., and L. Berger. 2017. "Personal Control, Political Control, and Belief in Conspiracy Theories." *Presented at the MPSA Annual Conference, April 6-9, 2017.*

Silverman, D. 2019. "What Shapes Civilian Beliefs About Violent Events?" *Journal of Conflict Resolution* 63(9): 1460-87.

Stevens, T. 2013. "Book Review: The Violent Image." *Media, War & Conflict* 6(1): 93-4.

Swami, V., R. Coles, S. Stieger, J. Pietschnig, A. Furnham, S. Rehim, and M. Voracek. 2011. "Conspiracist Ideation in Britain and Austria." *British Journal of Psychology* 102(3): 443–63.

Taber, C. S., and M. Lodge. 2006. "Motivated Skepticism in the Evaluation of Political Beliefs." *American Journal of Political Science* 50(3): 755-69.

Taj, F. 2010. "Year of the Drone Misinformation." *Small Wars & Insurgencies* 21(3): 529-35.

Tetlock, P. E. 1983. "Accountability and the Perseverance of First Impressions." *Social Psychology Quarterly* 46: 285-292.

Tugwell, M. 1986. "Terrorism and Propaganda." *Journal of Conflict Studies* 6(2): 5-15.

Uscinski, J. E., and J. M. Parent. 2014. *American Conspiracy Theories*. New York: Oxford University Press.

Zhukov, Y., and M. Baum. 2016. "Reporting Bias and Information Warfare." *Presented at the Annual Meeting of the International Studies Association, Atlanta, GA, March 16-19.*

# Seeing is Disbelieving – Appendix:

We conduct a number of robustness checks to boost confidence in the results. These tests both help address concerns about potential confounders driving our findings, and ensure that our conclusions are robust to concerns about model selection and specification.

*Anti-ISIL Bias:*

As discussed in the main text, one key concern is that more proximate civilians might be motivated not by a desire for accuracy, but by anti-ISIL bias. In particular, locals might be more strongly opposed to ISIL due either to its brutalization of nearby communities (i.e., hatred) or to the more acute threat that it poses to them (i.e., fear). This might make them more supportive of any effort to eliminate it including the Coalition airstrikes (and thus skeptical of negative claims about them). To address this, we first include several distinct measures of Iraqi opinions of ISIL in the base models. These include: (1) a direct item about civilians' support for ISIL's goals and activities, (2) a slightly more indirect question about their perceptions of its perceived influence on the country, and (3) a still-more-indirect measure of their proximity to ISIL terror attacks, as captured by data from the Global Terrorism Database (START 2017). In fact, the third measure builds on recent work showing that insurgents attack areas opposed to them with more violence (Hirose, Imai, and Lyall 2017) (which, in turn, further reinforces the opposition).

We include all three measures in the base models in Table A5. As is clear, they show that our key findings are unchanged; accounting for opposition toward ISIL in various ways does not

change the conclusion that exposure to the Coalition airstrikes diminishes factual misperceptions about them.[1]

## Table A1: Replication of Base Models, with Measures of ISIL Attitudes

| | Airstrikes Target PMF | Airstrikes Help ISIL |
|---|---|---|
| ***Exposure*** | | |
| Time under ISIL | -0.12*** | -0.13*** |
| | (0.03) | (0.03) |
| ***Orientations*** | | |
| Shi'a Arab | 0.65*** | 0.75*** |
| | (0.12) | (0.12) |
| Sunni Arab | 0.07 | 0.22 |
| | (0.12) | (0.11) |
| Confidence in U.S. | -0.32*** | -0.24*** |
| | (0.03) | (0.03) |
| Support for PMF | 0.18*** | 0.25*** |
| | (0.05) | (0.05) |
| ***Information*** | | |
| Iraqiyya TV | 0.11*** | 0.05 |
| | (0.03) | (0.03) |
| Sharqiyya TV | -0.20*** | -0.12*** |
| | (0.03) | (0.03) |
| Rudaw TV | -0.27*** | -0.28*** |
| | (0.04) | (0.04) |
| ***ISIL attitudes*** | | |
| Support for ISIL | -0.10 | -0.08 |
| | (0.12) | (0.12) |
| ISIL influence positive | 0.06 | 0.14* |
| | (0.06) | (0.06) |
| Distance to ISIL attack | -0.00 | -0.00 |
| | (0.00) | (0.00) |
| Constant | 2.27*** | 1.88*** |
| | (0.17) | (0.17) |
| Observations | 2,218 | 2,219 |
| $R^2$ | 0.33 | 0.31 |

*Notes: Results from OLS regressions. Demographic factors (age, gender, education, income, urbanity, IDP status) not shown. Standard errors in parentheses.*
*\*\*\* p<0.001, \*\* p<0.01, \* p<0.05*

---

[1] Yet, one might still worry that Iraqis could be hiding their views of ISIL, especially if they are closer to the action. One way to check is to look at the non-response rates to the two direct questions about ISIL. If exposed civilians are hiding their hatred for ISIL out of fear, we might see significantly increased rates of non-response to these questions among them. Yet while non-response to these two questions is negligible overall, it is if anything *greater* among the unexposed (1.28% and 2.18%) than the exposed (0.67% and 0.80%) populace. This does *not* support the notion that proximate civilians perceive questions about ISIL as any more sensitive than other Iraqis and are thus more afraid to reveal their views (i.e. opposition) of the group.

In addition to this, we also conduct a placebo or "control-outcome" test to help address this concern. The idea of these tests is to leverage the "specificity of the treatment effect" (Hill 1965) by using outcomes that – while otherwise similar to the key dependent variable – should not be affected by the treatment. In this way, analysts can rule out plausible alternatives. In our case, for example, we look at Iraqis' belief in two *valid* negative allegations about the behavior of the PMF – instead of the Coalition – in its anti-ISIL activities. If proximate Iraqis were truly motivated by hatred or fear of ISIL (rather than a drive for accuracy), we would expect them to reject these negative claims – just as they do those about the Coalition, since the PMF has been one of ISIL's most effective adversaries.

**Table A2: Placebo Test – Impact of Exposure on Concerns about PMF Abuses vs. ISIL**

|  | PMF will punish | PMF will displace |
|---|---|---|
| ***Exposure*** |  |  |
| Time under ISIL | 0.09 | 0.04 |
|  | (0.05) | (0.05) |
| ***Orientations*** |  |  |
| Shi'a Arab | -4.71*** | -5.65*** |
|  | (0.54) | (0.74) |
| Sunni Arab | -0.67** | -0.86*** |
|  | (0.24) | (0.23) |
| Confidence in U.S. | -0.44*** | -0.38*** |
|  | (0.08) | (0.08) |
| ***Information*** |  |  |
| Iraqiyya TV | -0.81*** | -0.84*** |
|  | (0.07) | (0.07) |
| Sharqiyya TV | 0.54*** | 0.42*** |
|  | (0.08) | (0.08) |
| Rudaw TV | 0.36*** | 0.40*** |
|  | (0.09) | (0.10) |
| Constant | -0.90* | -0.22 |
|  | (0.38) | (0.38) |
| Observations | 2,214 | 2,211 |

*Notes: Results from logit regressions. Demographic factors (age, gender, education, income, urbanity, IDP status) not shown. Standard errors in parentheses*
*** $p<0.001$, ** $p<0.01$, * $p<0.05$

In particular, the survey asked Iraqis if they were concerned about each of the following by the PMF in its anti-ISIL operations: (1) that it will "take revenge on local civilians," and (2) that it will "displace civilians from the area." Critically, while these questions do not represent factual claims since they are about future expectations and subjective degrees of concern, these concerns are generally *valid* in nature;[2] they do not offer lies about the conflict. In other words, we would *not* expect exposed citizens to be more skeptical of these concerns if our argument is right, since "seeing" should not drive "disbelieving" of well-founded claims about the fighting. Thus a null result here would strengthen our argument that it is only untrue claims (rather than, say, unwelcome ones) that are rejected by the "treated" individuals.[3]

Table A6 shows the results of logit models of both concerns, using the main specification in the article. The results reveal that exposure has no clear relationship with concerns about PMF behaviors; the coefficient is far from significance in both cases. These results cast more doubt on the idea of an anti-ISIL bias confounder. If local civilians were truly driven by antipathy to ISIL, why would they only reject negative allegations about the *Coalition's* anti-ISIL efforts, but not also those of the *PMF*? Along with our efforts to account for ISIL attitudes, these results speak against the notion that our findings are driven by anti-ISIL bias.[4]

---

[2] Reports of abuse, victimization, and displacement of local civilians by the PMF in anti-ISIL "clearing" operations were common from 2014-16, prompting the U.S. to insist on its exclusion from key operations like the recapture of Ramadi in favor of other local partners. See, for example, "Iraqi Army Makes New Push to Retake City of Ramadi From Islamic State" *Wall Street Journal*, December 23, 2015. Available at https://www.wsj.com/articles/iraqi-army-begins-final-offensive-to-retake-ramadi-from-islamic-state-1450779699

[3] It is worth noting that these two items were just asked to Iraqis who first said they opposed the PMF's participation in anti-ISIL operations. Yet, we recoded them to include our entire sample, with PMF supporters coded as zeroes (in other words, coding PMF supporters as "not concerned"). Thus, the items can be seen as capturing a very high level of concern about these abuses (so high that it would provoke opposition to PMF inclusion). Results are similar when only analyzing the PMF opponents (available upon request), but we opt for the full sample here with recoding as our preferred test.

[4] These results also show that the findings are not just the product of "reactance bias" (e.g., Brehm and Brehm 1981) among the local population, whereby those who have lived under ISIL's rule are more skeptical of any statement put before them about the conflict by enumerators (since they are not more skeptical of the anti-PMF statements, but just the anti-Coalition ones). Thanks to an anonymous colleague for raising this issue.

*Sectarian Composition:*

**Table A3: Replication of Base Results, with Sunni Arabs Only**

|  | Airstrikes<br>Target PMF | Airstrikes<br>Help ISIL |
|---|:---:|:---:|
| ***Exposure*** | | |
| Time under ISIL | -0.14*** | -0.14*** |
|  | (0.03) | (0.03) |
| ***Orientations*** | | |
| Confidence in U.S. | -0.09* | -0.03 |
|  | (0.04) | (0.04) |
| Support for PMF | 0.02 | 0.03 |
|  | (0.06) | (0.06) |
| ***Information*** | | |
| Iraqiyya TV | 0.03 | -0.02 |
|  | (0.04) | (0.05) |
| Sharqiyya TV | -0.21*** | -0.16** |
|  | (0.05) | (0.05) |
| Rudaw TV | -0.28*** | -0.25** |
|  | (0.08) | (0.08) |
| Constant | 2.66*** | 2.52*** |
|  | (0.24) | (0.24) |
| Observations | 974 | 979 |
| $R^2$ | 0.14 | 0.13 |

*Notes: Results from OLS regressions. Demographic factors (age, gender, education, income, urbanity, IDP status) not shown. Standard errors in parentheses*
*** $p<0.001$, ** $p<0.01$, * $p<0.05$

Another potential concern is that, while Iraq is a Shi'a-majority country, the constituency that has lived under ISIL's rule is largely Sunni Arab in composition. Thus, one might worry that we are not comparing "apples to apples" when we analyze the effect of exposure. This concern is lessened by the fact that we include sectarian identity in our models, and that some of the models below only examine differences *among* the exposed population. Yet, there may still be a concern that the results are influenced by the distinct sectarian profiles of local vs. non-local respondents. To help ameliorate this, we replicate the models with Sunni Arabs only. The results are shown in Table A7. As is clear, this choice has no substantive impact on our results; exposure still reduces both misperceptions when we limit our sample to Sunni Arabs only. This helps assuage concerns about the sectarian composition of the sample lurking behind our findings.

*Preference Falsification:*

**Table A4: Replication of Base Results, with Measures of Interview Quality**

|  | Airstrikes Target PMF | Airstrikes Help ISIL |
|---|---|---|
| ***Exposure*** | | |
| Time under ISIL | -0.12*** | -0.13*** |
| | (0.03) | (0.02) |
| ***Orientations*** | | |
| Shi'a Arab | 0.64*** | 0.76*** |
| | (0.12) | (0.12) |
| Sunni Arab | 0.10 | 0.27* |
| | (0.11) | (0.11) |
| Confidence in U.S. | -0.31*** | -0.23*** |
| | (0.03) | (0.03) |
| Support for PMF | 0.19*** | 0.24*** |
| | (0.05) | (0.05) |
| ***Information*** | | |
| Iraqiyya TV | 0.12*** | 0.05 |
| | (0.03) | (0.03) |
| Sharqiyya TV | -0.19*** | -0.12*** |
| | (0.03) | (0.03) |
| Rudaw TV | -0.28*** | -0.29*** |
| | (0.04) | (0.04) |
| ***Interview*** | | |
| Perceived comfort | -0.20* | -0.31*** |
| | (0.09) | (0.09) |
| Perceived honesty | 0.06 | 0.20 |
| | (0.12) | (0.12) |
| Constant | 2.32*** | 1.92*** |
| | (0.20) | (0.19) |
| Observations | 2,262 | 2,262 |
| $R^2$ | 0.34 | 0.32 |

*Notes: Results from OLS regressions. Demographic factors (age, gender, education, income, urbanity, IDP status) not shown. Standard errors in parentheses*
*\*\*\* p<0.001, \*\* p<0.01, \* p<0.05*

Another significant concern is that in a precarious context like contemporary Iraq, some individuals may not have answered questions about their views of different combatants and their behaviors truthfully. Specifically, local citizens may have been afraid to express their opposition to the Coalition airstrikes given their exposure or proximity to the air campaign. Such concern is lessened by the fact that about half the respondents were willing to embrace the misinformation, and the questions that ask about it have a very low non-response rate. However, to help mitigate this concern, we include enumerator perceptions about the degree of (1) comfort and (2) honesty

of each Iraqi during their interview. The results – reported in Table A8 – reveal that our findings are not sensitive to these measures; even when we control for the perceived honesty and comfort of respondents, our key findings about the influence of exposure remains. This militates against the idea that our conclusions are driven by preference falsification by more proximate civilians, at least as perceived by the survey's enumerators.

*Alternate Mesaures of Motivated Bias:*

We also check to ensure that our findings are robust to the measurement of key variables. In particular, we replicate the analysis with new measures of support for the actors included – the U.S. and PMF. For the U.S., we use an item on the degree to which civilians perceive the U.S. as a reliable partner to Iraq ($r=.71$ with the original item). For the PMF, we use an item on people's view of the PMF's influence on the country ($r=.86$ with the original item). To explore the effect of these alternate measures, we replicate the interaction figures in which their impact on the two factual misperceptions is shown by people's exposure to the strikes (since this was the main test in which we had a substantive interest in the effect of prior attitudes). The results are reported in Figure A6. As can be seen, using these new measures has no substantive impact on our findings. In both cases, Iraqis' views of these combatants still shape their factual beliefs in general, but the effects disappear or are substantially diminished among exposed civilians.

**Figure A1: Replication of Interaction Plots, with Alternate Measures of Support for the U.S. and PMF**
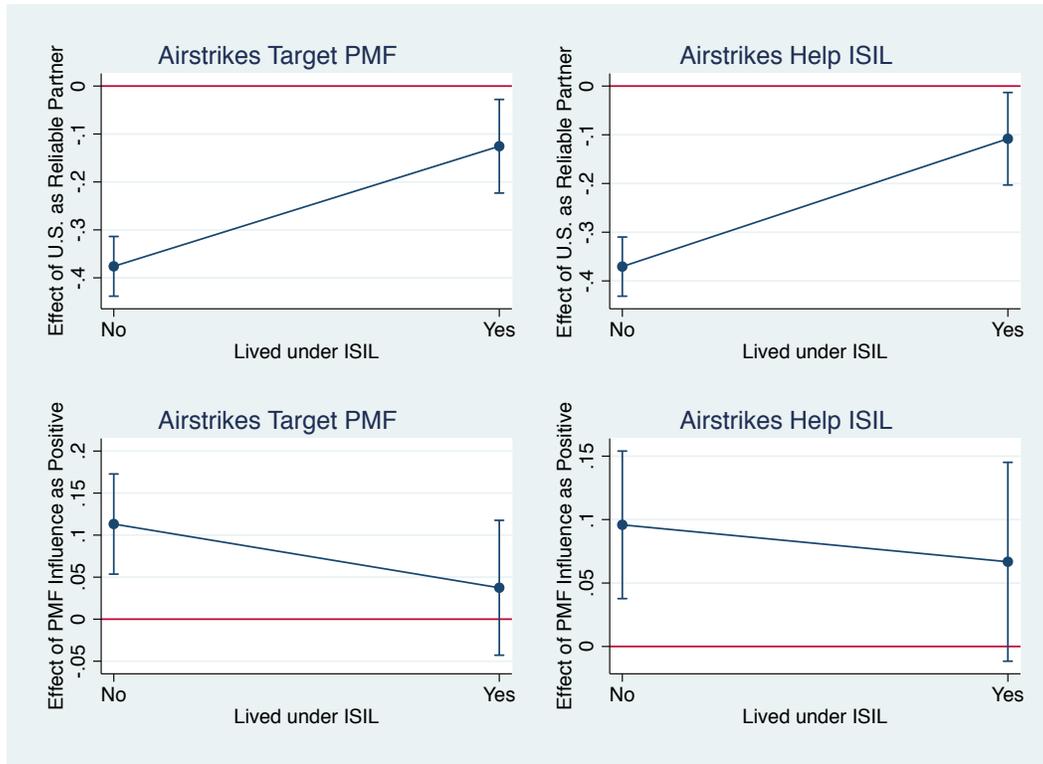


*Note: figure shows marginal effect of perceptions that the U.S. is reliable and that the PMF's influence is positive by experience under ISIL rule. Results from OLS regressions, with 95% confidence intervals.*

*Additional Modeling Choices:*

We also carry out additional tests to ensure that our results are robust to model selection and specification concerns. First, we add district-level fixed effects in order to control for other unmeasured differences across districts that could potentially confound our results. Second, we include clustered standard errors at the PSU level in order to account for the potential grouping of Iraqis drawn from the same spatial units. Third, we replicate the findings using ordered logit as opposed to OLS models to ensure that the results are not simply artifacts of model selection. The results of all three of these tests are reported in Tables A9-A11. As is clear, our conclusions are unaffected in all three cases, with exposure to the campaign still diminishing misperceptions

about it across all of the relevant models. This further boosts confidence in the robustness of the

paper's main results.

**Table A5: Replication of Base Results with District Fixed Effects (M1-2), Clustered Standard Errors (M3-4), and Ordered Logit Models (M5-6)**

| | Airstrikes Target PMF (M1) | Airstrikes Help ISIL (M2) | Airstrikes Target PMF (M3) | Airstrikes Help ISIL (M4) | Airstrikes Target PMF (M5) | Airstrikes Help ISIL (M6) |
|---|---|---|---|---|---|---|
| *Exposure* | | | | | | |
| ISIL time | -0.10** | -0.10*** | -0.12*** | -0.13*** | -0.17*** | -0.19*** |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.04) | (0.04) |
| *Orientations* | | | | | | |
| Shi'a Arab | 0.13 | 0.15 | 0.65*** | 0.77*** | 1.04*** | 1.20*** |
| | (0.15) | (0.15) | (0.16) | (0.16) | (0.18) | (0.19) |
| Sunni Arab | -0.55*** | -0.47** | 0.09 | 0.25 | 0.20 | 0.46* |
| | (0.15) | (0.15) | (0.15) | (0.15) | (0.18) | (0.18) |
| Pro U.S. | -0.33*** | -0.24*** | -0.31*** | -0.24*** | -0.50*** | -0.40*** |
| | (0.03) | (0.03) | (0.04) | (0.04) | (0.05) | (0.05) |
| Pro PMF | 0.03 | 0.09+ | 0.18** | 0.24*** | 0.28*** | 0.37*** |
| | (0.05) | (0.05) | (0.06) | (0.06) | (0.07) | (0.07) |
| *Information* | | | | | | |
| Iraqiyya TV | 0.04 | -0.01 | 0.12*** | 0.05 | 0.18*** | 0.07 |
| | (0.03) | (0.03) | (0.04) | (0.04) | (0.05) | (0.05) |
| Sharqiyya TV | -0.20*** | -0.14*** | -0.19*** | -0.12*** | -0.29*** | -0.18*** |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.04) | (0.04) |
| Rudaw TV | -0.18*** | -0.16** | -0.28*** | -0.29*** | -0.46*** | -0.52*** |
| | (0.05) | (0.05) | (0.06) | (0.05) | (0.07) | (0.07) |
| *Other Factors* | | | | | | |
| District FE | **YES** | **YES** | | | | |
| Clustered SE | | | **YES** | **YES** | | |
| Cut Point 1 | | | | | -2.07*** | -1.57*** |
| | | | | | (0.26) | (0.26) |
| Cut Point 2 | | | | | -0.30 | 0.13 |
| | | | | | (0.26) | (0.26) |
| Cut Point 3 | | | | | -0.20 | 0.24 |
| | | | | | (0.26) | (0.26) |
| Cut Point 4 | | | | | 1.81*** | 2.47*** |
| | | | | | (0.26) | (0.26) |
| Constant | 1.94*** | 1.57*** | 2.21*** | 1.85*** | | |
| | (0.37) | (0.37) | (0.22) | (0.22) | | |
| Observations | 2,262 | 2,262 | 2,262 | 2,262 | 2,262 | 2,262 |
| $R^2$ | 0.39 | 0.37 | 0.33 | 0.31 | | |

*Notes: Results from OLS (M1-4) and ordered logit (M5-6) models. Demographic factors (age, gender, education, income, urbanity, IDP status) not shown. Standard errors in parentheses*
*** $p<0.001$, ** $p<0.01$, * $p<0.05$

**Appendix References:**

Brehm, Sharon S., and Jack W. Brehm. 1981. *Psychological Reactance – A Theory of Freedom and Control.* New York, NY: Academic Press.

Hill, Austin. 1965. "The Environment and Disease: Association or Causation?" *Proceedings of the Royal Society of Medicine* 58(5): 295-300.

Hirose, Kentaro, Kosuke Imai, and Jason Lyall. 2017. "Can Civilian Attitudes Predict Insurgent Violence?" *Journal of Peace Research* 54(1): 47-63.

National Consortium for the Study of Terrorism and Responses to Terrorism (START). 2017. "Global Terrorism Database." http://www.start.umd.edu/gtd.