

Testing the Surge

Why Did Violence
Decline in Iraq in 2007?

Stephen Biddle,
Jeffrey A. Friedman,
and
Jacob N. Shapiro

From 2004 to mid-2007, Iraq was extremely violent: civilian fatalities averaged more than 1,500 a month by August 2006, and by late fall, the U.S. military was suffering a monthly toll of almost 100 dead and 700 wounded. Then something changed. By the end of 2007, U.S. military fatalities had declined from their wartime monthly peak of 126 in May of that year to just 23 by December. From June 2008 to June 2011, monthly U.S. military fatalities averaged fewer than 11, a rate less than 15 percent of the 2004 through mid-2007 average and an order of magnitude smaller than their maximum. Monthly civilian fatalities fell from more than 1,700 in May 2007 to around 500 by December; from June 2008 to June 2011, these averaged around 200, or about one-tenth of the rate for the last half of 2006.¹

Iraq today is far from a Garden of Eden, and a return to open warfare cannot be ruled out. But whatever Iraq's current politics and future prognosis, its past now includes a remarkable reversal in 2007 from years of intense bloodshed to almost four years of relative calm since then. What caused this turnaround?

Many analysts now credit what is commonly called "the surge" for this outcome. On January 10, 2007, President George W. Bush announced a roughly 30,000-soldier reinforcement of the U.S. presence in Iraq, together with a new commander in Gen. David Petraeus and a new strategy for the use of U.S. forces. In particular, Petraeus replaced a prior emphasis on large, fortified

Stephen Biddle is Roger Hertog Senior Fellow for Defense Policy at the Council on Foreign Relations. Jeffrey A. Friedman is a Ph.D. candidate in Public Policy at Harvard University. Jacob N. Shapiro is Assistant Professor of Politics and International Affairs at Princeton University.

The authors thank Daniel Altman, Eli Berman, Richard Betts, Daniel Byman, Luke Condra, Ben Connable, James Fearon, Peter Feaver, Gian Gentile, Carter Malkasian, Jeffrey Peterson, Kenneth Pollack, Dan Reiter, Alissa Rubin, Idean Salehyan, Paul Staniland, Nathan Toronto, Barbara Walter, Nils Weidmann, Michael Yankovich, Yuri Zhukov, and seminar participants at the University of California at Berkeley, George Washington University, Harvard University, the Massachusetts Institute of Technology, Stanford University, and the 2011 PRIO-MIT Conference on Counterinsurgency and Counterterrorism for helpful comments on earlier drafts. They also thank Joshua Borkowski, Michael Johnson, Christopher Paik, and Ari Rubin for their excellent research assistance; Charles Lewis and Nathan Toronto for assistance in arranging interviews; Zeynep Bulutgil for generously sharing her interviews on events in Ramadi in 2005–06; and the seventy U.S. and allied officers whose interviews form an important part of the evidence presented below, and without whose time and cooperation this analysis would not have been possible. Jacob Shapiro acknowledges financial support from Air Force Office of Scientific Research Award #FA9550-09-1-0314.

1. Casualty figures are from "Operation Iraqi Freedom," *iCasualties.org*, accessed July 25, 2011.

International Security, Vol. 37, No. 1 (Summer 2012), pp. 7–40

© 2012 by the President and Fellows of Harvard College and the Massachusetts Institute of Technology.

bases, mounted patrols, and transition to Iraqi security forces with a new pattern of smaller, dispersed bases, dismounted patrolling, and direct provision of U.S. security for threatened Iraqi civilians. Proponents of the “surge thesis” hold that this combination of more troops and different methods reduced the level of violence by suffocating the insurgency and destroying its ability to kill Americans or Iraqis.²

Not everyone agrees. Critics have advanced a variety of alternative explanations, including the 2006–07 Sunni tribal uprising against al-Qaida in Iraq (AQI), which produced the “Anbar Awakening,”³ the dynamics of sectarian cleansing,⁴ and interaction effects among multiple causes.⁵

2. See, for example, Kimberly Kagan, *The Surge: A Military History* (New York: Encounter Books, 2009); John McCain and Joe Lieberman, “The Surge Worked,” *Wall Street Journal*, January 10, 2008; Max Boot, “The Truth about Iraq’s Casualty Count,” *Wall Street Journal*, May 3, 2008; James R. Crider, “A View from Inside the Surge,” *Military Review*, Vol. 89, No. 2 (March/April 2009), pp. 81–88; Craig A. Collier, “Now That We’re Leaving Iraq, What Did We Learn?” *Military Review*, Vol. 90, No. 5 (September/October 2010), pp. 88–93; Bartle Bull, “Mission Accomplished,” *Prospect*, October 27, 2007; and Dale Andrade, *Surging South of Baghdad: The 3d Infantry Division and Task Force Marne in Iraq, 2007–2008* (Washington, D.C.: U.S. Army Center of Military History, 2010).

3. See, for example, Austin Long, “The Anbar Awakening,” *Survival*, Vol. 50, No. 2 (April/May 2008), pp. 67–94; Steven Simon, “The Price of the Surge,” *Foreign Affairs*, Vol. 87, No. 3 (May/June 2008), pp. 57–76; Marc Lynch, “Sunni World,” *American Prospect*, September 13, 2007; Jim Michaels, *A Chance in Hell: The Men Who Triumphed Over Iraq’s Deadliest City and Turned the Tide of War* (New York: St. Martin’s, 2010); Daniel R. Green, “The Fallujah Awakening: A Case Study in Counter-Insurgency,” *Small Wars and Insurgencies*, Vol. 21, No. 4 (December 2010), pp. 591–609; Dick Couch, *The Sheriff of Ramadi: Navy SEALs and the Winning of Anbar* (Annapolis: Naval Institute Press, 2008); Stanley Kober, “Did the Surge Work?” *Daily Caller*, July 16, 2010; Jon Lee Anderson, “Inside the Surge: The American Military Finds New Allies, but at What Cost?” *New Yorker*, November 19, 2009, pp. 58–69; and Nir Rosen, “The Myth of the Surge,” *Rolling Stone*, March 6, 2008, pp. 46–53. Following this literature, we use the phrase “Anbar Awakening” to refer both to the origins of the Sunni realignment in Anbar in the fall of 2006 and to the subsequent spread and maturation of this movement as “Sons of Iraq” (SOI) over the course of 2007. Note that, although the Awakening thus began before the surge, the overwhelming majority of SOIs joined after April 2007, well into the surge. See, for example, Andrade, *Surging South of Baghdad*, pp. 209–242.

4. Nils B. Weidmann and Idean Salehyan, “Violence and Ethnic Segregation: A Computational Model Applied to Baghdad,” *International Studies Quarterly*, forthcoming; Lawrence Korb, Brian Katulis, Sean Duggan, and Peter Juul, *How Does This End? Strategic Failures Overshadow Tactical Gains in Iraq* (Washington, D.C.: Center for American Progress, 2008); and John Agnew, Thomas W. Gillespie, Jorge Gonzalez, and Brian Min, “Baghdad Nights: Evaluating the U.S. Military ‘Surge’ Using Nighttime Light Signatures,” *Environment and Planning A*, Vol. 40, No. 10 (October 2008), pp. 2285–2295.

5. Stephen Biddle, “Stabilizing Iraq from the Bottom Up,” testimony before the U.S. Senate Foreign Relations Committee, April 2, 2008; Stephen Biddle, Michael O’Hanlon, and Kenneth Pollack, “How to Leave a Stable Iraq: Building on Progress,” *Foreign Affairs*, Vol. 87, No. 5 (September/October 2008), pp. 40–58; Colin H. Kahl, “Walk before Running,” *Foreign Affairs*, Vol. 87, No. 4 (July/August 2008), pp. 151–154, which also credits congressional threats of withdrawal; and Carter Malkasian, “Did the Coalition Need More Forces in Iraq?” *Joint Force Quarterly*, Vol. 46, No. 3 (Summer 2007), pp. 120–126. Also emphasizing the Awakening along with the surge but without any explicit analysis of synergy are Bing West, *The Strongest Tribe: War, Politics, and the Endgame in Iraq* (New York: Random House, 2008); Linda Robinson, *Tell Me How This Ends: General David Petraeus and the Search for a Way Out of Iraq* (New York: PublicAffairs, 2008); and Thomas E. Ricks, *The Gamble: General David Petraeus and the American Military Adventure in Iraq, 2006–2008* (New York: Penguin, 2009).

The differences among these explanations matter both for policy and for scholarship.⁶ The Iraq surge is now widely seen as one of the most remarkable military events of recent memory, and it casts a long shadow over military doctrine and planning across much of the Western world. The British army, for example, recently published a new counterinsurgency (COIN) doctrine shaped by its view of the 2007 surge, and other NATO members are considering similar moves.⁷ Among the more important debates in U.S. defense policy today is the appropriate balance between COIN and conventional capability; this debate is powerfully influenced by assumptions about the role of U.S. strategy in reversing Iraq's violence in 2007.⁸ The post-2009 debate on Afghanistan has been shaped by perceptions of the surge experience in Iraq; if these perceptions were unsound, much of this debate has been miscast.⁹ The 2007 case even played a part in U.S. presidential politics: in the 2008 elections, John McCain's campaign publicly embraced a surge-only account of putative success in Iraq, which Barack Obama's campaign countered with an Awakening-only rebuttal.¹⁰ Rarely do arguments over military cause and effect rise to this level of public awareness; the 2007 campaign in Iraq has had a perhaps unique political salience.

These debates all hinge on the surge's relative importance in reducing Iraq's violence. If the commonplace surge narrative is correct, then U.S. policies were chiefly responsible for the outcome, similar policies should work again in the future, and defense planning should reflect this conclusion. If the Awakening or cleansing accounts are correct, then U.S. policies had little to do with the reduction of violence in Iraq, future surges would be much more problematic, and defense planning built on surge analogies would be ill advised. If the

6. Some observers have also argued that leadership targeting had brought the insurgency to its knees by late 2007. See, especially, Bob Woodward, *The War Within: A Secret White House History, 2006–2008* (New York: Simon and Schuster, 2008). See also Christopher J. Lamb and Evan Munzing, *Secret Weapon: High-Value Target Teams as an Organizational Innovation* (Washington, D.C.: National Defense University Press, 2011). In principle, one could propose combinations other than the surge-Awakening thesis treated below. The explanations considered here are thus not a logically exhaustive set, but the four schools we discuss capture the main lines of debate in the literature to date; thus our analysis focuses on them.

7. *British Army Field Manual*, Vol. 1, pt. 10: *Countering Insurgency*, Army Code 71876, October 2009.

8. On the contours of this debate and how it has been influenced by the surge, see David H. Ucko, *The New Counterinsurgency Era: Transforming the U.S. Military for Modern Wars* (Washington, D.C.: Georgetown University Press, 2009), especially chap. 8. For a sharply different view, see Gian P. Gentile, "Our COIN Doctrine Removes the Enemy from the Essence of War," *Armed Forces Journal*, January 2008, p. 39.

9. On Iraq's influence on the Afghanistan debate, see, for example, Jeffrey Michaels and Matthew Ford, "Bandwagonistas: Rhetorical Re-description, Strategic Choice, and the Politics of Counterinsurgency," *Small Wars and Insurgencies*, Vol. 22, No. 2 (May 2011), pp. 352–384; and Stephen Biddle, "Iraq's Lessons in Afghanistan and Iraq," in Seyom Brown and Robert H. Scales, eds., *U.S. Policy in Afghanistan and Iraq: Lessons and Legacies* (Boulder, Colo.: Lynne Rienner, 2012), pp. 89–98.

10. See, for example, the transcript of the presidential debate held on September 26, 2008, <http://elections.nytimes.com/2008/president/debates/transcripts/first-presidential-debate.html>.

surge was necessary but insufficient without the Awakening, then U.S. policy deserves some credit, as without it Iraqi violence would have stayed high, but the surge would be a poor template for future policy unless similar preconditions obtain elsewhere.

For scholars, too, the 2007 experience matters. A burgeoning literature in comparative politics and international relations seeks to understand the dynamics of civil warfare.¹¹ Yet, to date, little of this literature considers the role of systematic realignments of the kind seen in the Anbar Awakening. Similarly, the role of troop density, so important for the surge debate, remains largely absent from the scholarly literature on internal war, and the debate over partition as a solution to ethnic conflict has yet to consider the case evidence asserted by those who see sectarian unmixing as the reason for the reduction of violence in Iraq.¹² The U.S. military's current COIN doctrine has been the subject of scholarly debate and is widely assigned for classroom use, yet its relationship to one of the most salient recent cases of counterinsurgency—Iraq—turns on an unresolved question of the causes for 2007's drop in violence.¹³

Yet, for all its importance, this debate has not moved from hypothesis to test. The competing accounts emerged quickly—each was in print before the surge had even ended. Few, however, addressed others' claims in any depth, and none has yet advanced a body of systematic evidence sufficient to establish itself over the others on a rigorous basis. The purpose of this article is to provide such a test by evaluating the competing hypotheses head-to-head against a broad range of qualitative and quantitative evidence on the conduct of the war.

This evidence suggests that a synergistic interaction between the surge and the Awakening is the best explanation for why violence declined in Iraq in 2007. Without the surge, the Anbar Awakening would probably not have spread fast or far enough. And without the surge, sectarian violence would likely have continued for a long time to come—the pattern and distribution of the bloodshed offers little reason to believe that it had burned itself out by mid-2007. Yet the surge, though necessary, was insufficient to explain 2007's sudden reversal in fortunes. Without the Awakening to thin the insurgents'

11. For recent reviews of the literature, see Christopher Blattman and Edward Miguel, "Civil War," *Journal of Economic Literature*, Vol. 48, No. 1 (March 2010), pp. 3–57; and Stathis N. Kalyvas and Paul Kenny, "Civil Wars," in Robert A. Denemark, ed., *The International Studies Association Compendium Project* (Oxford: Blackwell, 2009).

12. For an exception, see Jeffrey Friedman, "Manpower and Counterinsurgency: Empirical Foundations for Theory and Doctrine," *Security Studies*, Vol. 20, No. 4 (December 2011), pp. 556–591.

13. See, for example, Jeffrey C. Isaac, Stephen Biddle, Stathis Kalyvas, Wendy Brown, and Douglas A. Ollivant, "The New U.S. Army/Marine Corps Counterinsurgency Field Manual as Political Science and Political Praxis," *Perspectives on Politics*, Vol. 6, No. 2 (June 2008), pp. 347–350.

ranks and unveil the holdouts to U.S. troops, the violence would probably have remained very high until well after the surge had been withdrawn and well after U.S. voters had lost patience with the war. Our argument is more than just a claim that both the surge and the Awakening mattered—we argue that a synergistic interaction between them created something new that neither could have achieved alone. This implies that U.S. reinforcements and doctrine played an essential role in 2007—but so did local conditions that will not necessarily recur elsewhere. U.S. policy thus deserves important but partial credit for the reduction of violence in Iraq, and similar results cannot necessarily be expected from similar methods in the future.

We make this argument in five steps. First, we describe our evidence and approach. Second, we explain why the cleansing thesis cannot account for stability in Iraq, and how other factors must have played a critical role. We then show that the Awakening could not have spread sufficiently without the surge. Next we show that the surge could not have succeeded without the Awakening, and that mutual reinforcement between these effects was necessary for reducing violence so quickly and systematically across Iraq. We conclude by discussing our findings' implications for policy and scholarship.

Evidence and Approach

We base our findings on two principal sources of evidence. The first is a recently declassified dataset of 193,264 “significant activities” (SIGACTs) recorded by Multinational Force–Iraq (MNF-I) headquarters from February 2004 to December 2008. Each SIGACT documents a use of force involving coalition forces, Iraqi units, insurgents, or sectarian militias reported through MNF-I channels. These data provide the location, date, time, and nature of each event; all such events reported to MNF-I in the time interval considered are included.¹⁴

The second source of evidence is an original series of seventy structured interviews with coalition officers who fought in the 2006–08 campaign and could observe its conduct firsthand. These interviews cover twenty-two of the twenty-five districts responsible for 90 percent of the SIGACTs in 2006, the violence whose reduction we seek to explain. For fourteen of these districts, we have at least two different interview subjects; for sixteen we have inter-

14. SIGACT data were provided by the Empirical Studies of Conflict (ESOC) Project. For a full discussion, see Eli Berman, Jacob N. Shapiro, and Joseph Felter, “Can Hearts and Minds Be Bought? The Economics of Counterinsurgency in Iraq,” *Journal of Political Economy*, Vol. 119, No. 4 (August 2011), pp. 766–819.

view coverage both before and after the violence peak in that district.¹⁵ These interviews were conducted by the authors at Fort Leavenworth, Kansas; in Boston, Massachusetts; and via telephone. They are documented in audio files deposited at the U.S. Army Military History Institute archive in Carlisle, Pennsylvania. The typical interview lasted 30 to 60 minutes; twenty-five subjects granted follow-up interviews or responded to follow-up questions via email.¹⁶

We supplement these primary sources with data on civilian casualties and sectarian violence not caused by combat from Iraq Body Count (IBC), a non-profit organization dedicated to tracking civilian casualties using media reports as well as hospital, morgue, and other figures.¹⁷ These data capture 19,961 incidents in which civilians were killed that can be accurately geo-located to the district level, accounting for 59,245 civilian deaths from March 2003 through June 2009.¹⁸

These sources are systematic and objective, but they are not perfect. SIGACTs undercount actual violence, because they record only episodes reported to coalition authorities and then entered into a database. In addition, SIGACTs do not measure the intensity of violent events. Participant interviews are only as good as the accuracy of the participants' observations and recollection. We found no evidence, however, that either source of imperfection introduced systematic bias. On balance, these sources provide an unusually objective and consistent base of information, both for tracking changes in vio-

15. Iraq's violence was never uniformly distributed over the country's 111 districts: the 25 that accounted for 90 percent of 2006 SIGACTs were localized in central and western Iraq, especially in Anbar, Baghdad, Diyala, and Salah ad Din Provinces. As our purpose is to explain why violence fell, the relevant explanatory universe thus consists of districts where there was violence to reduce, of which our interviews span the great majority. There is substantial variance in the scale and speed of reduction across these 25 districts; the 22 for which we have interviews cover districts with greater and lesser SIGACTs as well as faster and slower reductions, and are not subject to bias from selection on the dependent variable. Note that Iraq had 104 districts in 2004 (the start date for our violence data) but currently has 111, as several districts in the Kurdish regions have been split.

16. Interviewees responded to a general call for participation to students and faculty in mid-career education programs at the U.S. Army Command and General Staff College, Harvard University, and Marine Corps Base Quantico. Initial participants recommended other individuals, some of whom were then interviewed. No selection criteria were imposed beyond service in Iraq from 2006 to 2008. These student populations are large and diverse, with no reason to expect systematic correlation between membership and the nature of their experience in Iraq. We have no evidence of sample bias relevant to our analysis.

17. "Iraq Body Count," <http://www.iraqbodycount.org/>. Our data were produced through a multiyear ESOC-IBC collaboration, which made several improvements to the publicly available IBC data, including more consistent district-level geocoding.

18. For diagnostics and a complete discussion of these data, see Luke Condra and Jacob N. Shapiro, "Who Takes the Blame? The Strategic Effects of Collateral Damage," *American Journal of Political Science*, Vol. 56, No. 1 (January 2012), pp. 167–187.

lence over time (which helps control for underreporting) and for identifying changes in local political dynamics, both of which are critical for our analysis.

We use this evidence to process trace the four candidate explanations for the Iraq case. That is, we deduce from each explanation's causal logic a series of observable implications that should hold if that explanation were sound. We use those implications to guide our search for evidence and compare the evidence we find to what we should expect to see if that thesis were true. We then evaluate the relative consistency of each explanation's logical implications with the observed evidence.¹⁹

We focus on local cross-sectional and time-series variance at the level of individual districts or unit areas of operation (AOs) within Iraq.²⁰ Previous literature on the surge has often assumed that analysts' knowledge is inherently limited by the difficulties of drawing causal inference from a single observation,²¹ but this problem holds only if one views Iraq as a unitary case. In fact, there is substantial within-case variance across both space and time, and our analysis uses geocoded, micro-level data to break the case down and create leverage for distinguishing among the candidate explanations in the literature.²²

Sectarian Cleansing

The first explanation for the reduction of violence in Iraq is that sectarian bloodshed had played itself out by mid-2007; or as Patrick Cockburn put it, "[T]he killing stopped because there was no one left to kill."²³ Cockburn's

19. On process tracing, see Gary King, Robert Keohane, and Sidney Verba, *Designing Social Inquiry: Scientific Inference in Qualitative Research* (Princeton, N.J.: Princeton University Press, 1994), pp. 85–87, 225–228. Our approach constitutes what Alexander L. George and Andrew Bennett call "analytical process tracing," as distinct from detailed narrative description of event sequences. George and Bennett, *Case Studies and Theory Development in the Social Sciences* (Cambridge, Mass.: MIT Press, 2005), p. 211. We do not test the competing explanations in a regression framework for several reasons. First, many of the arguments have no obvious implications for variance between observable factors at fixed, comparable geographic units (e.g., district-months). Second, there is no systematic theaterwide data on important variables such as Awakening forces' availability. Third, and most important, there is no viable source of plausibly exogenous variation in critical variables such as coalition force levels or operational methods.

20. Note that "AOs," which are delineated by military formation boundaries, are rarely collinear with "districts," which are Iraqi political subdivisions. We use both units of analysis as appropriate.

21. Weidmann and Salehyan, "Violence and Ethnic Segregation," p. 4; and Douglas Ollivant, *Countering the New Orthodoxy: Reinterpreting Counterinsurgency in Iraq* (Washington, D.C.: New America Foundation, 2011), p. 11.

22. Replication data, additional details on the AOs, coding choices, and various robustness checks are provided in supplementary materials at <http://esoc.princeton.edu>.

23. Patrick Cockburn, "Who Is Whose Enemy?" *London Review of Books*, Vol. 30, No. 5 (March 2008), p. 14. On the cleansing school, generally, see Weidmann and Salehyan, "Violence and Ethnic

claim is obviously not accurate in literal terms: to this day, Iraq has many Sunnis left for Shiites to kill if they were so inclined and vice versa. Instead the cleansing thesis's causal logic concerns the distribution of populations and sectarian violence. Proponents of the cleansing thesis argue that it was the spatial intermingling of prewar Sunnis and Shiites that led to violence: large, internally homogeneous communities would be defensible and thus secure, but the prewar patchwork quilt of interpenetrated neighborhoods created a security dilemma in which each group was exposed to violence from the other. In this view, the war was chiefly a response to mutual threat, with each side fighting to evict rivals from areas that could then be made homogeneous and secure. While the populations were intermingled, the violence was intense, but the fighting progressively unmixed the two groups, yielding large, contiguous areas of uniform makeup with defensible borders between them. This in turn resolved the security dilemma, and as neighborhoods were cleansed, the fighting petered out as a product of its own dynamics rather than as a response to U.S. reinforcements.²⁴

On its face, the cleansing thesis has major challenges to overcome. Most of this literature advances cleansing and its burnout as an alternative to the surge account of Iraq's violence reduction in 2007. To sustain this central claim logically requires either that combat in areas where cleansing was happening made up the bulk of the pre-2007 violence (hence cleansing's completion could end that violence), or that combat in other areas was epiphenomenal to cleansing. Neither assertion is consistent with the evidence.

Throughout 2005 and 2006, much of the violence in Iraq occurred in Anbar Province, which is almost entirely Sunni and where no unmixing could thus occur. In fact, for most of 2006, SIGACTs data show more insurgent attacks in

Segregation"; Korb et al., *How Does This End?*; and Agnew et al., "Baghdad Nights." This argument draws on a theoretical tradition that sees security dilemmas involving comingled populations as a major source of violence. See, for example, James D. Fearon and David D. Laitin, "Explaining Interethnic Cooperation," *American Political Science Review*, Vol. 90, No. 4 (December 1996), pp. 715–735; Barry R. Posen, "The Security Dilemma and Ethnic Conflict," *Survival*, Vol. 35, No. 1 (Spring 1993), pp. 27–47; Chaim Kaufmann, "Possible and Impossible Solutions to Ethnic Civil Wars," *International Security*, Vol. 20, No. 4 (Spring 1996), pp. 136–175; Alexander B. Downes, "The Problem with Negotiated Settlements to Ethnic Civil Wars," *Security Studies*, Vol. 13, No. 4 (Summer 2004), pp. 230–279; the special issue of *Security Studies*, Vol. 13, No. 4 (Summer 2004); and Rui J.P. de Figueiredo Jr. and Barry R. Weingast, "The Rationality of Fear: Political Opportunism and Ethnic Conflict," in Barbara Walter and Jack Snyder, eds., *Civil Wars, Insecurity, and Intervention* (New York: Columbia University Press, 1999).

24. Of course, sectarian Sunni versus Shiite killings made up only part of Iraq's violence—it excludes, for example, the Iraqi versus U.S. fighting that loomed so large for the U.S. debate. In addition, the relative prevalence of sectarian and nonsectarian violence varied both geographically and temporally. The cleansing school is rarely explicit on what aspects of this violence it seeks to explain.

Sunni districts than in mixed ones, and violence began to decline in Sunni areas a full eight months before it did in mixed areas. The timing of the reductions in violence also suggests that nonsectarian violence (such as attacks on U.S. forces) was not epiphenomenal to sectarian bloodshed. The IBC data show that sectarian violence actually lags behind both insurgent attacks on coalition forces and civilian casualties resulting from combat: total SIGACTs began to decline in May 2007, three months before sectarian violence turned around.

The cleansing thesis nevertheless enjoys a degree of intuitive appeal given its theoretical motivation and its potential to explain not just why but when violence would decline: Iraq's population had become much less intermingled overall by mid-2007, and this is also when aggregate violence fell. Yet a closer look at the violence in Baghdad offers little support for this argument: when neighborhoods unmixed, violence moved but did not diminish, and this onward advance of a moving combat frontier was far from exhausted when violence nevertheless fell in mid-2007.²⁵

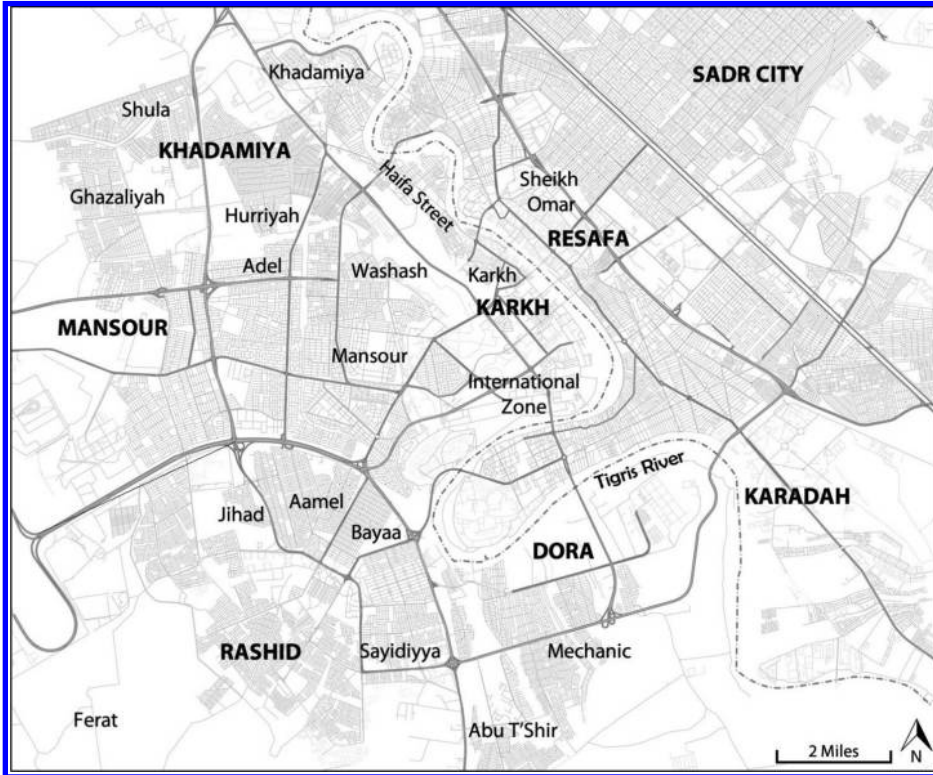
After al-Qaida in Iraq bombed the Shiite Golden Dome Mosque in Samarra in February 2006, sectarian violence in Iraq increased, and the initial wave did indeed focus on Shiite efforts to remove Sunnis from mixed districts in Baghdad. The fighting did not die out, however, when this unmixing was complete. Instead, Shiite militias used the newly secure cleansed zones as bases for onward movement into adjoining, homogeneously Sunni neighborhoods, where the fighting continued unabated.²⁶ Hence instead of the violence burning out as Baghdad's population unmixed, it simply moved as ascendant Shiites attempted to conquer formerly Sunni territory. This produced a pattern of continuing violence that was localized on the moving frontiers that separated homogeneous neighborhoods. Moreover, these moving battle lines had not exhausted the potential for bloodshed by mid- or even late 2007: Shiites had conquered much but not all of Sunni Baghdad, leaving ample targets remaining for continuing predation when violence instead fell. This pattern of sectarian killing offers little reason to believe that it ended of its own accord by the middle of 2007, as the cleansing thesis argues.²⁷

25. The following discussion is based entirely on original interviews with coalition officers who served in Baghdad during the period in question.

26. Of course, no human population is literally homogeneous in the sense that its makeup is absolutely uniform. There are always exceptions, and our usage is not meant to exclude this. By "homogeneous," we mean a substantial preponderance of one sect over another, following the characterizations provided by our interviewees and in demographic analyses such as the Gulf 2000 Project.

27. This does not constitute a general refutation of security dilemma theories of ethnosectarian violence in Iraq or elsewhere. We do not claim that fear was unimportant in causing violence in Iraq.

Figure 1. Baghdad Neighborhoods



This map was generated with TileMill software and OpenStreetMap shapefiles.

In early to mid-2006, for example, the primary sectarian battlefields in the capital were in the neighborhoods bordering Khadamiya, just west of the Tigris River to the city's north, and around West Rashid in southern Baghdad (see figure 1). The city's pre-2006 sectarian demography was something of a patchwork quilt, but west of the Tigris, central Baghdad was generally Sunni with intermingled neighborhoods to the north and south and two predominantly Shiite enclaves beyond these: Khadamiya in the north and West Rashid in the south.

What the evidence does establish, however, is that the pattern of violence offers no logical basis for Iraq's bloodshed to fall suddenly in mid-2007, whether the motive for that violence was fear or greed. By mid-2007, conquest, not unmixing, was dominant in Baghdad's sectarian warfare, and Shiites' conquest of the city was incomplete and apparently ongoing when the level of violence fell.

After the Samarra Mosque bombing in February, Muqtada al-Sadr's Shiite Jaish al-Mahdi (JAM) militia established lines of communication from its primary base in Sadr City, the large Shiite slum in northeast Baghdad, into beachheads west of the Tigris in these two Shiite quarters. In the north, the JAM then began infiltrating the accessible mixed districts to the south and west of Khadamiya. The result was a sharp increase in fighting in Hurriyah, Shula, and Washash. By October 2006 these cleansing efforts had succeeded, and much of northern Baghdad had become homogeneously Shiite. Sectarian fighting did not stop, however—it simply moved. Instead of standing down with the unmixing of intermingled Washash, the JAM drove south into the adjoining Sunni neighborhood of Mansour and southeast into predominantly Sunni Karkh along Haifa Street. Instead of halting with the clearance of once-mixed Shula and Hurriyah, the JAM pushed onward into Sunni Adel and southwest into Ghazaliyah. In the process, they drove out residents from uniformly Sunni apartment blocks for replacement with Shiite squatters, pushed the sectarian frontier outward into homogeneously Sunni territory, and extended their line of communications from Sadr City to enable further advances south and southeast into the heart of Sunni central Baghdad.²⁸

In southern Baghdad, the JAM moved outward from its base in West Rashid, clearing areas with large Shiite populations such as Jihad, Bayaa, and Abu T'Shir. Their offensive was not limited to rescuing Shiites, however. They also attempted to expand outward into the predominantly Sunni neighborhoods of Dora and Mechanic to the east, Ferat to the west, and Aamel and Sayidiyya to the north.²⁹

At no point, moreover, was the violence uniformly distributed over the intermingled sections of the city. Even during the fighting for intermingled Shula, Hurriyah, Washash, Sayidiyya, and Aamel, bloodshed was concentrated at the front lines of the JAM advance through these districts from their bases in Khadamiya and West Rashid, with localities off these frontiers relatively quiet. Nor was residence in a contiguous, homogeneously Sunni neighborhood any guarantee of safety: the JAM offensive carried onward directly into the Sunni heart of central Baghdad once it had cleared the way. In early 2006, the metropolitan districts of Karkh and Mansour comprised a homogeneously Sunni community of more than 1.5 million people over 10 to 20 contiguous square miles; by mid-2007 perhaps half of this area had been cleansed of its Sunni residents by the JAM and repopulated with Shiite squatters. The

28. U.S. Army Military History Institute, Iraq Surge Collection (henceforth MHI) audio files 10, 17, 23, 35, and 55.

29. MHI audio files 11, 18, 26, 36, 38, 55, and 61.

fact that the remainder was homogeneous and contiguous thus offered no reason to expect that it would not be next on the list for conquest—the fighting had no more burned itself out in mid-2007 when the front line had advanced partway into Sunni central Baghdad than it had in mid-2006 when it was approaching the boundaries of the once mixed-sect neighborhoods in the city's north and south. Something other than the natural completion of a process of unmixing had to be at work for the violence to end when it did.³⁰

The Awakening

Proponents of the Awakening thesis claim that violence declined in 2007 because the Sunni insurgency abandoned its erstwhile AQI allies in exchange for U.S. payments of \$300 per fighter per month as “Sons of Iraq” (SOI) and a promised cease-fire. In this view, these actions yielded an uneasy truce in which still-armed, unbeaten insurgent factions stopped fighting for reasons that had little or nothing to do with the surge.³¹

Supporters of the Awakening and the synergy schools both see Sunni realignment as necessary for Iraq's 2007 violence reduction; the former implies it was also sufficient for this. We evaluate the Awakening's necessity below. In this section, we consider its sufficiency: If there had been an Awakening but without the reinforcements and new methods brought by the surge, would Iraq's violence still have fallen as broadly and rapidly as it did in 2007?

The experience of 2004–06 sheds light on this counterfactual. During this period, Sunnis made at least four attempts to realign with coalition forces; none succeeded. Each time, Sunni tribal leaders had become alienated by AQI's brutal methods and tried to break with AQI by negotiating local cease-fires with U.S. commanders. Each time, Sunni tribesmen agreed to defend their communities from al-Qaida in exchange for payments from the United States or the Iraqi government. Yet none of these efforts received the kind of protection that

30. MHI audio files 11, 18, 38, and 55. Mansour's and Karkh's size and population were calculated from LandScan 2008 data. Similar patterns characterized violence east of the Tigris. In Rusafa, for instance, Sunnis lived mostly in mahala-sized clusters such as the roughly 3.5-square-kilometer Sheikh Omar neighborhood. This was divided from the Shiite sections of al-Fadl to the south by a market known as “Line Square.” The Sheikh Omar neighborhood's perimeter was walled; Line Square was defended on both sides with barriers and snipers; and this is where the sectarian violence mainly occurred. MHI audio file 14. In the Madain district south of Baghdad, the sects were also largely divided into homogeneous clusters, with Sunnis living to the north and Shiites to the south. Violence largely took place along this fault line, with JAM evicting Sunnis and emplacing squatters as they left. MHI audio file 51.

31. On the Awakening thesis, see Long, “The Anbar Awakening”; Simon, “The Price of the Surge”; Lynch, “Sunni World”; Michaels, *A Chance in Hell*; Green, “The Fallujah Awakening”; Couch, *The Sheriff of Ramadi*; Kober, “Did the Surge Work?”; Anderson, “Inside the Surge”; and Rosen, “The Myth of the Surge.”

the surge offered to the Anbar Awakening, and without this protection, none of these efforts proved able to survive and spread in the face of insurgent counterattacks.³²

The first of these four failed Sunni realignments involved the Albu Nimr tribe in 2004. Based in Anbar but with members living as far as Baghdad, the Nimr were a cohesive tribe with a larger membership than the Albu Risha—the tribe that ultimately catalyzed the late 2006 Awakening. The Nimr reached out to U.S. forces in early 2004 to make common cause against al-Qaida by standing up tribesmen as local police and civil defense forces in exchange for U.S. money, weapons, and support. In 2004, however, the U.S. military had little to offer in the way of direct protection; a single Special Forces detachment of a dozen soldiers was assigned to work with the Nimr and coordinate their security. Meanwhile, the limited conventional force presence in Anbar focused its attention on the offensive in Fallujah, with no meaningful capacity to protect Nimr tribesmen elsewhere. Coalition requests to the Nimr to assist in Fallujah produced tension when the Nimr demurred, and when AQI began serious counterattacks against the Nimr in mid-2004, the coalition's inability to protect its allies became clear. Many Nimr tribesmen were killed, others melted away, and the alliance collapsed.³³

The second failed realignment came in the spring of 2005. Sunnis from the Albu Mahal tribe in al-Qaim (together with Albu Nimr elements from the city of Hit) created an armed resistance movement dubbed the "Hamza Brigade." AQI fought back, and by May the Hamza Brigade was seeking U.S. military assistance. They received little. U.S. operations near al-Qaim (Operation Matador) were not coordinated with the Hamza leadership, which complained that the coalition was not protecting them from AQI attack. By September, Hamza forces had been driven from al-Qaim; the Hamza Brigade had dissolved; and the tribesmen who continued to resist AQI had withdrawn to the town of Aqashat and been marginalized.³⁴

32. Secondary literature is cited where relevant, but the description of previous Awakening attempts is again solely based on original interviews.

33. MHI audio file 48. See also Timothy S. McWilliams and Kurtis P. Wheeler, eds., *Al-Anbar Awakening*, Vol. 1: *American Perspectives: U.S. Marines and Counterinsurgency in Iraq, 2004–2009* (Quantico, Va.: Marine Corps University, 2009), pp. 54, 62; Steve Negus, "Home-Grown Police Force Takes On Iraq Insurgents," *Financial Times*, March 31, 2006; and Nelson Hernandez, "Iraqis Begin Duty with Refusal; Some Sunni Soldiers Say They Won't Serve outside Home Areas," *Washington Post*, May 2, 2006.

34. MHI audio file 48. See also Long, "The Anbar Awakening," p. 78; James A. Russell, *Innovation, Transformation, and War: Counterinsurgency Operations in Anbar and Ninewa Provinces, Iraq, 2005–2007* (Stanford, Calif.: Stanford University Press, 2011), p. 60; Gary W. Montgomery and Timothy S. McWilliams, eds., *Al-Anbar Awakening*, Vol. 2: *Iraqi Perspectives: From Insurgency to Counterinsurgency in Iraq, 2004–2009* (Quantico, Va.: Marine Corps University, 2009), p. 142; and Malkasian,

In the fall of 2005, the Desert Protectors, a militia organized by U.S. Special Forces in conjunction with Operation Steel Curtain in al-Qaim, attempted a third realignment. The U.S. commandos trained and equipped forty-five to sixty Sunnis, many of whom were reportedly remnants of the Hamza Brigade, and committed them in al-Qaim during the operation. The program was then used to route local recruits into the Iraqi army and police. At its peak, the Desert Protectors provided perhaps 1,000 Sunni recruits, but the organization broke down after the coalition insisted that participants serve not as strict home-defense forces and instead agree to be redeployed for service elsewhere. In response, about one-third of the members resigned, and the program largely disbanded.³⁵

The fourth failed realignment was dubbed the “Anbar People’s Council” and began in late 2005. Organized by seventeen tribal elders mostly from the Fahad tribe, the Council was led by Muhammad Mahmud Latif al-Fahadawi and Sheikh Nasser al-Fahadawi. Its leaders and many of its members were insurgents from the 1920s Brigade (a prominent Sunni guerilla faction) who had become disaffected by AQI’s criminal activities and expropriation of local smuggling income. On November 28, 2005, they decided to break with AQI and support the coalition, directing tribesmen into the police for local security duty. The coalition accepted these recruits, but failed to protect their leadership. By early 2006, AQI counterattacks against the group had become extremely violent: al-Qaida bombed a police station during an Anbar Council recruitment drive in January, killing seventy. Although initially resilient in the face of this violence, the Council could not hold out indefinitely: by late January, AQI had killed almost half the founding elders, including Sheikh Nasser. By the end of the month, the group had disbanded. The Anbar People’s Council was notable for its similarity to the eventual Anbar Awakening movement: it had a wide popular base (much wider than the Albu Risha tribe that catalyzed the 2006 Awakening); it included a substantial number of disaffected insurgents; and its leaders and foot soldiers accepted significant personal risk to combat al-Qaida. Yet its inability to defend itself from counterattack shut it down within weeks.³⁶

There is thus ample evidence of earlier attempts by Sunni tribes, including

“Did the Coalition Need More Forces in Iraq?” p. 123. Later, after U.S. Operations Steel Curtain and Steel Curtain II cleared al-Qaim in November 2005, U.S. forces reengaged the Albu Mahal in holding the area, but the Hamza Brigade had effectively been disestablished. MHI audio file 48.

35. MHI audio files 29 and 48.

36. MHI audio files 46 and 48. See also McWilliams and Wheeler, *Al-Anbar Awakening*, Vol. 1, pp. 114, 125–126; and Niel Smith and Sean MacFarland, “Anbar Awakens: The Tipping Point,” *Military Review*, Vol. 88, No. 2 (March/April 2008), pp. 41–52.

former insurgent groups, to realign against their erstwhile AQI allies prior to the surge. Yet none succeeded. For some, unwillingness to deploy outside their home districts contributed to their breakup. For at least three of the four cases, however, the decisive cause of failure appears to have been their inability to withstand counterattack.

This should not be surprising. All insurgencies face a constant risk of factionalism and defection, which can easily lead to annihilation by larger, better-equipped state militaries.³⁷ Self-preservation thus compels insurgents to put down incipient defections with brutal violence lest the defection spread, and AQI was unusually ruthless in this regard. Any Sunni tribe that broke with al-Qaida could expect fierce retaliation. In the successful 2006–07 Awakening, the Sons of Iraq were under constant threat of reprisal. Interviewees reported insurgents assassinating SOI leaders or engaging SOI units in prolonged gunfights in Amiriyah, Awja, Babil, East Rashid, Haditha, Jisr Diyala, Khadamiya, Kirkuk, Ramadi, Sadr al Yusufiyah, Tarmia, and Tikrit. Insurgents used improvised explosive devices (IEDs) to target recruitment drives and to attack SOI checkpoints, and the 2006–07 Awakening’s original leader, Sheikh Sattar Albu Risha, was himself killed with an IED in 2007.³⁸ The 2006–07 SOIs, however, had the surge to protect them from these attacks; the prior attempts did not, and none survived long enough to change the war in any fundamental way.

The fact that the 2006–07 Awakening received coalition protection that its predecessors lacked was not an accident. The pre-surge U.S. military was in no position to provide the security that Sunnis needed. This was partly because smaller pre-surge U.S. forces had less capacity for protection,³⁹ but it was also because the prevailing pre-surge doctrine was ill suited to the job. With the exception of occasional experiments by innovative local commanders, pre-surge methods normally emphasized force protection via mounted patrols; deployment in large, fortified bases; and operations in large formations without sustained informal contact with the population. These dispositions delayed responsiveness in assisting Sunnis under attack, made it hard for tribesmen to

37. See, for example, Paul Staniland, “Between a Rock and a Hard Place: Insurgent Fratricide, Ethnic Defection, and the Rise of Pro-State Paramilitaries,” *Journal of Conflict Resolution*, Vol. 56, No. 1 (February 2012), pp. 16–40; and Stathis N. Kalyvas, *The Logic of Violence in Civil War* (New York: Cambridge University Press, 2006).

38. See, for example, MHI audio files 4, 9, 15, 18, 23, 25, 35, 37, 40, 45, 48, 49, 50, and 69.

39. Pre-surge U.S. troop strength averaged 135,000 to 140,000, and exceeded 145,000 in only seven of the forty-three months between August 2003 and February 2007. Michael O’Hanlon and Ian Livingston, “Iraq Index: Tracking Variables of Reconstruction & Security in Post-Saddam Iraq” (Washington, D.C.: Brookings Institution, August 2011), p. 13, <http://www.brookings.edu/saban/iraq-index.aspx>, accessed March 6, 2012. U.S. troop strength while the Anbar People’s Council and the Desert Protectors were active averaged 150,000 to 155,000; neither of the other pre-surge realignment attempts occurred with more than 140,000 U.S. troops in Iraq.

communicate with U.S. troops without surveillance by their enemies, and made it all but impossible to protect realigning tribes from infiltration by AQI operatives or to protect their families from AQI assassination teams. In fact, some local U.S. commanders did try to cooperate with realigning tribesmen prior to the surge. The pre-2007 troop strength and doctrine, however, made such cooperation difficult even when both sides sought it. Without the surge or its methods, realignment faced hurdles too high to overcome.⁴⁰

Comparing Surge and Synergy

If the Anbar Awakening could not have survived without the surge, could the surge have succeeded without the Awakening? The answer to this question is what separates the surge and synergy theses, and we examine that question in this section via a series of tests designed to distinguish these arguments from each other.

LOGIC OF THE SURGE THESIS

The surge thesis has two main logical components.⁴¹ First, it holds that 30,000 U.S. reinforcements proved necessary to extend security over the critical sections of western and central Iraq. Coalition offensives had been able to clear and even hold particular places at particular times prior to 2007; the problem, in this view, was that insurgents had simply moved from the cleared areas to others, leading to deterioration elsewhere in a balloon-squeezing phenomenon that prevented security from improving overall. The surge, by contrast, is said to have provided enough troops to clear and hold much wider expanses, preventing the return of insurgents and sustaining security gains.⁴²

Second, the surge brought the new tactics described above. Previous U.S.

40. Note that the fall 2006 Anbar realignment that initiated the Awakening occurred in Col. Sean MacFarland's AO, where one of the occasional early experiments with Petraeus-like methods was ongoing. The surge brought such methods across the theater, and was thus instrumental in the Anbar Awakening's ability to spread beyond its origin in this AO.

41. The description below is drawn from Kagan, *The Surge*; McCain and Lieberman, "The Surge Worked"; Boot, "The Truth about Iraq's Casualty Count"; Crider, "A View from Inside the Surge"; Collier, "Now That We're Leaving Iraq, What Did We Learn?"; Bull, "Mission Accomplished"; and Andrade, *Surging South of Baghdad*.

42. Examples include Operations Iron Reaper and Iron Harvest, which we discuss in more detail below. Many analysts also emphasize concomitant improvements in Iraqi Security Forces (ISF), which they believe provided much of the surge's effective strength. See, for example, Kagan, *The Surge*, pp. 137–165. Here we treat the ISF buildup and U.S. reinforcements together as the surge, though Iraqi methods and skills lagged far behind the Americans' throughout 2007. Note that the surge's main effort was initially in Baghdad with additional forces deployed to Anbar and Diyala. The resulting increase in troop density was felt more broadly over time, as the stabilization of areas to which the surge brigades initially deployed enabled forces to be moved elsewhere.

methods under Gen. George Casey had emphasized transition to Iraqi security forces. Implementation varied from place to place and commander to commander, but many emphasized reducing U.S. vulnerability and visibility among a resentful population until indigenous forces could take over. General Petraeus, in this view, pushed U.S. forces out among the population and tasked U.S. troops with protecting Iraqi civilians themselves. This was not entirely unprecedented; innovative individuals such as Col. H.R. McMaster at Tal Afar in 2005 and Col. Sean MacFarland in Ramadi in 2006 had experimented with similar approaches on a local basis prior to the surge. What changed in 2007 was that Petraeus insisted on their consistent, theaterwide adoption and thus regularized such methods across Iraq.

The surge-only argument is thus more than just a claim about reinforcements: it is centrally an argument about more troops and new doctrine for their use. Of course, troop count and doctrine are logically independent. In principle, the surge-only thesis could be sustained if one, the other, or the combination proved decisive. What this school does require, however, is that some combination of the two was both necessary and sufficient to bring violence down to something similar to the observed 2008 levels.

LOGIC OF THE SYNERGY THESIS

The surge-Awakening synergy thesis, by contrast, sees the reinforcements and doctrinal changes as necessary but insufficient.⁴³ In this view, the surge was too small, and the impact of doctrinal changes insufficient, to defeat a determined insurgency before the reinforcements' time limit was reached and their withdrawal began. Hence the surge without the Awakening would have improved security temporarily but would not have broken the insurgency, which would have survived and returned as the reinforcements went home. The surge added a temporary, yearlong boost of about 30,000 U.S. troops to a pre-surge coalition strength of about 155,000 foreign and 323,000 Iraqi troops and police as of December 2006 (Iraqi Security Forces, or ISF, grew by about another 37,000 by September 2007, when violence had begun to drop).⁴⁴ Thus the surge entailed only a marginal increase in troop density: an expansion of less than 15 percent overall and perhaps 20 percent in U.S. strength. Half of the overall increase, moreover, was in Iraqi forces, which were far from proficient in the new U.S. methods by 2006–07.⁴⁵ And as mentioned above, the U.S. com-

43. The account below is drawn from Biddle, "Stabilizing Iraq from the Bottom Up"; Biddle, O'Hanlon, and Pollack, "How to Leave a Stable Iraq"; Kahl, "Walk before Running"; and Malkasian, "Did the Coalition Need More Forces in Iraq?"

44. For troop counts, see O'Hanlon and Livingston, *Iraq Index*, pp. 13, 17.

45. The Jones Commission, tasked by the U.S. Congress with assessing ISF capability and poten-

ponent had only about a year in which to function at this strength, after which it was to return to pre-surge numbers or fewer. For this reinforcement per se to have been decisive, one must assume that previous troop density lay just below some critical threshold that happened to be within 20 percent of the pre-surge value. Although this coincidence cannot be excluded, there is no *prima facie* reason to expect it.⁴⁶

For synergy proponents, the Awakening was thus necessary for the surge to succeed. In this view, the Awakening had three central effects. First, it took most of the Sunni insurgency off the battlefield as an opponent, radically weakening the enemy. Second, it provided crucial information on remaining holdouts, and especially AQI, which greatly increased coalition combat effectiveness. And third, these effects among Sunnis reshaped Shiite incentives, leading their primary militias to stand down in turn.

As for the first two points, although the SOI movement never comprised just former insurgents, the insurgency nevertheless provided much of the SOIs' combatant strength—and the bulk of the secular Sunni insurgency nationwide became SOIs over the course of 2007. By the end of the year, SOI strength nationwide had reached 100,000 members, under more than 200 separate contracts. As insurgents progressively realigned in this way, the remaining insurgency shrank dramatically. The fact that so many SOIs were former insurgents also made the SOIs uniquely valuable coalition allies: they knew their erstwhile associates' identities, methods, and whereabouts in ways that government counterinsurgents rarely do. When insurgents who had been allied with AQI realigned as Sons of Iraq, the coalition suddenly gained intelligence

tial, put it this way in September 2007: "The challenge for the [Iraqi] Army is its limited operational effectiveness, caused primarily by deficiencies in leadership, lack of disciplinary standards, and logistics shortfalls." Iraqi police rated even harsher assessments: "In general, the Iraqi Police Service is incapable today of providing security at a level sufficient to protect Iraqi neighborhoods from insurgents and sectarian violence. . . . The National Police have proven operationally ineffective, and sectarianism in these units may fundamentally undermine their ability to provide security. The force is not viable in its current form." The Commission saw the ISF as improving, but far from effective, in 2007. Gen. James L. Jones, U.S. Marine Corps, chairman, *The Report of the Independent Commission on the Security Forces of Iraq* (Washington, D.C.: Center for Strategic and International Studies, September 6, 2007), pp. 9–10.

46. This is especially true given that the U.S. military fell well short of its own doctrinal standard that successful counterinsurgents require 20 troops per 1,000 civilians to be protected. Headquarters, Department of the Army, *FM 3-24: Counterinsurgency* (Washington, D.C.: U.S. Government Printing Office, December 2006), par. 1-67. Iraq's population is roughly 30 million. Central Intelligence Agency, *The World Factbook: Iraq*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html>, accessed March 30, 2012. *FM 3-24* thus implies a need for about 600,000 soldiers in Iraq—and, as discussed earlier, it is unclear how much the ISF contributed to the effort. The utility of *FM 3-24*'s standard is questionable (see Friedman, "Manpower and Counterinsurgency"), but even those who accept it would have little reason to expect that the surge bumped coalition troop density above some critical threshold in Iraq.

on AQI membership, cell structure, the identity of safe houses and bomb-making workshops, and locations of roadside bombs and booby traps. Guerrillas rely on stealth and secrecy to survive against heavily armed government soldiers. When SOIs lifted this veil of secrecy, coalition firepower guided by SOI intelligence became extremely lethal, creating ever-increasing incentives for holdouts to seek similar deals for themselves; soon only committed AQI fanatics remained, marginalized in a few districts in Iraq's northwest.⁴⁷

In the synergy account, Sunni realignment in turn had major consequences for Shiite militias such as the Jaish al-Mahdi.⁴⁸ Many of these militias began as self-defense mechanisms to protect Shiite civilians from Sunni attack, but they grew increasingly predatory as they realized they could exploit a dependent population. Rising criminality in turn created fissiparous tendencies as factions with their own income grew increasingly independent of their leadership. When the SOIs began appearing, the Sunni threat waned, and with it the need for defenders. At the same time, the SOI cease-fires freed arriving U.S. surge brigades to focus on Shiite militiamen. These developments created multiple perils for militia leadership. In previous firefights with U.S. forces, the JAM in particular had sustained heavy losses but easily made them up with new recruits given its popularity. Shiites' growing disaffection with militia predation, however, coupled with declining fear of Sunni attack, threatened leaders' ability to make up losses with new recruits. At the same time, intra-Shiite violence among rival militias, especially between the Badr Brigade and the JAM, posed a rising threat from a different direction. When Shiites were unified by a mortal Sunni threat and U.S. forces were tied down by insurgents and AQI, these internal problems were manageable. But as the Sunni threat waned, Shiite support weakened, internal divisions multiplied, and U.S. troop strength grew, Shiite militias' ability to survive new battles with coalition forces fell. In the synergy account, these challenges persuaded Muqtada

47. Most interviewees with firsthand knowledge of SOIs reported that these units contained former insurgents, not just in Anbar but across central Iraq, including Al Dur, Awja, Baladrooz, Habbaniyah, Hit, Kirkuk, Narwan, Northern Babil, Northwest Wasit, Rawah, Salman Pak, South Diyala, Tikrit, and Wymot, and the Baghdad neighborhoods of al-Rusafa, Amiriyah, Dora, East Rashid, Khadamiya, Madain, Mahmoudiya, Sayidiyya, and Tarmia. MHI audio files 4, 7–11, 13, 18, 20, 23–26, 30, 35, 41, 43, 49, 51, 53, 54, 63, 64, 68, and 69.

48. The discussion here follows the synergy literature; it focuses on the JAM as the most important of the Shiite militias and one whose military incentives mirrored those of its rivals. On other Shiite militias, see Michael Harari, *Status Update: Shi'a Militias in Iraq* (Washington, D.C.: Institute for the Study of War, 2010); Anthony Cordesman, *The Iraqi Insurgency and the Risk of Civil War: Who Are the Players?* (Washington, D.C.: Center for Strategic and International Studies, 2006); Patrick Gaughen, "Background #17: The Fight for Diwaniyah: The Sadrist Trend and the ISCI Struggle for Supremacy" (Washington, D.C.: Institute for the Study of War, 2007); and Anthony Shadid, "In a Land without Order, Punishment Is Power: Conflicts among Shiites Challenge a Village Sheikh in Southern Iraq," *Washington Post*, October 22, 2006.

al-Sadr to stand down rather than risk another beating from the coalition, and the result was his announced cease-fire of August 2007—which took the primary Shiite militia off the battlefield, leaving all of 2006’s major militant groups under cease-fires, save a marginalized remnant of AQI, and producing the radical violence reduction of late 2007 and thereafter.⁴⁹

Proponents of the synergy thesis thus see the Awakening as necessary for the surge to succeed. In this view, however, neither the surge nor the Awakening was sufficient, nor did these factors combine in an additive way. As noted above, Sunni groups had attempted similar realignments on previous occasions—and those earlier attempts had all failed at great cost. For the synergy school, what distinguished the failures from the successful 2007 Awakening was a coalition force that could protect insurgent defectors from counterattack. The surge may not have been large enough to suffocate a determined insurgency, but it was large enough to enable cooperation with turncoat Sunnis and exploit their knowledge to direct coalition firepower against the still-active insurgents, enabling them to survive the kind of retaliation that had crippled their predecessors.

This U.S. contribution required the surge’s doctrinal element as well as its reinforcements. After all, the initial experiments that became the Awakening and the SOI movement predated the reinforcements: it was in Anbar in the fall of 2006 that Sheikh Sattar and his Albu Risha tribe first worked out an arrangement to assist U.S. forces under Colonel MacFarland in exchange for physical protection against counterattack. As Colonel McMaster had done in Tal Afar and others had tried elsewhere, MacFarland had anticipated the methods that Petraeus would shortly institute across the theater. Those methods were necessary for the delicate process of establishing trust between mutually wary parties and enabling the necessary speed and effectiveness of security cooperation. The fall 2006 Awakening in Anbar could survive because it was supported with the new methods, and it could spread across most of Iraq in less than a year because the surge spread those methods across a reinforced theater. For the synergy school, both the Awakening and the surge were therefore necessary, as each reinforced the other in close interaction; and the surge’s doctrinal component, not just its numerical reinforcement, was necessary.

49. An exception was the post-2007 combat between Sadr’s JAM and coalition forces during the Iraqi government’s spring 2008 “Charge of the Knights” offensive in Basra and the follow-on operations in Amarah and Sadr City. This offensive led to a brief spike in violence, which quickly subsided when Sadr again stood down in a cease-fire negotiated with Nouri al-Maliki’s government after the JAM proved unable to hold; the 2008 cease-fire’s logic was similar to its 2007 predecessor’s, and the 2008 violence did not produce more than a temporary exception to the trend of radical violence reduction after 2007. On the Charge of the Knights offensive and ensuing combat, see Marisa Cochrane, *The Battle for Basra*, Iraq Report, No. 9 (Washington, D.C.: Institute for the Study of War, June 23, 2008).

EVIDENCE: SURGE VERSUS SYNERGY

Which, then, is the stronger explanation, surge or synergy? The critical distinction concerns the SOIs. Both schools' proponents see the surge as necessary; only synergy thesis adherents see the SOIs as essential. If the surge-only view is correct, the SOIs were thus either inconsequential or epiphenomenal. Regarding the latter, even a crucial Awakening could still be consistent with a surge-only explanation if the surge created it. Of course, Sheikh Sattar's original Awakening predated the surge, so it could not have been caused by it. The vast majority of the SOIs, however, came later and elsewhere, after surge brigades had begun to deploy—the transition from a small-scale experiment in one part of Iraq to a widespread movement that fielded 100,000 members took place almost entirely after the surge was well under way. If the surge was as powerful as is often claimed, rational insurgents would have had strong reasons to abandon the fight, and the SOI program offered an ideal vehicle.

To assess these possibilities, the critical observable implications concern the trajectory of the reduction in violence and its relationship to the timing of SOI standup. The surge-only thesis implies that for any given area of operations, combat before SOI standup should have been sufficient to reverse the 2006 trend of increasing bloodshed and to put local violence on a downward trajectory steep enough to pacify the AO before the surge ended and reinforcements were withdrawn. Where this is so, subsequent SOI standups would be superfluous, either because they were unnecessary or because they would be indistinguishable from a rational decision by insurgents to stop contesting a surge that was beating them anyway. In such cases, the surge would have sufficed without the SOIs, whether they eventually appeared or not, and their appearance would be epiphenomenal to the surge. By contrast, the synergy thesis implies that for any given AO, the reduction in violence before SOI standup should be too slow to pacify the AO before the surge's end. The reduction in violence afterward, however, should accelerate to a pace that could reduce bloodshed to roughly 2008 levels by the surge's end, and by the end of U.S. political patience with such intense combat in Iraq—which had neared the breaking point even by mid-2007 and would surely not have survived into the 2008 presidential campaign season. If so, the surge would be necessary but insufficient, and unable to pacify Iraq by itself or motivate rational Sunnis to realign.

To test these implications, we compared SIGACTs trends before and after SOI standup in each of the 38 AOs for which our interviews provide specific standup dates.⁵⁰ We computed violence slopes using ordinary least squares re-

50. In the two AOs where interviewees rotated out before the SOIs stood up, we used Iraq Recon-

gression on the three months of combat preceding SOI standup in that AO, and the three months afterward.⁵¹ Figure 2 illustrates the results by showing trends in SIGACTs over time for each AO, with SOI standup dates superimposed. Table 1 provides descriptive information on each AO, including slope estimates and other details.

The results suggest that SOIs played a crucial role in reducing Iraq's violence in 2007. As table 2 shows, 24 of 38 AOs where SOIs stood up (63 percent) show violence trending downward more sharply after SOI standup than before. The difference, moreover, is large: across all 38 AOs, the average rate of reduction before SOI standup was 2.5 percentage points per month; the rate after standup was 5.8 percentage points per month, or roughly two and a half times greater.⁵² Of course, these are aggregate statistics. Table 2 thus breaks the data down into subsets by timing of SOI standup, location of AOs, and violence patterns therein.

The results in table 2 suggest that SOIs had bigger effects in more important AOs. For example, in AOs where SOIs stood up prior to August 2007 (when fighting was generally heaviest), violence declined faster after SOIs stood up in 78 percent of cases. Whereas violence was increasing in each of these AOs at standup, it reversed and plummeted thereafter, falling by more than 8 percentage points per month on average.⁵³ For AOs in Baghdad and Anbar (the

struction Management System data to identify the date of first payments to SOIs in that AO. For a description of these data, see Berman, Shapiro, and Felter, "Can Hearts and Minds Be Bought?" 51. The independent variable for these regressions is time; the dependent variable is monthly SIGACTs as a percentage of the maximum value that AO experienced from 2004 to 2008. This normalization facilitates cross-AO comparisons, because a drop of 10 SIGACTs per month could be a major change in a quiet AO, but a marginal change elsewhere. Thus, an estimated coefficient of -0.06 would show violence declining in that AO by six percentage points per month. Two AOs produced equal coefficients before and after SOI standup; these ties were broken by examining one- and two-month intervals (see table 1). All regressions and supporting data are available at <http://esoc.princeton.edu>.

52. These findings are robust to a variety of alternative specifications. When we examine other intervals of equal length before and after SOI standup, the SOIs correlate with faster rates of violence reduction. If we were to shorten the intervals to two months, for example, the SOIs' apparent impact would increase, with violence declining on average by 1.2 percentage points per month prior to SOI standup and by 5.8 percentage points thereafter. There is no interval between one and twelve months for which the violence reduction rate does not increase by at least a factor of 1.9 after SOIs stand up. Nor do the intervals need to be symmetric to support synergy: when the slope of violence is computed for any interval from one to twelve months after SOI standup, it falls faster on average across all 38 AOs than it does for any interval from one to twelve months prior to SOI standup. We also examined the robustness of these results by dropping all SIGACTs that were positively identified as not occurring from combat. All of these patterns remained substantively the same: for example, violence fell by 6.2 percentage points per month on average in the three months following standup, versus 2.5 in the three months prior. Across a range of intervals and ways of measuring insurgent attacks, violence thus drops faster after SOI standup.

53. Table 2 also demonstrates that, for AOs where SOIs stood up during 2007, 69 percent support the synergy thesis, with a fivefold acceleration in violence reduction.

Figure 2. Violence Trends by Area of Operation

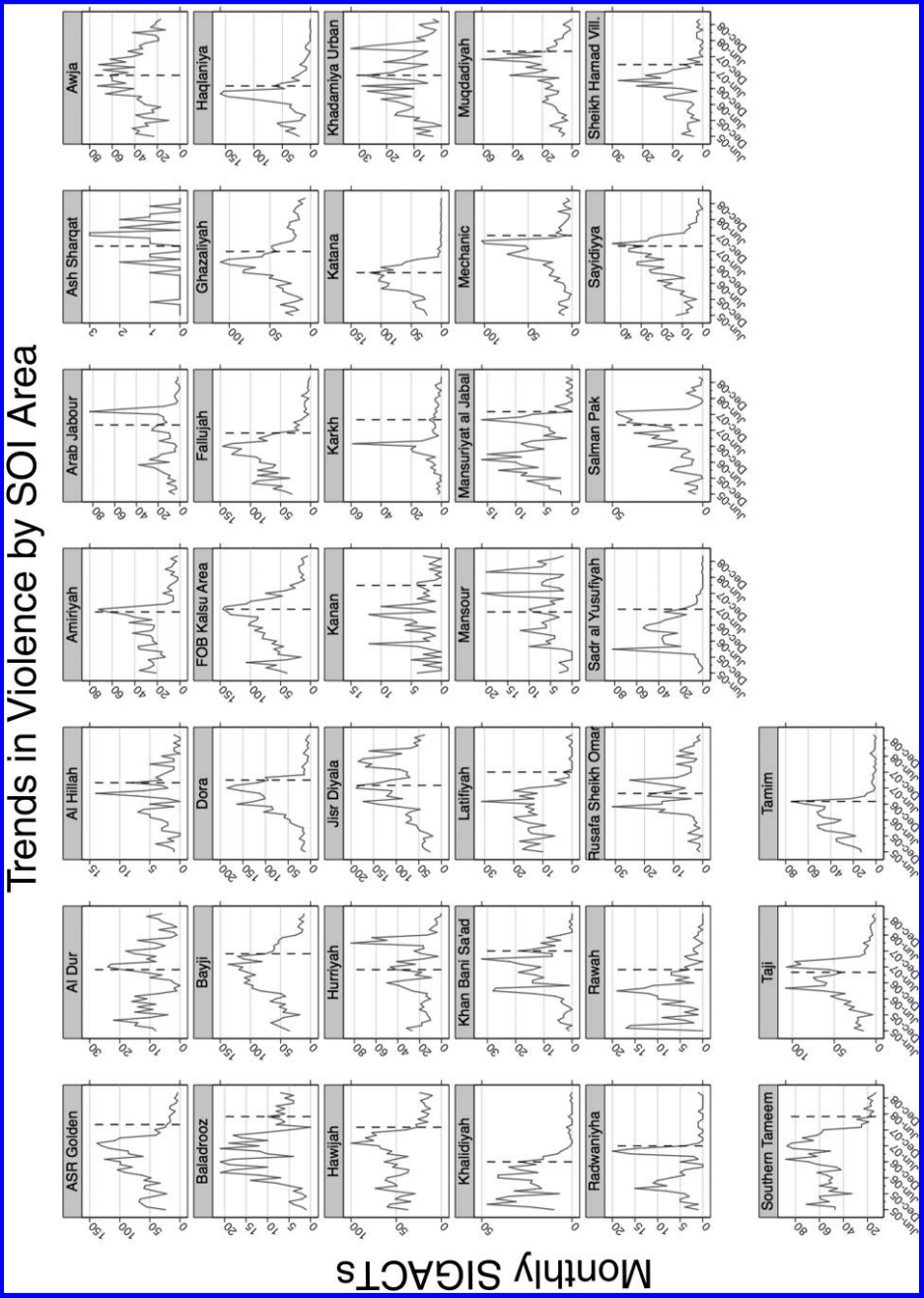


Table 1. Areas of Operation with Sons of Iraq (SOI) Standup

Area of Operation	Location	Peak Violence	SOI Standup Date	Pre-SOI Violence Trend	Post-SOI Violence Trend	Confirmation for Synergy?
Al Dur	Saladin Province	30	May07	+11.7	-11.7	yes
Al Hillah	Babil Province	18	Aug07	+8.3	-11.1	yes
Amiriyah	West Baghdad	85	May07	+15.4	-24.5	yes
Arab Jabour	South Baghdad	83	Aug07	+3.9	-2.0	yes
Ash Sharqat	Saladin Province	3	Aug07	-16.7	+20.0	no
ASR Golden	South of Samarra	150	Feb08	-3.6	-0.8	no
Awja	South of Tikrit	82	May07	+3.7	-5.5	yes
Baladrooz	Diyala Province	42	May08	+1.2	-3.6	yes
Bayji	Saladin Province	149	Nov07	-1.5	-3.3	yes
Dora	South Baghdad	264	Sep07	-12.7	-16.1	yes
Fallujah	Anbar Province	148	May07	-4.1	-7.2	yes
FOB Kalsu Area	Sunni Triangle	183	Jun07	+9.1	-12.6	yes
Ghazaliyah	Northwest Baghdad	157	Jun07	-11.5	-4.7	no
Haqlaniya	South of Haditha	160	Jan07	-24.6	-7.2	no
Hawijah	Tameem Province	116	Jan08	-14.8	-1.5	no
Hurriyah	Northwest Baghdad	163	May07	+7.1	-4.0	yes
Jisr Diyala	Diyala Province	214	Jul07	+14.7	-20.8	yes
Kanan	Diyala Province	21	Mar08	+3.3	-7.6	yes
Karkh	West Baghdad	104	Oct07	+0.6	-1.7	yes
Katana	Downtown Ramadi	119	Oct06	+3.1	-11.6	yes
Khadamiya Urban	Northwest Baghdad	71	May07	+16.8	-10.6	yes

Khalidiyah	Anbar Province	47	Dec06	-3.4	-12.8	yes
Khan Bani Sa'ad	Diyala Province	43	Dec07	-9.8	-7.7	no
Latifiyah	Southwest Baghdad	38	Dec07	-2.4	-2.4	yes*
Mansour	West Baghdad	33	May07	+13.9	-8.5	yes
Mansuriyat al Jabal	Diyala Province	18	Jan08	-27.8	+2.8	no
Mechanic	South Baghdad	107	Dec07	-34.3	+1.2	no
Muqdadiyah	Sunni Triangle	62	Feb08	-18.1	-3.5	no
Radwaniya	Southwest Baghdad	22	Jun07	-20.5	-5.9	no
Rawah	Western Anbar	20	May07	+3.0	-7.5	yes
Rusafa Sheikh Omar	East Baghdad	54	Apr08	+1.1	+1.1	yes†
Sadr al Yusufiyah	Sunni Triangle	82	Jun07	+1.3	-5.7	yes
Salman Pak	South Baghdad	49	Aug07	-6.5	+6.9	no
Sayidiyya	Southwest Baghdad	75	Aug07	+3.7	-11.3	yes
Sheikh Hamad Village	Sunni Triangle	29	Sep07	-9.3	-4.8	no
Southern Tameem	South of Kirkuk	101	May08	-1.0	+1.2	no
Taji	North Baghdad	167	Apr07	-8.2	+11.4	no
Tamim	Anbar Province	76	Jan07	+13.3	-27.9	yes
Average (N = 38)		91		-2.5	-5.8	

"Peak Violence" is the maximum number of significant activities in each area of operation for any month between 2004 and 2008. "Pre-" and "Post-SOI Violence Trends" are slope estimates of piecewise linear regressions fit to the three-month interval prior to SOI standup and the three-month interval afterward.

*In both one- and two-month interval comparisons, violence declined more rapidly after SOI standup.

†In both one- and two-month interval comparisons, violence rose more slowly after SOI standup.

Table 2. Comparisons of Violence Trends Pre- and Post-Sons of Iraq (SOI) Standup

Subset	N	Areas of Operation Confirming Synergy	Average Slope prior to Standup	Average Slope after Standup
All Areas of Operation	38	24 (63%)	-2.5	-5.8
SOI standup timing				
prior to August 2007	18	14 (78%)	+1.5	-8.6
during 2007	29	20 (69%)	-1.2	-6.3
Region/demography				
Baghdad/Anbar	24	17 (71%)	-1.9	-7.0
high population	19	14 (74%)	+0.8	-7.2
high population density	19	15 (79%)	-0.5	-6.5
Violence Levels				
> 50 percent peak	15	14 (93%)	+6.9	-10.9
> median	19	14 (74%)	+0.0	-8.5
violence rising	19	19 (100%)	+7.1	-9.8

"Areas of Operation Confirming Synergy" are those where violence declines faster in the three-month interval following SOI standup than the three-month interval beforehand. "Average Slope prior to Standup" and "Average Slope after Standup" give average violence trends for all AOs meeting the given criterion.

The rows in the table present different subsets of the data: "high population" are AOs whose total population was above the median, and "high population density" are AOs whose population density was above the median relative to all 38 AOs. "> 50 percent peak" are AOs where SOIs stood up in a month where violence was at least 50 percent of its 2004–08 monthly maximum; "> median" are AOs where violence in the month where SOIs stood up was greater than the median for all 38 AOs; and "violence rising" represents AOs where SOIs stood up while violence was increasing over the previous three-month interval.

surge's main effort), 71 percent are confirmatory, and the reduction in violence accelerated by nearly a factor of four after SOIs stood up. For AOs with at least the median population or population density, 74 and 79 percent of AOs support synergy, respectively, with violence dropping an additional 6 to 8 percentage points per month after standup. For AOs where SOIs stood up while violence was still above 50 percent of peak (i.e., where violence still had the farthest to fall), the results are especially stark: 93 percent show improved trends after standup, with the violence trends reversing from an average 7 percent per month increase before standup to an 11 percent per month decrease afterward.⁵⁴ For fully half the entire sample (19 cases of 38), violence was still rising when SOIs stood up; in every instance, violence trends reversed thereafter.

54. Table 2 demonstrates that results also become more confirmatory when one examines the 19 AOs where violence was highest in the month of SOI standup.

As noted above, interview evidence also supports crucial elements of the synergy causal mechanism. Many SOI members were in fact former insurgents. These former insurgents did indeed provide important intelligence and other support to U.S. forces; SOIs did indeed suffer frequent counterattacks from holdouts and especially AQI; and U.S. forces often were required to come to their defense when this happened, as synergy advocates claim.⁵⁵

These findings suggest that if no SOIs had stood up, and if the pre-SOI violence reduction rate seen in the AOs studied here had persisted for the duration of the surge, then violence might have declined so slowly that Iraq—especially Iraq’s key terrain—would have been far from stabilized when the surge ended.⁵⁶ The first surge brigade deployed in February 2007; the last surge brigade withdrew in July 2008.⁵⁷ If violence had declined only at a rate of two percentage points per month throughout this period (as seen, on average, prior to SOI standup), then violence when the surge ended would have been no lower than in mid-2006, and this after another ten months of intense combat not seen in the historical case. Without SOIs, the data suggest that it could have taken more than three years of grinding warfare with surge-scale troop levels to bring the violence down to the levels achieved in a few months with the SOIs; without the Awakening, violence would have remained very high for a very long time—and certainly long after the surge brigades had gone home.

Moreover, many of the apparently disconfirmatory AOs either pose anomalies for the surge-only thesis, too, or offer important if partial support for elements of the synergy thesis all the same, or both. For example, in three of the fourteen apparently disconfirmatory AOs (Ash Sharqat, Salman Pak, and Taji),

55. See MHI audio files 4, 9, 15, 18, 23, 25, 35, 37, 40, 45, 48, 49, 50, and 69.

56. Note that casualty rates in COIN often increase following reinforcements, then decline thereafter; this was so in Iraq in 2007, where U.S. casualties peaked three months into the surge in May 2007. “Operation Iraqi Freedom,” *iCasualties.org*. In principle, this “darkest before the dawn” phenomenon could bias post-SOI violence reduction rates downward: if the pre-SOI slope calculation straddled a crest in violence, this would artificially increase the apparent synergy confirmation rate, but this did not happen here. In only 2 AOs (Sayidiyya and Radwaniyha) did violence peak within the three-month window prior to SOI standup, and only the Sayidiyya AO was otherwise confirmatory (and thus subject to potential confirmation bias). Moreover, per note 51, SOIs correlate with accelerated violence reduction no matter what intervals we analyze, indicating that local maxima prior to SOI standups are not confounding the analysis either. Nor is our analysis confounded by violence trends that were already declining at an accelerating rate prior to SOI standup. Violence trends across these 38 AOs are actually weakly convex: if we regress monthly violence on time elapsed since violence peaked in each AO, then a second-order term for duration has a positive coefficient that is statistically significant at the $p = 0.001$ level, no matter what time period the regression covers. These patterns all indicate that the results presented here are not simply artifacts of nonlinear violence trends.

57. MNF-I Public Affairs Office, “Last ‘Surge’ Brigade Redeploys,” Press Release, No. 20080708-08, July 9, 2008.

SOIs stood up while the violence was still rising, but shortly afterward peaked and then rapidly declined. This post-SOI peak increases the computed post-SOI slope and thus mutes the contrast with pre-SOI experience, but there is substantial evidence that SOI standup in these AOs played an important role in the subsequent turnaround in ways the basic comparison conceals. Interviewees reported that these SOIs manned checkpoints, provided intelligence, led patrols, and fought insurgents, as the synergy thesis expects and finds decisive.⁵⁸ Furthermore, these contributions could indeed have been decisive for these AOs; in each instance, violence declined sharply within a short time after the SOIs stood up. At the very least, there is no reason to see these cases as confirming the surge-only hypothesis, as coalition forces were unable to stabilize these AOs before the SOIs emerged, and violence was still rising when they did.

Of the remaining 11 AOs that appear to support the surge-only argument, 4 involved unusually high coalition troop densities that could not have been achieved in more than a handful of districts. Muqdadiyah and Khan Bani Sa'ad, for example, are both areas of Diyala Province where the violence trend turned downward in November 2007. By this time, bloodshed had declined throughout much of Iraq, freeing the coalition to invest disproportionate resources in areas that remained problematic. Indeed, starting in November 2007, the coalition targeted large parts of Diyala (including Muqdadiyah and Khan Bani Sa'ad) with Operations Iron Reaper and Iron Harvest, which involved roughly 25,000 U.S. troops and about 50,000 Iraqi Security Forces. Those operations produced a steep falloff in violence without SOIs, but they required a troop strength almost equal to the entire surge in just a portion of Diyala. The resulting troop density was more than three times higher than the nationwide average at the height of the surge, and this posture could never have been sustained across all of threatened Iraq.⁵⁹ Similarly, in Haqlaniya (a town with roughly 10,000 inhabitants), the U.S. Army deployed a full company of troops, producing a coalition troop density about twice the theater-wide average at the height of the surge.⁶⁰ Sheikh Hamad Village was within walking distance of a major U.S. installation (Camp Taji), which provided far more overwatch and far quicker reaction times from U.S. forces than could be expected across Iraq more broadly.⁶¹ Another 4 apparently disconfirmatory AOs had either been significantly less violent than most others (Mansuriyat

58. MHI audio files 24, 30, and 65.

59. MHI audio files 18 and 63.

60. MHI audio file 45.

61. MHI audio file 24.

al-Jabal and Radwaniyha) or comprised rural route security missions with limited population security duties of the sort that underpin the logic of either the surge-only or synergy schools (Alternate Supply Route Golden and Southern Tameem). In all, only 3 of 38 total AOs—Ghazaliyah and Mechanic in Baghdad, and Hawijah near Kirkuk—provide unambiguously confirmatory evidence for the surge thesis, as opposed to the 24 that offer unambiguous support for synergy.

Given these findings, the strongest case for a surge-only position would be to argue that the Awakening, though militarily important, was mostly epiphenomenal to the surge. Yet here, as well, there is important counterevidence. In particular, the insurgency was still too lethal at the time of SOI standup for the SOI movement to represent a rational conclusion by Sunnis that the surge had defeated them. For the AOs that we studied, violence still averaged 97 percent of its pre-surge level when the SOIs stood up.⁶² In 15 of these AOs, violence was actually higher when the SOIs stood up than it had been before the surge; in 19 of them, or fully half the total, violence was actually still increasing in the AO at the time of standup. The insurgency had hardly lost its ability to inflict heavy casualties when the SOIs realigned, and rational insurgents would have had little concrete basis to expect defeat by U.S. forces in a fight to the finish if they had chosen to fight on instead of realigning. Sunnis were in real danger of losing a war of sectarian conquest to their Shiite rivals in Baghdad to be sure, but at the time SOIs stood up, the SIGACTs data show no obvious break in their ability to inflict major losses on U.S. troops. If Sunnis concluded that they faced defeat and needed to realign, this was likely to have been inspired at least as much by their inability to hold ground against the JAM—an enemy not leaving Iraq any time soon—as by their results against the surge, a temporary reinforcement they knew had a time limit.

To sustain an argument that the surge itself created the Awakening, one must therefore assume that the Awakening's leaders seriously underestimated their own lethality, that they did so consistently and systematically, that this systemic error was induced by the surge, and that their erroneous assessment of the surge outweighed their valid concerns with JAM conquest. Although not impossible, there is no positive evidence for this. Epiphenomenality for the Awakening cannot be definitively excluded without systematic evidence on Sunni perceptions and motives. The synergy argument, however, is strongly consistent with the evidence we do have and requires no such assumptions. On balance, it is the stronger fit with what we do know.

62. We operationalized pre-surge violence in each AO as the average of monthly SIGACTs from September 2006 through December 2006.

Conclusion

The decline of violence in Iraq in 2007 does not mean that the war was necessarily a success, that violence will remain low in the future, that the invasion was wise, or that U.S. national interests were necessarily met. But for explaining why this reduction in violence took place, the evidence suggests that the surge, though necessary, was insufficient and that an interaction between it and the Awakening offers the strongest explanation. The Awakening thesis is at odds with the repeated failure of other, pre-surge attempts by Sunni tribes to realign. The cleansing thesis cannot be squared with either the macro-trends or micro-dynamics of Iraq's violence, which give no reason to expect sectarian killing to have ended of its own accord by mid-2007. The surge thesis has some support, as the evidence suggests that either its reinforcements or its doctrinal change, or both, were necessary for the observed violence reduction. The critical distinction between the surge and the synergy accounts, however, is not whether the surge was necessary but whether it was sufficient—and the evidence suggests that without the Awakening, the surge would not have stabilized Iraq by the summer of 2008. It was not until the Sons of Iraq stood up that bloodshed fell fast enough; without them, our findings suggest that Iraq's violence would still have been at mid-2006 levels when the surge ended. In all, 24 of the 38 areas of operation that we studied (63 percent) show results strongly consistent with the synergy thesis, and the evidence is even stronger for the most important parts of Iraq. Eleven of the 38 AOs show ambiguous results, with either an apparent contribution for synergy but on a slower time-scale, an apparent surge confirmation but at unsustainably high troop density, a low-violence AO, or an idiosyncratic mission type. Only 3 of the 38 AOs unambiguously support surge over synergy.

What, then, does this imply for policy and scholarship? Perhaps the central policy issues here are the interconnected questions of whether the surge deserves credit for reducing Iraq's violence, and whether its effects are replicable elsewhere. Many surge supporters answer yes to both questions; many critics answer no to both. Our analysis, however, suggests a mixed verdict. The surge was necessary—but because it was insufficient, similar reinforcements cannot be expected to work elsewhere as quickly or dramatically as in 2007 without enemy realignments as sweeping as the Awakening's.

This finding in turn suggests caution in drawing optimistic conclusions for the larger debate over counterinsurgency and its future. Iraq does show that sizable forces using 2007-like doctrine can stabilize threatened areas even without an Awakening: many parts of Iraq saw declining violence for months before the Sons of Iraq stood up (including 19 of 38 AOs in our sample). Prog-

ress without the SOIs was slow and costly, however. The speed and decisiveness of 2007's reversal appear to have required the Awakening. This does not mean that COIN is hopeless or should always be avoided: Iraq suggests that a democracy willing to pay the price can indeed make progress even without an Awakening. It seems highly unlikely, however, that the United States in 2007–08 would have done so. Perhaps such a slow, expensive campaign could be acceptable in some future war, but Iraq gives no reason to expect quick success without insurgent realignment.

These findings suggest caution for Afghanistan, in particular. Some COIN optimists saw Iraq as grounds for supporting a comparable surge in Afghanistan.⁶³ The 2008–09 reinforcements there may or may not have been wise, but if they were advisable it was not because of Iraq: Afghanistan has not produced a movement analogous to the Awakening, and without this one should not expect 2007-like results. If the Afghan surge works, it will be a longer, tougher slog.

Another common analogy to Iraq has involved local militia initiatives in Afghanistan. Many analysts and officials, including General Petraeus, have supported programs for arming Afghan civilians for self-defense, patterned to varying degrees on the SOI experience.⁶⁴ Here, too, caution is in order. Many SOIs were actually the enemy themselves, now fighting on the other side with the same command and control networks they had used against the coalition. When they realigned, this simultaneously removed much of the threat while creating a U.S.-allied force of often-experienced fighters with deep knowledge of their former comrades' identities, infrastructure, and methods. These SOIs were then supported by large formations of U.S. troops. In Afghanistan, by contrast, programs such as the Afghan Public Protection Police (APPP) and the Afghan Local Police (ALP) do not represent organized cells of former insurgents changing sides—they must therefore face an undiluted threat with only limited training and equipment.⁶⁵ Yet many officials have hoped that such programs could transform Afghanistan by standing up in areas without major conventional forces to assist them. On a smaller scale and with greater sup-

63. See, for example, Max Boot, Frederick Kagan, and Kimberly Kagan, "How to Surge the Taliban," *New York Times*, March 12, 2009.

64. Alissa J. Rubin, "Afghan Program Adds Local Units to Resist Taliban," *New York Times*, July 15, 2010; Anand Gopal and Yochi J. Dreazen, "Afghanistan Enlists Tribal Militia Forces," *Wall Street Journal*, August 12, 2009; and Peter Mansoor and Max Boot, "Winning in Afghanistan," *Los Angeles Times*, December 16, 2010.

65. On the APPP and ALP programs, see Seth G. Jones and Arturo Muñoz, *Afghanistan's Local War: Building Local Defense Forces* (Santa Monica, Calif.: RAND, 2010); Mathieu Lefèvre, *Local Defence in Afghanistan: A Review of Government-Backed Initiatives* (Kabul: Afghanistan Analysts Network, 2010); Alex Rodriguez, "Anti-Taliban Tribal Militias Come with Baggage," *Los Angeles Times*, June 19, 2010; and Rubin, "Afghan Program Adds Local Units to Resist Taliban."

port, similar programs may be helpful in Afghanistan. The SOI experience, however, does not suggest that arming untrained villagers for self-defense can turn a campaign: this is not what happened in Iraq.

For military doctrine, the findings above suggest a need to rethink the relative emphasis on security, governance, and economic development in COIN, at least for ethnosectarian identity wars such as Iraq. Current U.S. doctrine is often seen as predicting victory for counterinsurgents who “win hearts and minds” by providing superior government services, thereby persuading uncommitted civilians to back the government and reject the insurgents.⁶⁶ There is no evidence, however, that the 2007 turnaround occurred because some group of nonaligned civilians changed their minds and decided to support Nouri al-Maliki’s government.⁶⁷ Especially after the sectarian escalation of 2006, Iraq was a polarized society of highly mobilized sectarian identity groups that were unlikely to support sectarian rivals in response to an offer of better services. In fact, when the Sunni insurgency changed sides in the Awakening, it did so not by allying with the Shiite government of Iraq (GoI), as SOI contracts were negotiated with U.S. soldiers. And what realigning Sunnis needed from these Americans was not large-scale economic development or assistance in public administration, but combat power to protect them from counterattack by their erstwhile comrades (and U.S. protection from the GoI: many SOI leaders wanted U.S. commanders to keep the ISF out of the SOIs’ operating areas, and the Americans often complied).⁶⁸ Different insurgencies have different *casus belli*, and in some, such as Afghanistan, governance reform and service provision may well be critical.⁶⁹ Iraq’s causal dynamics in 2007, however, appear to have had more to do with combat than with winning hearts and minds via service delivery.⁷⁰

For scholars, Iraq raises a number of important issues for research. Our findings emphasize the Sunni realignment’s importance, yet realignment’s role in civil warfare is largely unstudied, as are its causes and consequences; the

66. See Headquarters, Department of the Army, *FM 3-24*. Note that, although the manual does see COIN as a competition in governance, the phrase “hearts and minds” appears only once, in an appendix, paragraph A-26.

67. This is not to say that local civilians’ decisions played no role on the margins (see, e.g., Berman, Shapiro, and Felter, “Can Hearts and Minds Be Bought?”; and Condra and Shapiro, “Who Takes the Blame?”), just that these decisions cannot explain Iraq’s overall violence trends.

68. Many interviewees reported tensions between the ISF and SOIs; these tensions sometimes escalated into violence, with SOIs often demanding protection from the ISF. For examples, see MHI audio files 1, 3, 6, 13, 24, 26, 36, 37, 51, and 68.

69. On governance reform’s importance for Afghanistan, see, for example, Stephen Biddle, “The Difference Two Years Make,” *American Interest*, Vol. 7, No. 1 (September/October 2011), pp. 40–49.

70. On surge brigades’ sometimes lavish use of firepower in 2007, see, for example, Andrade, *Surging South of Baghdad*, pp. 129, 249, 317–320; on its importance, see, for example, MHI audio file 69.

analysis here suggests that this is a research agenda with significant implications for both theory and practice.⁷¹

Similarly, the surge debate is centrally about troop density and doctrine, yet neither has played a systematic role in the theoretical literature.⁷² The findings above suggest that one or both were critical for Iraq's 2007 turnaround. It is difficult, however, to distinguish which surge component—reinforcement or doctrinal change—was most important in Iraq, primarily because there was little variation in force employment during this period. After February 2007, General Petraeus strove to enforce consistent methods across the theater, and none of our interviewees reported tactical choices at odds with prevailing doctrine. The modest scale of reinforcements in 2007 suggests that doctrine may have been the decisive factor. Without observing independent variation in troop density and doctrine, however, it is impossible to make a definitive statement as to their relative causal impact. Further research could make a potentially important contribution by focusing on this question. The larger point of the Iraq experience, however, is that theories of civil warfare that overlook doctrine and force levels may be deeply incomplete.

The cleansing thesis is heavily influenced by security dilemma theories of ethnic warfare, with their emphasis on defensively motivated unmixing as a driver of violence. Yet our analysis of sectarian violence in Baghdad suggests that this account is missing something important. Although many observers expect that local security dilemmas can resolve themselves via separation of intermingled populations, Baghdad in 2006–07 was characterized by offensively minded Shiite militias that intended to unmix some neighborhoods but also to conquer others. Being able to separate the mechanisms of unmixing versus conquest is important for developing theoretical models of civil conflict, just as it is important for policymakers attempting to understand and address the dynamics of ongoing violence. Here again the fighting in Iraq reveals important limitations in current scholarship, suggesting an area of further development if security dilemma theories of ethnic warfare are to be applied to similar cases.

Most broadly, the Iraq case shows the need for continued theoretical prog-

71. For points of departure in such research, see Fotini Christia, "The Closest of Enemies: Alliance Formation in the Afghan and Bosnian Civil Wars," Ph.D. dissertation, Harvard University, 2008; and Paul Staniland, "Explaining Cohesion, Fragmentation, and Control in Insurgent Groups," Ph.D. dissertation, Massachusetts Institute of Technology, 2010.

72. For exceptions, see Friedman, "Manpower and Counterinsurgency," on troop density; Jason Lyall and Isaiah Wilson III, "Rage against the Machines: Explaining Outcomes in Counterinsurgency Wars," *International Organization*, Vol. 63, No. 1 (Winter 2009), pp. 67–106, on doctrine and equipment; and Andrew Enterline and Joseph Magagnoli, "Reversal of Fortune? Strategy Change and Counterinsurgent Success by Foreign Powers in the Twentieth Century," unpublished manuscript, University of North Texas, January 29, 2010, on doctrine.

ress on explaining success and failure in counterinsurgency. Civil war has motivated a growing literature in comparative politics and international relations, but its focus has been chiefly the onset, termination, and settlement of such wars, without engaging the kinds of doctrinal and material variations under debate in many militaries today. Historical practice in COIN offers ample observable variance in such methods, on which theories of success and failure can gainfully build. The Iraq experience shows the significance of categories and variables that have received too little attention from rigorous social scientists; it suggests an important opportunity for theoretical progress that can also make a real difference for policy.

This article has been cited by:

1. Lesley-Ann Daniels. 2020. How and When Amnesty during Conflict Affects Conflict Termination. *Journal of Conflict Resolution* 7, 002200272090988. [[Crossref](#)]
2. John Banister. 2020. Narrativizing the Surge: From Quagmire to Counterinsurgency in Iraq. *Western Journal of Communication* 15, 1-18. [[Crossref](#)]
3. Jack Snyder. 2020. Backlash against human rights shaming: emotions in groups. *International Theory* 12:1, 109-132. [[Crossref](#)]
4. Louis-Alexandre Berg. 2020. Civil–Military Relations and Civil War Recurrence: Security Forces in Postwar Politics. *Journal of Conflict Resolution* 59, 002200272090335. [[Crossref](#)]
5. Andrew Payne. 2020. Presidents, Politics, and Military Strategy: Electoral Constraints during the Iraq War. *International Security* 44:3, 163-203. [[Abstract](#)] [[Full Text](#)] [[PDF](#)] [[PDF Plus](#)]
6. Joakim Kreutz, Enzo Nussio. 2019. Destroying Trust in Government: Effects of a Broken Pact among Colombian Ex-Combatants. *International Studies Quarterly* 63:4, 1175-1188. [[Crossref](#)]
7. Matthew Lewon, Ramona A. Houmanfar, Linda J. Hayes. 2019. The Will to Fight: Aversion-Induced Aggression and the Role of Motivation in Intergroup Conflicts. *Perspectives on Behavior Science* 42:4, 889-910. [[Crossref](#)]
8. Jacqueline L. Hazelton. 2019. The Power Puzzle: When Exclusion Increases Security and Inclusion Reduces It. *Journal of Global Security Studies* 37. . [[Crossref](#)]
9. Steven T. Zech, Joshua Eastin. 2019. The Household Economics of Counterinsurgency. *Defence and Peace Economics* 40, 1-20. [[Crossref](#)]
10. Daniel Patrick Marston. 2019. Operation TELIC VIII to XI: Difficulties of twenty-first-century command. *Journal of Strategic Studies* 147, 1-28. [[Crossref](#)]
11. Quint Hoekstra. 2019. How Mosul fell: the role of coup-proofing in the 2014 partial collapse of the Iraqi security forces. *International Politics* 70. . [[Crossref](#)]
12. Luke N. Condra, Michael Callen, Radha K. Iyengar, James D. Long, Jacob N. Shapiro. 2019. Damaging democracy? Security provision and turnout in Afghan elections †. *Economics & Politics* 31:2, 163-193. [[Crossref](#)]
13. Carrie A. Lee, John Kendall. 2019. Use It or Lose It: The Political Economy of Counterinsurgency Strategy. *Armed Forces & Society* 45:3, 399-429. [[Crossref](#)]
14. Helge Holtermann. 2019. Diversionary Rebel Violence in Territorial Civil War. *International Studies Quarterly* 63:2, 215-230. [[Crossref](#)]
15. Andrew Shaver, David B. Carter, Tsering Wangyal Shawa. 2019. Terrain ruggedness and land cover: Improved data for most research designs. *Conflict Management and Peace Science* 36:2, 191-218. [[Crossref](#)]
16. Matthew Adam Kocher, Adria K. Lawrence, Nuno P. Monteiro. 2018. Nationalism, Collaboration, and Resistance: France under Nazi Occupation. *International Security* 43:2, 117-150. [[Abstract](#)] [[Full Text](#)] [[PDF](#)] [[PDF Plus](#)]
17. Joshua Kaiser, John Hagan. 2018. Crimes of Terror, Counterterrorism, and the Unanticipated Consequences of a Militarized Incapacitation Strategy in Iraq. *Social Forces* 97:1, 309-346. [[Crossref](#)]
18. Costantino Pischedda. 2018. Wars within Wars: Why Windows of Opportunity and Vulnerability Cause Inter-rebel Fighting in Internal Conflicts. *International Security* 43:1, 138-176. [[Abstract](#)] [[Full Text](#)] [[PDF](#)] [[PDF Plus](#)]

19. Christian Tripodi. 2018. The British Army, 'Understanding', and the Illusion of Control. *Journal of Strategic Studies* 41:5, 632-658. [[Crossref](#)]
20. Yehuda Magid, Justin Schon. 2018. Introducing the African Relational Pro-Government Militia Dataset (RPGMD). *International Interactions* 44:4, 801-832. [[Crossref](#)]
21. Stephen Biddle, Julia Macdonald, Ryan Baker. 2018. Small footprint, small payoff: The military effectiveness of security force assistance. *Journal of Strategic Studies* 41:1-2, 89-142. [[Crossref](#)]
22. Hal Brands, Peter Feaver. 2018. The case for Bush revisionism: Reevaluating the legacy of America's 43rd president. *Journal of Strategic Studies* 41:1-2, 234-274. [[Crossref](#)]
23. Diane Maye. 2018. Two Awakenings, One Process: Implications from the Sunni Realignment in Iraq, 2006-2007. *Special Operations Journal* 4:1, 1-14. [[Crossref](#)]
24. C. Christine Fair, Rebecca Littman, Neil Malhotra, Jacob N. Shapiro. 2018. Relative Poverty, Perceived Violence, and Support for Militant Politics: Evidence from Pakistan. *Political Science Research and Methods* 6:1, 57-81. [[Crossref](#)]
25. Christoph Mikulaschek, Jacob N. Shapiro. 2018. Lessons on Political Violence from America's Post-9/11 Wars. *Journal of Conflict Resolution* 62:1, 174-202. [[Crossref](#)]
26. Jon R. Lindsay. 2017. Target Practice. *Science, Technology, & Human Values* 42:6, 1061-1099. [[Crossref](#)]
27. MICHAEL J. REESE, KEVEN G. RUBY, ROBERT A. PAPE. 2017. Days of Action or Restraint? How the Islamic Calendar Impacts Violence. *American Political Science Review* 111:3, 439-459. [[Crossref](#)]
28. ROBERT POWELL. 2017. Taking Sides in Wars of Attrition. *American Political Science Review* 111:2, 219-236. [[Crossref](#)]
29. Lucía Martínez Ordóñez. The Advantage of Moving First Versus a First-Mover Advantage 37-48. [[Crossref](#)]
30. Lucía Martínez Ordóñez. Modelling Specific Aspects of COIN Operations: On the Possibility of a First Mover Advantage 59-79. [[Crossref](#)]
31. Lars Erslev Andersen. The Locals Strike Back: The Anbar Awakening in Iraq and the Rise of Islamic State 187-205. [[Crossref](#)]
32. Peter D. Feaver. 2017. Resign in Protest? A Cure Worse Than Most Diseases. *Armed Forces & Society* 43:1, 29-40. [[Crossref](#)]
33. Ariel I. Ahram. 2016. The Rise and Fall of Iraq in the Social Sciences*. *Social Science Quarterly* 97:4, 850-861. [[Crossref](#)]
34. RENARD SEXTON. 2016. Aid as a Tool against Insurgency: Evidence from Contested and Controlled Territory in Afghanistan. *American Political Science Review* 110:4, 731-749. [[Crossref](#)]
35. Govinda Clayton, Andrew Thomson. 2016. Civilianizing Civil Conflict: Civilian Defense Militias and the Logic of Violence in Intrastate Conflict. *International Studies Quarterly* 60:3, 499-510. [[Crossref](#)]
36. Spencer L Willardson. 2016. Detention as a Peacemaking Strategy: The 2007-08 Iraq Surge and US Detention Policy. *Foreign Policy Analysis* 16, orw041. [[Crossref](#)]
37. Daniel Byman. 2016. Understanding the Islamic State—A Review Essay. *International Security* 40:4, 127-165. [[Abstract](#)] [[Full Text](#)] [[PDF](#)] [[PDF Plus](#)]
38. Diane L. Maye. 2016. Understanding the Sunni Realignment in Iraq with Complexity Theory. *Digest of Middle East Studies* 25:1, 132-154. [[Crossref](#)]
39. Paul Lushenko, John Hardy. 2016. Panjwai: a tale of two COINs in Afghanistan. *Small Wars & Insurgencies* 27:1, 106-131. [[Crossref](#)]

40. Timothy J. Lomperis. 2016. The 'first' surge: the repulse of the Easter Invasion in South Vietnam, 1972 – implications for Iraq and Afghanistan. *Small Wars & Insurgencies* 27:1, 132-153. [[Crossref](#)]
41. Michael Aaronson, Ariel I. Ahram, Mark Duffield, Amitai Etzioni, Jack Holland, Roger Mac Ginty, Laura McLeod, Sukanya Podder, Oliver P. Richmond, David Roberts. 2016. The Journal of Intervention and Statebuilding Ten Years on: Critical Reflections and Stimulating Ideas on an Evolving Scholarship. *Journal of Intervention and Statebuilding* 10:1, 3-24. [[Crossref](#)]
42. David Wille. 2016. The Political Economy of Intervention in the Conflict Against ISIS. *SSRN Electronic Journal* . [[Crossref](#)]
43. David Romano, Brian Calfano, Robert Phelps. 2015. Successful and Less Successful Interventions: Stabilizing Iraq and Afghanistan. *International Studies Perspectives* 16:4, 388-405. [[Crossref](#)]
44. Daniel S. Geller, Alvin M. Saperstein. 2015. A dynamic model of suicide terrorism and political mobilization. *International Political Science Review* 36:5, 562-577. [[Crossref](#)]
45. Ethan Bueno de Mesquita, C. Christine Fair, Jenna Jordan, Rasul Bakhsh Rais, Jacob N. Shapiro. 2015. Measuring political violence in Pakistan: Insights from the BFRS Dataset. *Conflict Management and Peace Science* 32:5, 536-558. [[Crossref](#)]
46. Eric Grynawski. 2015. Brokering cooperation: Intermediaries and US cooperation with non-state allies, 1776–1945. *European Journal of International Relations* 21:3, 691-717. [[Crossref](#)]
47. Michael Desch. 2015. Technique Trumps Relevance: The Professionalization of Political Science and the Marginalization of Security Studies. *Perspectives on Politics* 13:2, 377-393. [[Crossref](#)]
48. Eli Berman, Aila M. Matanock. 2015. The Empiricists' Insurgency. *Annual Review of Political Science* 18:1, 443-464. [[Crossref](#)]
49. Noriyuki Katagiri. 2015. ISIL, insurgent strategies for statehood, and the challenge for security studies. *Small Wars & Insurgencies* 26:3, 542-556. [[Crossref](#)]
50. Jacob N. Shapiro, Nils B. Weidmann. 2015. Is the Phone Mightier Than the Sword? Cellphones and Insurgent Violence in Iraq. *International Organization* 69:2, 247-274. [[Crossref](#)]
51. Lee J.M. Seymour. 2014. Why Factions Switch Sides in Civil Wars: Rivalry, Patronage, and Realignment in Sudan. *International Security* 39:2, 92-131. [[Abstract](#)] [[Full Text](#)] [[PDF](#)] [[PDF Plus](#)]
52. JEREMY FERWERDA, NICHOLAS L. MILLER. 2014. Political Devolution and Resistance to Foreign Rule: A Natural Experiment. *American Political Science Review* 108:3, 642-660. [[Crossref](#)]
53. Patrick Porter. 2014. Goodbye to all that: On small wars and big choices. *Small Wars & Insurgencies* 25:3, 685-695. [[Crossref](#)]
54. David H. Ucko. 2014. Critics gone wild: Counterinsurgency as the root of all evil. *Small Wars & Insurgencies* 25:1, 161-179. [[Crossref](#)]
55. Michael Evans. 2014. From Patton to Petraeus: American Generalship and the Art of War Since 1941. *Small Wars & Insurgencies* 25:1, 186-204. [[Crossref](#)]
56. Huw Bennett. The Reluctant Counter-insurgents: Britain's Absent Surge in Southern Iraq 278-296. [[Crossref](#)]
57. Joshua Rovner. Questions about COIN after Iraq and Afghanistan 299-318. [[Crossref](#)]
58. Paul Staniland. Counter-insurgency and Violence Management 144-155. [[Crossref](#)]
59. David Fitzgerald, David Ryan. Afghan 'Good Enough' 73-91. [[Crossref](#)]
60. JOHN MACMILLAN. 2013. Historicising intervention: strategy and synchronicity in British intervention 1815–50. *Review of International Studies* 39:5, 1091-1110. [[Crossref](#)]

61. Jan Angstrom. 2013. The changing norms of civil and military and civil-military relations theory. *Small Wars & Insurgencies* 24:2, 224-236. [[Crossref](#)]
62. Robert Powell. 2013. Monopolizing Violence and Consolidating Power*. *The Quarterly Journal of Economics* 128:2, 807-859. [[Crossref](#)]
63. Benjamin W Bahney, Radha K Iyengar, Patrick B Johnston, Danielle F Jung, Jacob N Shapiro, Howard J Shatz. 2013. Insurgent Compensation: Evidence from Iraq. *American Economic Review* 103:3, 518-522. [[Crossref](#)]
64. John Hagan, Joshua Kaiser, Anna Hanson, Jon R. Lindsay, Austin G. Long, Stephen Biddle, Jeffrey A. Friedman, Jacob N. Shapiro. 2013. Correspondence: Assessing the Synergy Thesis in Iraq. *International Security* 37:4, 173-198. [[Citation](#)] [[PDF](#)] [[PDF Plus](#)]
65. Ethan Bueno de Mesquita. 2013. Rebel Tactics. *Journal of Political Economy* 121:2, 323-357. [[Crossref](#)]
66. Nicholas Miller. 2013. Beyond Patriots and Traitors: Collaborations and Resistance in Iraq, 2003-2005. *SSRN Electronic Journal* . [[Crossref](#)]
67. John Hagan, Joshua Kaiser. 2013. A Separate Peace: Explaining War, Crime, Violence, and Security During and After the Surge in Iraq. *SSRN Electronic Journal* . [[Crossref](#)]
68. Jeremy Ferwerda, Nicholas Miller. 2013. Resistance to Foreign Rule: Evidence from a Natural Experiment. *SSRN Electronic Journal* . [[Crossref](#)]
69. Jeffrey H. Michaels. The Surge 147-166. [[Crossref](#)]