Mixed Methods Research in the Study of Violence and Conflict

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Abstract: The study of violence has expanded in recent decades, concurrent with a rise in the use of mixed quantitative and qualitative methods in research throughout the social sciences. Methodologists have also begun to engage in a thorough theorization of both the epistemological foundations and empirical practice of mixed methods research. Mixed methods enable us to tie the broader patterns revealed by quantitative analysis to underlying processes and causal mechanisms that qualitative research is better able to illuminate, examining and explicating the interactions of structure and agency. This paper examines how qualitative and quantitative research methods may best be integrated in the study of violence, providing and critiquing examples from previous work on different forms of violence and conflict and suggesting directions for future research. Through the use of mixed methods, we have the opportunity both to improve the accordance of theories and empirical studies with social reality and to gain a more nuanced understanding of the causes and consequences of violence.

Introduction

The study of conflict and violence has been expanding in recent decades at all levels of analysis, ranging from interpersonal violence to interstate warfare. Concurrently, there has been increasing methodological development and rising popularity of mixed methods research across the social sciences. Despite some recent studies, however, mixed methods research (MMR) is still not used with great frequency in studies of violence and conflict. This paper argues that MMR increases our leverage on complex puzzles in the study of violence and is likely to reward scholars who use this approach with valuable empirical insights that will aid in theory testing and development.

Arguments are presented for the utility of MMR in the study of violence at different levels of analysis and examples and critiques are provided of research that has used mixed methods research to study each of these forms of violence. I discuss frameworks and directions for future research and consider the potential difficulties of conducting MMR in general, as well as the particular difficulties that emerge when studying a sensitive topic such as violence. As we study the motivations and behaviors of violent individuals, groups, organizations, and states, it is beneficial to use all the methods at our disposal to understand violence and attempt to achieve the normative goal of reducing the incidence of violence in human society.

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Mixed Methods Research: Recent History and Applicability to the Study of Violence

While the mid-20th century saw intense debates between social scientists advocating and using quantitative or qualitative methods to the exclusion of other approaches, this divisiveness has waned somewhat in the past two decades as greater attention has been paid to the complementarity of methods and how they may fruitfully be combined. A new wave of methodologists and other scholars has sought to lay out a coherent logic for mixed methods research, for studies that combine quantitative and qualitative parts into a cohesive whole. Their success may be seen in the existence of interdisciplinary mixed methods journals (e.g. the *Journal of Mixed Methods Research* and *Quality & Quantity*) and books dedicated to the theory, design, implementation, and analysis of mixed methods research (Brewer and Hunter 1989; Brannen 1992; Tashakkori and Teddlie 2003). Quantitative and qualitative methods have begun to be combined more frequently by political scientists and sociologists, as well as in disciplines such as health and education research. Political scientists and economists, especially those in the rational choice tradition, have also made use of formal models in addition to qualitative and quantitative methods to create what Laitin (2002) calls a ‘tripartite’ methodology (see also Bennett and Braumoeller 2005).

In response to criticisms from philosophers of science that quantitative and qualitative research rest on different epistemological foundations and thus are incompatible and cannot be integrated (see discussion in Smaling 1994; Tashakkori and Teddlie 1998; Johnson, Onwuegbuzie and Turner 2007), mixed methods proponents have adopted the philosophy (and research practice) of pragmatism. Pragmatism “is a philosophy rooted in common sense and dedicated to the transformation of culture, to the resolution of the conflicts that divide us” (Sleeper 1986 in Maxcy 2003: 54), thus approving of the use of the formulation or combination of research methods that best meet the needs of the research question and, by extension, of society. Sleeper’s depiction of pragmatism as seeking conflict resolution is especially fitting when employed in the study of those conflicts that escalate to violence.

The *philosophy* of pragmatism is seldom acknowledged by political scientists who endorse mixing methods, who, with some caveats, treat qualitative and quantitative methods as sharing a logic of inference and a scientific method, thus making them epistemologically compatible (see King, Keohane, and Verba 1994; Brady and Collier 2004; Fearon and Laitin 2008; Levy 2008: 15). While Brady and Collier’s *Rethinking Social Inquiry* (2004) directly responded to and critiqued King, Keohane, and Verba’s *Designing Social Inquiry* (1994) from a decidedly qualitatively-oriented standpoint and criticized the more strict positivist philosophy of the earlier book, these authors are all able to agree on the commensurability of quantitative and qualitative methods and the need to bring these approaches together. Brady, Collier, and Seawright (2004: 7) state that the differences between qualitative and quantitative methods are not “profound and obdurate” and may be overcome by methodologists, while King, Keohane, and Verba (1995: 475) argue that “much of the best social science research can combine quantitative and qualitative data, precisely because there is no contradiction between the fundamental processes of inference involved in each.” This approach is similar to that of the philosophical pragmatists

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2 In this paper I do not discuss the method of transforming data, changing qualitative to quantitative or vice versa. For instance, in ‘qualitative data analysis,’ qualitative interview or text data is coded and statistically analyzed.

3 For a deeper philosophical/epistemological analysis of mixed methods research, see Onwuegbuzie and Leech (2005) and Morgan (2007).
in its rejection of the epistemological incommensurability of different methods, and these political scientists frequently discuss pragmatism in research in practical terms.

In fact, despite the acrimony existing between the qualitative and quantitative camps in the 1960s and 1970s, there is a long history of mixed qualitative and quantitative research in the social sciences. Johnson, Onwuegbuzie, and Turner (2007: 113) note that “For the first 60 years or so of the 20th century, ‘mixed research’ (in the sense of including what we, today, would call qualitative and quantitative data) can be seen in the work of cultural anthropologists and, especially, the fieldwork sociologists.” Sieber (1973), discussing sociology after World War II and writing at the height of the ‘paradigm wars,’ describes a divide between fieldworkers (qualitative) and survey researchers (quantitative). However, he then outlines numerous earlier studies that have integrated survey and fieldwork methods, writing that “one could almost say that a new style of research is born of the marriage of survey and fieldwork methodologies” (Sieber 1973: 1337). Bryman (1988: 108) further notes that many authors who treated quantitative and qualitative research as different epistemological paradigms also stated that in practice the research methods could be fruitfully combined (see also Smaling 1994: 234).

MMR has become more accepted in the social scientific community at large and it is particularly well-suited to the study of violence. Violence, like all social action, is a complex phenomenon. In discussing his methods and sources in his book Violence: A Micro-sociological Theory, Randall Collins (2008: 32) states: “My sources are very heterogeneous. This is as it should be. We need as many angles of vision as possible to bear on the phenomenon. Methodological purity is a big stumbling block to understanding, particularly for something as hard to get at as violence.” Geddes (2003: 23) highlights the need to use quantitative methods to identify causal factors and qualitative methods to explain the processes by which they act to explain “compound outcomes (otherwise known as big questions),” a category in which I argue violence and conflict should be included.

Snyder, addressing the study of collective violence and riots found that contemporary quantitative approaches suffered problems of measurement and inference due to their attempts to apply theories across levels of analysis; he thus suggests “merging qualitative analyses of crowd dynamics into quantitative ecological treatments,” and recommends strategies ranging “from longitudinal surveys of individual perceptions to intensive analyses of organized groups’ life histories to examinations of crowd dynamics” (1978: 526) in order to come closer to capturing and understanding the social processes leading from background conditions to violent action. He argues that “given the difficulties of conventional empirical approaches, methodological shifts in the directions proposed here must be implemented if the continuing problematic issues in collective violence are to be adequately addressed” (Snyder 1978: 526). Bryman (1988: 140) presents an argument that, when juxtaposed with the above statements by Snyder, holds that mixed methods research can answer Snyder’s call for bringing together patterns and processes:

“…qualitative research presents a processual view of social life, whereas quantitative research provides a static account. The attribution ‘static’ may be taken to have a negative connotation, but this need not be so. By adopting a static view, much quantitative research can provide an account of the regularities, and hence patterns of structure, which are a feature of social life. A division of labour is suggested here in that
quantitative research may be conceived of as a means of establishing the structural element in social life, qualitative research the processual.\textsuperscript{4}

The study of violence is also frequently divided between the micro level (experiences and processes) and the macro level (trends and patterns). While the micro level has traditionally been investigated using qualitative methods and the macro with quantitative, this has changed as better data have become available on violence at the individual and community levels. No matter which method is used at which level, though, a more complete understanding of violence results if we are able to integrate micro and macro explanations. Varshney (2008: 353), introducing a journal issue on collective violence in Indonesia, emphasizes the need for both quantitative micro-level research and qualitative macro-historical research,\textsuperscript{5} concluding that “A more thorough explanation of Indonesian violence will clearly require both macro- and microexplanations.” Once again, Bryman anticipated this need, suggesting MMR as a means of tying together the micro and macro levels (1988: 147-149; see also Creswell 2009). Using only one method, we may wind up with a myopic view of a research subject, one that either neglects processes of social interaction to the point of abstraction or, instead, fails to examine larger patterns that may permit generalization from the work (see Ragin 1987: 69).

This last point highlights the persistent problem of the relationship between structure and agency in the study of social action. Structure, the systems of social relations and systems of meaning (Hays 1994) within which social action takes place, can be studied empirically using either quantitative or qualitative methods, though quantitative methods render structure more legible. Within the framework of structure, however, action results from the decisions of individual agents. In Weber’s formulation, “behavior that is identical in its external course and result can be based on the most varied constellations of motives” (in Oakley 1997: 817). Thus to capture these motives we must learn about the ideas and thought processes of agents, a task for which qualitative methods are better suited.\textsuperscript{6} If we take the view of Giddens (1984) that structure and agency are in fact intertwined, with agents’ actions both shaped by and producing structure, then mixed methods are ideally suited for examining this structure-agency interaction and achieving the Weberian goal of Verstehen, “making intelligible and thereby understanding the causes of events and phenomena generated by the social actions of individual subjective agents” (Oakley 1997: 813).\textsuperscript{7} As McGovern (2011: 350) points out, micro-level studies suggest that “participants in violent politics [operate] according to rational and irrational choice models at once” (see also Wood 2003),\textsuperscript{8} their actions shaped by external conditions and personal experiences or motivations. In studying violence, mixed methods capture the broader structural context and the agent’s motives, decisions, and interpretation in the perpetration or experience of a violent act. If, like Collins (2008), and following the philosophical pragmatists (see Emirbayer and Mische

\textsuperscript{4} Tarrow has similarly highlighted the role of qualitative research in exposing the processes underlying patterns in quantitative data. He argues that, “Whenever possible, we should use qualitative data to interpret quantitative findings, to get inside the processes underlying decision outcomes, and to investigate the reasons for the tipping points in historical time-series” (Tarrow 1995: 474).

\textsuperscript{5} This point was also made by Coser (1975: 695).

\textsuperscript{6} However, psychological experiments, which tend to produce quantitative data, may also permit us to get ‘inside the heads’ of agents. For an application of this method in the study of violence, see Nisbett and Cohen (1996).

\textsuperscript{7} There may, however, be some explanatory mechanisms that operate only at a structural level, affecting political and social processes without being catalyzed by agents (see Sil and Katzenstein 2010: 420).

\textsuperscript{8} Blattman and Miguel (2010: 14-15) argue that non-material motivations can be included in rational models “as ‘goods’ of inherent value that individuals consume by fighting.”
1998: 967-968), we view violent social action as a product of unique and constantly evolving situational dynamics, we must still account for the structures that shape situations and the decisions of the actors within them, a task that MMR is capable of accomplishing with scientific rigor.\(^9\)

Beyond the usual problems of complexity, violence and conflict are issues of grave social and political importance, and academic contributions to their resolution can reduce human suffering. Thus those of us studying violence and conflict should make use of all appropriate methodological tools at our disposal in order to produce knowledge that may be used by policy makers and practitioners (see Druckman 2005).\(^10\) The next section examines studies of violence and conflict that have used quantitative and qualitative methods together, and what implications they may have for future research.

The Use of Mixed Methods in Studies of Violence

Scholars are beginning to take note of these arguments and are utilizing mixed methods in studies of violence at all levels of organization. To show the breadth of this scholarship and the potential of mixed methods research to further improve our understanding of violence, I examine below some applications of mixed methods to the study of multiple different forms of sociopolitical violence: communal violence, civil war, and interstate wars and crises.\(^11\) The examples should provide a view of the wide range of topics to which mixed methods have been applied and may serve as potential models for scholars studying similar issues, as well as showing possible pitfalls.\(^12\)

Communal Violence

New research has greatly expanded our knowledge of the dynamics of riots, their complexity and organization. As Brass (2003: 29) astutely notes, previous conceptions from crowd theory of “riotous crowds as an undifferentiated mass of individuals who adopt the identity of the crowd, losing their own in the process” have been largely discarded as scholars, following Bill Buford’s (1992) participant observation ethnography of riotous soccer hooligans, have recognized “the multiplicity of roles and persons involved in [riots] and the justifications concerning them by their promoters and participants.” The larger patterns of riots are discernible through statistical analysis, but to understand motivations and the chain from a precipitating event to the “production” (Brass 2003) of a riot through the instigation of violent entrepreneurs, it is necessary to observe or speak with participants.

\(^9\) MMR studies, however, can be more difficult to conduct, as is discussed below.

\(^10\) On the need for production of practical knowledge in political science, see Sartori (2004).

\(^11\) For mixed methods studies of military coups, see Maniruzzaman (1992) and Singh (2009); on revolutions, see Paige (1975) and Goldstone (1991).

\(^12\) Some might object to my examination together of these forms of violence that occur at different levels of aggregation and organization. While there is ample need for debate about the definitions of and similarities or differences between forms of violence, as well as non-violent contention (see Tarrow 2007), violence and conflict continue to be treated as a specific area of inquiry in the social science and so is treated as such in this paper.
Many contemporary studies of riots focus mainly on India and the ethnic riots that have erupted between Hindus and Muslims. Varshney (2002) conducted statistical analysis using a newspaper dataset and used the patterns discovered to select cities for paired historical case comparisons between riot-prone and less violent cities, an iteration of the strategy Lieberman (2005) terms ‘nested analysis.’ Varshney’s statistical analysis relies on a dataset of the occurrence, location, and scale of interethnic riots across India, compiled from the national *Times of India* newspaper. Varshney tests his hypothesis that cross-cutting communal ties prevent violence and their absence allows it by selecting a sample of three riot-prone cities and three nonviolent cities for a paired comparison using close case studies. Varshney finds confirmatory support for his theory in the case studies, but he does so by ignoring one of the benefits of the nested approach: the examination of confounding variables. Possible confounding variables such as the intensity of non-violent ethnic conflict and the extent of Hindu nationalist mobilization are not sufficiently explored, and thus while Varshney demonstrates a correlation between interethnic ties and riot nonoccurrence, convincing causal inference cannot be generated (see Forbes 2003). As Jaffrelot’s (2003) review of the book points out, Varshney’s qualitative analysis of the cases, especially in the role of caste conflict in communal conflict, fails to connect the local experiences in the cases to the national context, to have a dialogue between the qualitative and quantitative data.

Outside of the sub-continent, Scacco (2010) sought to understand how and why ordinary people come to participate in violent riots through a study of Christian-Muslim riots in the Nigerian cities of Kaduna and Jos. She argues that in Nigeria, the state is weak and unable to afford protection to citizens, and thus there is a constant fear of attack by ethnic rivals. This fear is of greater concern for the poor, who are unable to afford private security measures, who thus conclude that it would be better to strike preemptively than to wait to be attacked. Insecurity, however, only explains a willingness to riot; Scacco further argues that poor people are drawn into the streets to riot through the activation of informal social ties. Thus two mechanisms account for riot participation: poverty (and its attendant vulnerability) and embeddedness in social networks.

To test her theory, Scacco conducted an original survey of rioters and non-rioters and semi-structured interviews with riot participants and witnesses in Kaduna and Jos, and then tested the generalizability of her theory to the rest of Nigeria using data from a previous national survey and Afrobarometer. Scacco first tests her hypotheses about the association of poverty and social network membership with riot participation against alternative explanations from the literature; after confirming the relationship, she conducts further statistical tests to see if poverty and social networks interact as hypothesized. Thus while Scacco’s theory rests on this interaction mechanism, she first sought to establish that its component elements were properly conceptualized and measured, establishing the internal validity of the statistical analysis. Scacco then tests these findings against her interview data to hear from rioters themselves the process leading to their participation and how it was affected by poverty-induced insecurity and social

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13 See Brass (2003) and Wilkinson (2004) for other mixed methods studies of Indian riots.
14 Wilkinson’s (2004) later work made use of a revised version of the data.
15 For another mixed methods study outside of India, see Weeraratne’s (2009) dissertation on anti-Chinese riots in Indonesia, carried out through analysis of three “large-N datasets compiled at city, regency and neighborhood levels across Indonesia” and qualitative evidence from interviews and field surveys, as well as spatial analysis using GIS.
pressure. The interviews were also used to remove lingering doubts about alternative explanations.

As a further test, Scacco uses data from a previous national survey in Nigeria and Afrobarometer to see if her theory also applies to their measures of ‘violent demonstrations’ at the level of local governance areas. This tests the external validity of Scacco’s theory, demonstrating its possible generalizability outside of Kaduna and Jos to the rest of Nigeria, and possibly to other countries afflicted by poverty and weak security institutions. It is in this section, though, where Scacco’s study is the weakest. She considers her definition of a riot to be similar to, but different from the measure of violent demonstrations, testing the “portability” of her theory to another type of “high-risk collective action” (173). There is not sufficient scrutiny of the distinction between these categories, and so it is not possible to know how many violent demonstrations would fit Scacco’s definition of a riot and vice versa. Further, as Scacco acknowledges (181), the national data do not allow for examination of the effect of previous episodes of collective violence on subsequent participation, a factor controlled in her own study by the lack of previous religious riots in Jos and the thirteen year long period between riots in Kaduna (80).

Scacco and Varshney have demonstrated the power of mixed quantitative and qualitative methods to expose patterns in the distribution of riots and the interactive processes through which riot directors and participants generate violence. There is, however, room for further methodological innovation. Laitin (2002: 650) raises the need for formal models of riot production, observing that “Brilliant expositions of communal violence…are presented as if formalization would provide no further insight. Yet more attention to the strategy space of rioters may help determine the conditions under which riot professionals will do their professional thing.”

Civil Wars

Studies of civil wars have been a growth industry in political science over the past decade, and mixed methods studies have been increasingly common. In their chapter in a mixed methods volume on civil war onset and outcomes, Collier, Hoeffler, and Sambanis (2005: 2) argue that:

“Quantitative and qualitative research designs are often (mistakenly) considered as substitutes rather than complements in political science. Our book should suggest that there is much to learn by combining the two approaches. Quantitative analysis is the best way to examine the covariance between civil war and many potentially important determinants of a process leading to war. Qualitative analysis can tell us how these determinants influence war outcomes over time and can help sort out the endogenous from the exogenous variables in the model.”

Sambanis (2004) similarly argues that economic theories on civil war, which tend to be quantitatively based, would benefit from greater integration of qualitative evidence. He suggests Lieberman’s (2005) nested analysis approach, using statistical analysis of a large-N dataset to generate hypotheses and select cases for in-depth study, as case studies help link “individual

16 See for instance the symposium in the Qualitative Methods newsletter on using mixed methods to study civil wars (Symposium 2008).
motives and actions” to civil war onset, adding the elements of process and agency to the structural arguments of economic theories (Sambanis 2004: 273).

Three of the most influential recent studies of violence in civil wars were carried out using diverse mixed methods designs.17 Wood (2003) sought to understand what drove peasants in El Salvador to join rebel movements and how these factors affected the dynamics of that country’s civil war. She theorized that campesinos moved from passive to active support of and combat with insurgents in the face of violent class repression, asserting themselves to enjoy what Wood terms the “pleasure of agency” (18). To give voice to the campesinos, the primary agents in her collective action story, Wood’s main data source is ethnographic interviews. As a further exercise in understanding the civil war and the changes it wrought in rural areas, Wood conducted an innovative mapping exercise, having campesinos draw maps that “document how campesino collective action literally redrew the boundaries of class relationships…through changes in de facto property rights and patterns of land use in the case study areas during the war” (45). This qualitative spatial analysis provides a check on Wood’s own theory and interpretation of observed changes in land tenure. To further balance her ethnographic data, Wood conducted interviews with elite figures opposed to the campesinos (i.e. landlords, military officers, government officials). While the qualitative account is on its own quite convincing, to test the generalizability of the mechanisms in her theory and the processes uncovered through interviews, Wood uses household survey, election, and cadastral data to see whether the statistics bear out her qualitative inferences, also ensuring that her theory is applicable to all of El Salvador, not only her fieldwork areas. Finally, to answer questions she feels were left unanswered by her empirical account, and to facilitate testing of her theory cross-nationally in similar contexts to El Salvador, Wood outlines a formal model of “high-risk collective action by subordinate social actors” (267-274). Using this tripartite approach (Laitin 2002), Wood was able to maintain her emphasis on campesino agency, while quantitatively testing her theory and qualitative inferences and establishing the external validity of her study. Establishing external validity is a particular concern with this study as the dynamics of the civil war at the time of her research meant Wood was unable to randomly select fieldwork areas.

Looking directly at violence in civil wars, Kalyvas (2006) developed a game theoretical model that explains insurgent and incumbent targeting of civilians based on relative levels of control within a territory. To test this ‘logic of violence,’ Kalyvas employed a “subnational, micro-comparative research design” (47) of the Argolid region of Greece, using archival sources and judicial records to construct a dataset of incidents of violence in the Greek civil war for quantitative analysis, and drawing on qualitative evidence from ethnographic interviews and local histories and memoirs, using villages as the units of analysis. With quantitative evidence compiled at the micro level and ethnographic data, Kalyvas is able to use both quantitative and qualitative data to examine the patterns and processes of violence production. To further test his theory, Kalyvas replicated his analysis using data from Almopia, a region as different as possible from the Argolid, and also a national dataset to ensure the validity of his predictions and findings in the Greek case. The one area where the study might be improved is in testing the logic’s cross-national generalizability. Kalyvas conducted a massive literature review to provide qualitative cross-national evidence in support of his theory, but as more cross-national data on the sub-

17 These studies are also reviewed together (and more thoroughly) in Tarrow (2007).
national dynamics of civil wars is becoming available, it may be possible to conduct a quantitative test as well.

Focusing solely on insurgent groups, Weinstein (2007) formulated an economic theory of what he terms the “industrial organization of violence” to explain why some rebel groups are indiscriminate in their violence against civilians, while others are selective. He argues that the character of rebel organizations is determined by their sources of financing and, contingent on this, how they recruit their members. Weinstein tests his theory through four mixed methods case studies of rebel groups in Mozambique, Peru, and Uganda. In the case studies he combines ethnographies of the rebel groups and community-level social histories with statistical analysis of original newspaper datasets on patterns of violence in each of the conflicts. Weinstein uses the quantitative data to look at national-level patterns of violence, while the qualitative data enable him to explore sub-national variation. To extend his analysis and establish the external validity of his study, Weinstein closes with a statistical analysis of Lacina and Gleditsch’s (2005) cross-national dataset on battle deaths, attempting to manipulate it to provide accurate measures of the scale of civilian killing by rebel groups. While this data is less than ideal, Weinstein finds that “the macro-level relationships that they illuminate lend support to the overall argument” (326), though he acknowledges that the closer case studies were necessary to assess causal mechanisms. Weinstein’s model may suffer from the omission of variables such as state strategy and group ideology (Tarrow 2007: 591), but it is undeniable that he is very effective in using quantitative and qualitative evidence to complement one another.

The aforementioned studies, along with those that do not employ mixed methods, have greatly improved our understanding of the dynamics of civil war and violence in these wars, yet much work remains, with Checkel (2008: 14) arguing that mixed methods research can bridge the divide between rationalist and constructivist theories of action in civil wars, a “double bridging exercise of methods and social theory” that will “generate richer theoretical accounts of civil war.”

**Interstate War and Conflict**

Mixed qualitative and quantitative methods are particularly well-suited to examination of violence and conflict at the subnational level, but the use of mixed methods is equally appropriate for studies in international relations. Formal models are more common in international relations research, and these must be empirically tested through statistical analysis and/or case studies. Additionally, while quantitative methods are extremely useful for examining cross-national and cross-case variation in the use of violence and management of conflicts by states and international organizations, qualitative methods allow for process-tracing in interstate relations, can provide a window into the motivations and decisions of leaders, and permit textual interpretation of treaties and resolutions, testing and shedding light on the patterns that quantitative analysis may uncover. Mixed methods approaches have been used by scholars testing two of the most important theories in conflict studies: nuclear deterrence and the democratic peace.

Achen and Snidal (1989: 168-169), examining the disconnect between comparative case studies and quantitative and formal theoretical work on deterrence theory, hold that “Case studies are an
important complement to both theory-building and statistical investigation” as they let the researcher “identify plausible causal variables, a task essential to theory construction and testing.” Similarly, Montgomery and Sagan (2009: 322), writing about the recent wave of quantitative studies of nuclear proliferation, argue that while “Some of the questions and debates in this subfield can only be fully tested when using statistical methods. Others will require mixed methods, combining historical case studies, deductive reasoning, and quantitative research.”

One study which successfully tested deterrence theory using a mixed methods approach was Kapur’s (2007) analysis of the effects of nuclear weapons on conflict and stability on the Indian subcontinent. Deterrence theory suggests that nuclear armed states will avoid direct armed conflict with each other, yet Kapur argues that nuclear weapons have in fact had a destabilizing effect on Indo-Pakistani relations, increasing the number of conventional militarized disputes, and that the increase in violence was due to “the incentives for aggression that proliferation can create for weak, revisionist states” (10). Using a combination of statistical analysis and comparative case studies of different periods of nuclearization, Kapur is able to test for an association between nuclearization and increased fighting, and then to process trace in order to assess whether his causal logic is correct. Kapur divides the India-Pakistan conflict dyad into three time periods with different levels of nuclearization. This improves the internal validity of the study by increasing the number of observations examined, an issue of particular emphasis for King, Keohane, and Verba (1994), while holding constant possible confounding variables.

After confirming his theory in the Indo-Pakistani cases, Kapur seeks to test its external validity with a comparative case study of China’s (the weaker state’s) behavior in the 1969 Sino-Soviet Ussuri River conflict. Finally, to permit future evaluation of his theory, Kapur undertakes prospective case studies of how he would expect proliferation to affect the conflict behavior of North Korea and Iran. These attempts to extrapolate to other contexts are the weakest point of Kapur’s study, for the prospective case studies do not take into account one of the key elements of the Indo-Pakistani dyad: the symmetry of nuclear capabilities. This makes it difficult to map the lessons of this case onto possible future cases such as confrontations between Iran and Israel or North Korea and the United States or China, as these would pit newly nuclear states against established and better-armed nuclear powers. This oversight highlights the importance of ensuring that key variables tested or conditions established with one method are not ignored when using another method.

Democratic peace theory, put simply, holds that democracies rarely go to war with one another, yet Mansfield and Snyder (2005) argue that this theory requires greater specification. Though established democracies may be less belligerent, countries that stall in the process of democratization and possess weak state institutions are in fact more likely to go to war, especially if they are involved in enduring rivalries with other states. Using data on democracy from Polity III and on interstate war from the Correlates of War project, Mansfield and Snyder conduct statistical analyses to test their hypotheses about the association between democratizing states and war. However, some of their hypothesized causal mechanisms (e.g. weakness of state institutions, threats to elite control, nationalism) are difficult to measure statistically, and so Mansfield and Snyder turn to case studies of the democratizing states in their data set which initiated wars. The case studies also allow Mansfield and Snyder to situate wars by democratizing states in historical context. Additionally, operationalizing a variable such as ‘democratization’ for statistical analysis requires concrete judgments on the quality of the
variable in a given case, when there is more nuance and ambiguity. Complementing the statistical analysis with case studies can help address problems of concept stretching (Sartori 1970) that might arise from the coding of quantitative data (see also Goemans 2007). Mansfield and Snyder, however, are not as careful as they should be about concept stretching, with ‘stalled democratization’ on closer scrutiny referring in the cases selected to a situation of “regime collapse or return to autocracy” (McFaul 2007: 164). Similarly to Kapur, a key variable is present in one method, but not the other, for ‘exclusionary nationalism’ is absent from the statistical analysis but present in all the case studies. There also remains room for greater dialogue between the statistical findings and the case studies, with the qualitative evidence spread thin by the attempt to examine such a wide range of cases.

**Research Frameworks and Best Practices**

In the studies reviewed above, various combinations and sequences of mixed methods were used. Mixed methods designs were implemented with varying success and varying degrees of correspondence between methods. This section outlines the specific design frameworks (see Table 1 below) that have been used in mixed methods studies of the occurrence of and participation in conflict and violence, examines best practices for MMR, and presents possible directions for future mixed methods studies in this area.
Table 1. Mixed Methods Research Designs in Studies of Violence and Conflict

| Collective Violence | • Large-n data analysis followed by micro-level case studies and secondary evidence (Varshney 2002; Wilkinson 2004)  
| | • Close qualitative case study and interviews complemented by statistical correlations (Brass 2003)  
| | • Micro-level quantitative analysis followed by qualitative interviews followed by meso-level quantitative test of generalizability (Scacco 2010)  
| | • Statistical and spatial analysis at multiple geographical levels complemented by qualitative field surveys and interviews (Weeraratne 2009)  
| Civil War | • Formal model followed by micro-level statistical and qualitative interview and local narrative evidence (Kalyvas 2006)  
| | • Ethnographic interviews and mapping exercise and case studies complemented by statistical evidence and supplemented with a formal model for generalizability (Wood 2003)  
| | • Ethnographic interviews and case studies complemented by national-level statistical analysis and supplemented by cross-national statistical analysis to test generalizability (Weinstein 2007)  
| | • Cross-national statistical analysis followed by case studies (Collier and Sambanis 2005; Fearon and Laitin 2008)  
| International Conflict | • Disaggregated single dyad quantitative analysis followed by qualitative interviews and case study (Kapur 2007)  
| | • Cross-national statistical analysis followed by qualitative case studies (Mansfield and Snyder 2005; Biswas 2006)  

Where one method has been ‘complemented’ by another, this means the findings have been integrated in the presentation of findings. In studies where one method has been ‘followed by’ another, the results have been presented separately and sequentially, with most of the dialogue between them taking place in the discussion or conclusion sections. A ‘supplemental’ method is one in which less of the intellectual heft of the study is invested and which serves to provide an additional test or demonstration of the theory (e.g. Wood’s [2003] formal model and Weinstein’s [2007] cross-national statistical analysis).

Regardless of what sequence is used or how much emphasis is accorded to each method, it is important to ensure a dialogue between the methods and that each is able to make a contribution to addressing the theoretical problem or research question. Otherwise, the study would be better split into its component parts as separate studies. Integrating the methods is one way to accomplish this, a task which has been best achieved in the micro-level studies of civil war, for instance in Kalyvas’s (2006) presentation of micro-level statistical and interview evidence.

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See Morgan (1998) for a more systematic ‘Priority-Sequence Model’ to characterize sequence and emphasis in integrating quantitative and qualitative data.
together to explain variations in patterns of violence. An alternative is to present findings sequentially, but referring back to findings from the first method in the discussion of the findings from the second method and maintaining a clear theoretical focus throughout, a task accomplished well by Scacco (2010).

It may be tempting in the face of discordant results between methods to drop the results of one method that does not accord with theory or intuition. Instead, this discord is a signal “to analyze a research problem further and to be cautious in interpreting the significance of any one set of data” (Brewer and Hunter 1989: 17). This maxim has proven true in my own research. In a study of interpersonal violence against strangers in South Africa (Seekings and Thaler, in press), we discovered a disconnect between interviewees’ perceptions of the causes of crime and the results of our statistical analysis: while interviewees believed unemployment and poverty led to crime, variables measuring these conditions were not significant in our models. This apparent inconsistency led us to reexamine our data and to conclude that while those who commit violence against strangers may in fact tend to be poor and unemployed, in a country such as South Africa where poverty and unemployment are widespread, other factors, such as heavy drinking and neighborhood social disorganization set the violent apart from their nonviolent socioeconomic peers. This process of reexamination illustrates the importance of mixed methods in acting as checks and balances upon each other. The findings from one method may confirm those of the other, or they may contradict it, with contradiction leading to necessary scrutiny of matters that would have been missed with a single method approach, as well as providing a direction for future investigation.

New Directions for Research

Researchers have begun using mixed methods to study the pressing issues of violence and conflict, but there remain many possibilities to expand the methodological scope of these studies. As highlighted by Laitin (2002: 650), the study of collective violence may be improved by increasing use of formal models. In the study of civil wars, there have been a growing number of micro-level field experiments and quantitative program evaluations in post-conflict settings, for example the work of many researchers associated with the Abu Latif Jameel Poverty Action Lab (J-PAL) or the Households in Conflict Network (HiCN). Blattman and Miguel (2008) argue that the generalizability of findings from these micro-level studies may best be established by increasing the overall number of such studies in diverse settings. It may also be possible, however, to begin this task by supplementing the quantitative findings with qualitative case studies of similar programs or experiments. Studies of international conflict may benefit from an increased use of interviews, as Kapur (2007) has demonstrated, to examine strategic decision making by military and political leaders. There is also the possibility of using Laitin’s (2002) tripartite approach and combining formal models, quantitative, and qualitative methods, as existing studies have not yet done.

Across these different types of violence, there is a need to explore norms, attitudes, and values about violence and among violent (and non-violent) actors. Blattman and Miguel (2008: 47) concur that we must “improve measures of political attitudes and grievances and test their

association with actual behaviors;” they suggest accomplishing this task through experiments. It may be possible, however, to achieve this goal in a non-experimental setting using vignettes, “short stories about hypothetical characters in specified circumstances, to whose situation the interviewee is invited to respond” (Finch 1987: 105). Vignettes can be either quantitative or qualitative, administered through a survey or in an interview. It can be particularly informative to conduct a mixed methods study with quantitative and qualitative vignettes to allow for both statistical testing and more open-ended responses (see Thaler 2011). If combined with data on personal experiences and actions, vignettes may help us better understand and bridge the attitude-behavior divide.

There is also a great opportunity to use qualitative methods to improve quantitative measures. Conducting interviews and limited case studies prior to the formulation of survey questionnaires or the coding of datasets can ensure that questions and coding decisions are culturally or historically appropriate and also that resulting variables in fact measure what the researchers intend.

**Stumbling Blocks and the Limitations of MMR**

Mixing methods is not a panacea. The appropriate choice of methods depends on the nature of the inquiry. Quantitative research is more useful for capturing patterns in the variation of violence and understanding its distribution and correlates. Qualitative research is more useful for understanding experiences of violence and their psychosocial effects or capturing the processes of violent situations. Given these different strengths, it is important when using mixed methods to be clear in defining the concepts and variables that each method is capturing. As the problems with variable specification in Mansfield and Snyder (2005) demonstrate, qualitative and quantitative data may be capturing different aspects of a phenomenon, depending on how measures are constructed or questions are phrased. This distinction does not mean, though, that the evidence presented about these slightly different, but related variables should not be integrated in the presentation of findings, for the qualitative and quantitative evidence together provide a clearer picture of the social reality of the population being studied. Following this line of argument, Ahram (2009: 6) cautions us to view mixed methods as “complementary, rather than corroborating.”

Conducting a study employing multiple methods is also more difficult, time-consuming, and expensive than a single-method study. It requires a researcher to have familiarity with the tools and methods of both qualitative and quantitative research, or to work as a team in which quantitative and qualitative experts’ skills may complement each other. Such a team, though, has potential for conflict, as there are many decisions to be made about research design and how results will be presented (Bryman 2007: 15-16). The process of conducting, for instance, both a survey and in-depth interviews is more time-intensive and also more costly than conducting only one of the two. Additionally, despite the increasing employment of mixed methods and past calls across disciplines for the integration of quantitative and qualitative research, there will always be those who believe in the primacy of one method over others.²⁰ Publication of MMR may be more

²⁰ See e.g. the debates in security studies between those who base theories on historical analysis and those who advocate the use of mathematical formal models (Brown et al. 2000).
difficult in journals or with presses whose editors and reviewers have a strong preference for a particular method (Bryman 2007: 18), and it can be difficult to fit the analysis from multiple methods within the word limits of many journals.

Finally, there are particular problems that may affect the conduct of MMR on a sensitive subject like violence. Quantitative analysis of violence through the use of previously compiled or archival datasets avoids the dangers that face researchers conducting fieldwork (be it interviews, field surveys, or observation) in violent areas (see e.g. Nordstrom and Robben 1995; Lee-Treweek and Linkogle 2000). There are increased worries about the validity of responses in dangerous contexts, as respondents may worry about the protection of their anonymity and potential negative consequences from sharing the truth with researchers. One must also remain aware of the potential for MMR to “identify and combine a variety of discrete data points from different methods, thereby linking information about individuals and groups that could not be linked if the methods were used separately” (Brewer and Hunter 1989: 194). As more researchers examine violence at the micro level, continued engagement with ethical concerns will hopefully lead to further new approaches for the maintenance of subject confidentiality, such as the multiple safeguards employed by Scacco (2010: 71-72), that can enable the collection of better data while ensuring the safety of informants.

**Conclusion**

Greater use of mixed methods research has the potential to make important contributions to the study of violence and conflict. As noted by Collins (2008) and others, violence is too complex and pressing a social problem to be subjected to methodological puritanism. We should take from the range of methodological tools those that may best be applied to our research questions and mix them as seems appropriate. To keep quantitative and qualitative methods separate is to limit ourselves and reduce the potential impact of studies on such a critical subject. Tarrow (1995: 474) admonishes that “a single-minded adherence to either quantitative or qualitative approaches straightjackets scientific progress.”

MMR provides checks and balances in the generation and testing of hypotheses and requires a useful interrogation of the differences that arise between qualitative and quantitative data. Taking a neutral stance on the primacy of structure or agency allows one to maintain the agency of subjects and to take seriously their lived experiences and the meanings they find in action, while more clearly delineating the prevalence and patterns of phenomena with quantitative evidence.

Mixing quantitative and qualitative methods promises to lead us beyond the abilities of one method alone by providing a more holistic view of the phenomena we study, of patterns and processes, effects and causes. This fuller view is extremely helpful (though not necessary) for the production of theories that more accurately explain social phenomena. The formulation of theories (or “clear concepts” in Weberian terms) is a central goal of social science (Durkheim 1964 [1895]; Coser 1975; Weber 1978 [1922]; King, Keohane and Verba 1994; Geddes 2003; 21)

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21 Rather than dismissing those experiences and meanings as not being as ‘factual’ as quantitative data, as Cameron (2009: 214) does.
George and Bennett (2005). However, as Geddes (2003: 4) eloquently states, “To be successful, social science must steer a careful course between the Scylla of lovely but untested theory and Charybdis, the maelstrom of information unstructured by theory.” Mixed methods provide the necessary empirical grounding for theory generation and data for theory testing that should be convincing to and replicable by researchers of any orientation.

From these tested theories and empirical evidence, formed by the combination of best practices in research methods, we may formulate ideas for the prevention, management, and resolution of violence and conflict. Political science and sociology, as fields open to the use of both quantitative and qualitative methods, are uniquely suited for uniting and testing different strands of research and theory on violence and conflict. In his critique of development economics, specifically the work of Paul Collier, the anthropologist Mike McGovern (2011: 353) writes that while “one productive division of labor would have economists identifying the surprising correlations in cross-cultural economic phenomena and anthropologists explaining them, political scientists may be able to do both parts of this process in house.”

Many of the studies examined above use quantitative methods to examine macro-level, structural factors and qualitative methods to uncover micro-level processes, but it may also be possible for these roles to be reversed given the trend toward greater use of micro-level surveys in political science, with qualitative narratives providing structural context for micro-level quantitative evidence on attitudes and decisions (e.g. Humphreys and Weinstein 2008). There also remains room for further methodological mixing across the spectrum of violence and conflict.

Through the ability of each research method to fill in the gaps in knowledge left by the others, mixed methods studies of violence and conflict give us as social scientists the opportunity to conduct research that both satisfies the criteria of social scientific inquiry and provide more useful and complete information for policy makers and practitioners.

A Final Note

This paper has been dedicated to exploring the value of MMR, but I do not wish to in any way demean the contribution that single-method studies have made and can continue to make to studies of violence, conflict, and myriad other subjects. As Brewer and Hunter (1989: 25) point out, the key concern is that work conducted with one set of methods be in dialogue with that conducted with another set of methods, for “Individual investigators using favored single methods, hoping to show the unique values of their methods, can certainly reach multimethod conclusions by carefully building upon and correcting each others’ work.” Until, however, more single-method scholars make use of previous findings from other methodological approaches and self-consciously present the results of their own research in such a manner as to make them relevant to and testable by scholars of the other methodological orientation, there remains a need for MMR to bridge the methodological divide.

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22 See Hirschman (1970) for a critique of the centrality of theory in social science.
Sources


Bennett, Andrew and Bear Braumoeller. 2006. “Where the Model Frequently Meets the Road: Combining Statistical, Formal, and Case Study Methods.” Unpublished manuscript, Departments of Government, Georgetown University and Harvard University.


