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New Event Data in Conflict Research

As this special issue of *International Interactions* demonstrates, there has been a resurgence of interest in recent years in event data for the analysis of various political phenomena, and conflict in particular. Concerted efforts in this area date back to the 1960s, notably the World Event Interaction Survey (WEIS) and Correlates of War Project (COW) (Schrodt 2012). The recent acceleration of event-data collection and analysis is driven primarily by new theoretical and empirical research agendas, which are in part motivated by changes in public policy agendas and by technological innovations that make information retrieval and processing more cost- efficient. In this issue, we take stock of these new developments in event-data collection and analysis. We do so both by showcasing several new event datasets, and by presenting a selected set of studies that use new event data to address particular questions pertaining to violent conflict.

In this introduction, we briefly dwell on the supply and demand side factors that have contributed to the resurgence of event-data collection and analysis in recent years. As to the supply side, Schrodt (2012, this issue) notes that the information base for event-data coding has changed dramatically since the 1960s. The Internet has become an enormous repository for information, a large part of which is freely available. Even for those electronic information sources that charge very substantial user fees, e.g. Factiva, BBC Monitoring, the Open Source Center (formerly FBIS), the

costs pale in comparison to the age of non-digital information sources, when an army of assistants was needed merely to extract relevant information from micro-fiche or hard-copy archival sources.

While commercial considerations are likely to continue to stand in the way of free information access, the need for better event data has been recognized by many governments[2] as well as by international organizations and funding agencies. In some cases, event-data projects organized or funded by governments or international organizations have produced proprietary or classified data. Often, such data nevertheless eventually end up in the public domain. Many governments increasingly recognize the right of the public to be informed and Freedom of Information Acts give the public in some countries a legal tool for extracting information. Access to data can also be obtained by investigative journalism or by major information leaks such as WikiLeaks (cf. Linke, Witmer, and O'Loughlin 2012, this issue).

Finally, digital information sources allow not only for more cost-efficient retrieval and selection of relevant pieces of information, but also facilitate machine-based event-data coding. The digital area of event-data research is also beginning to reduce the costs of using more sophisticated approaches to separating relevant from irrelevant information, and for data coding per se. The KEDS project (Schrodt 2006), which has developed innovative coding schemes and methods for automated content analysis has played a pioneering role in this regard.

Governmental recognition for the need for more systematic information, including event data, can also be seen as a demand-side factor. For scholarly use of such data, arguably the most important factor motivating the recent resurgence of interest in event data is associated with changes in the nature of violent conflict and the associated research agendas. As a number of recent books have suggested (notably Goldstein 2011 and Pinker 2011), there has been a steady, if by no means linear, decline in violence, which can be observed in the long term, as well as in the comparatively short term of the period since World War II, or even the period since the end of the Cold War. Systematic research on war and peace for a long time focused mainly on interstate war, which seemed justified in view of the carnage of the two world wars. As Mueller (1989) was one of the first to observe, interstate wars have declined in numbers as well as severity in recent decades. Even with a much lower casualty threshold than in the traditional studies, the annual data collection of the Uppsala Conflict Data Project (UCDP) recorded only one interstate armed conflict in the period 2004–2010 (Themnér and Wallensteen 2011: 528).

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[2] An example is provided by the Political Instability Task Force (PITF), funded by the US Government (Goldstone et al. 2010).

Over the past few decades, much of the attention of conflict researchers has shifted to the study of civil war. The latter became more numerous during the Cold War, in part fueled by the emergence of many new and politically unstable states, in part by great-power proxy wars. However, since the peak in 1992 there has been a 30% decline in the number of on-going civil wars and the number of annual battle-related casualties remains at an unprecedentedly low level. While major reversals can by no means be excluded, a study of factors associated with civil conflict in the past argues that these factors are also in decline (Hegre et al. 2013).

Partly because of the apparently declining occurrence and intensity of civil wars, researchers have increasingly expanded their research focus to include other forms of conflict, such as state repression and one-sided violence (Sullivan, Loyle, and Davenport 2012, Schneider, Bussmann, and Ruhe 2012, both this issue)[3], urban violence (Urdal and Hoelscher 2012, this issue), as well as non-violent forms of conflict over water (Bernauer et al. 2012, this issue). Most of this violence is of relatively low intensity, compared to the major internationalized civil wars. Building on insights from WEIS and the Conflict and Peace Data Bank (COPDAB) project (Azar 1980), various new event-data projects have also included cooperative events in their data coding efforts (King and Lowe 2004; Wolf et al. 2004; Kalbhenn and Bernauer 2012; Bernauer et al. 2012, this issue).

In many recent projects geographical coverage has also become more diversified. Up to 1945, Europe was a major war arena. During the Cold War, politico-military tension was particularly high in Europe, but no interstate war erupted across the Iron Curtain and, with only a few exceptions, casualty numbers in Europe were low. For instance, the enduring conflict in Northern Ireland (Sullivan, Loyle, and Davenport 2012, this issue) never reached a very high level of severity. This positive trend was temporarily broken with the post-Cold War flare-up in violence in Europe following the break-up of the Soviet Union and the Yugoslav Federation. The article on Bosnia by Schneider, Bussmann, and Ruhe (2012, this issue) focuses on the most serious of these conflicts.

During the Cold War, three of the largest wars took place in East Asia (Chinese Civil War, Korean War, Vietnam War), which has since become remarkably free of armed conflict. South Asia, the Middle East, and Africa have since become the major arenas of armed international or domestic conflict. The articles by Salehyan et al. (2012, Africa), Urdal and Hoelscher (2012, Asia and Subsaharan Africa), Bernauer et al. (2012, the Mediterranean, Middle East, and the Sahel), Linke, Witmer, and O'Loughlin (2012, Iraq), Sullivan, Loyle, and Davenport (2012,

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[3] Following in the footsteps of Feierabend, Feierabend, and Nesvold (1973), Rummel (1994), and many others.

Northern Ireland), Schneider, Bussmann, and Ruhe (2012, Bosnia), and Raleigh (2012, Africa) reflect the diversified geographical orientation of recent event-data research. However, as event-data studies increasingly focus on particular geographic areas, they also become more dependent on reporting from places which traditionally have been of marginal interest to international media and hence are covered less regularly and reliably. Several articles in this special issue are representative of innovative approaches that have been developed to cope with these difficulties (e.g. Chojnacki et al. 2012, this issue). One particularly noteworthy feature of several of the new datasets presented in this special issue is that they offer geo-referenced coding of events (e.g. Salehyan et al. 2012; Bernauer et al. 2012; Raleigh 2012), even if the main trend towards a decline on global violence is not contradicted. Such geo-referencing allows researchers to either control for spatial clustering effects of events, or (even better) develop spatially-oriented and more fine-grained explanations of the phenomenon of interest.

We have organized the ordering of the articles in this special issue according to a very simple logic. We start with articles that mainly present new datasets, then move on to articles that examine determinants of individual conflicts or countries in depth, and end with articles that focus on determinants of conflicts world-wide. Most of the articles in the last two categories also present new datasets.

New datasets

Salehyan et al. (2012) present the Social Conflict in Africa Database (SCAD). This dataset offers information on different forms of social and political unrest in Africa, including, for instance, protests, riots, strikes, government repression, and communal violence from 1990–2010. The data are geo-referenced and characterize these events in terms of time, actors, intensity, and other attributes.

Chojnacki et al. (2012) present the Event Data on Conflict and Security dataset (EDACS). Like the other new datasets presented in this special issue, the EDACS dataset is geo-referenced. This article includes an extensive discussion of challenges in geo-referenced event-data coding and ways and means by which the EDACS project has addressed these challenges.

Bernauer et al. (2012) provide an exampe of a growing number of event-data projects that involve issue coding. The WARICC (Water-Related Intrastate Conflict and Cooperation) dataset covers 35 countries in the Mediterranean, the Middle East, and the Sahel between 1997 and 2009.

In-depth studies of individual conflicts or countries

Linke, Witmer, and O'Loughlin (2012) study insurgent-coalition interaction in Iraq based on war logs published on WikiLeaks for the years 2004–2009. They seek to account for the dynamics of insurgency based on a spatio-temporal model of reciprocity that also considers such effects contingent on majority ethnic region, urban and non-urban location, and district income.

Sullivan, Loyle, and Davenport (2012) examine how state repression influences political dissent, contingent on when repression occurs. The analysis uses new event data on the "Troubles" in Northern Ireland in 1968–1974 to study whether repression (contingent on past increases or decreases in repression) increase the level of dissident action.

Schneider, Bussmann, and Ruhe (2012) study the determinants of one-sided violence, focusing on the extent to which such violence is driven by retaliation (which frequently materializes in the form of retaliation against civilians, developments on the battlefield, or behavior of international actors. This analysis is based on the Konstanz One-Sided Violence Event Dataset (KOSVED) and other sources.

Regional to global conflict studies

Urdal and Hoelscher (2012) use a new event dataset on urban violence in 55 major cities in Asia and sub-Saharan Africa for the 1960–2009 period. This dataset offers information both on non-violent (e.g. demonstrations and strikes) and violent political actions (e.g. riots, terrorism, armed conflict). They explore a wide range of potential determinants of urban social unrest, for instance income, economic inequality, and youth bulges.

Raleigh (2012) uses the Armed Conflict and Location Dataset (ACLED) to examine where and when violence against civilians occurs within civil wars , in developing countries. She explores a wide range of determinants of timing and location of such violence, including accessibility of targets of violence, characteristics of the attacker, the geography of frontlines in a conflict, or the strength of a violent group relative to its competitors.

The article by Kreutz (2012) focuses on whether natural disasters can facilitate conflict resolution. His argument is that governments are likely to be more interested in making concessions to separatist challengers (and thus to end armed hostilities) when exposed to strong public demands for disaster relief, the assumption being that ending hostilities makes it easier to deliver such relief. To test this hypothesis, he uses data on new negotiations, ceasefires, and peace agreements in civil war from 1990–2004.

The special issue ends with a wide-ranging review by Schrodt (2012), which examines the drivers of the recent renaissance in the development of political event datasets. He concentrates mainly on technological changes (which we dubbed above as the supply-side factors), discusses the departure of new event-data projects from the initially state-centric focus, reviews major new initiatives in this area, highlights the increased institutional support for large-scale event-data projects, points to the remaining challenges in event-data coding, and also sketches potential solutions to some of these challenges, e.g. use of open-source natural language processing tools, standardization of coding taxonomies, and near-real-time coding systems.

The set of articles published in this issue is by no means exhaustive.[4] However, we believe that these articles are representative of some general trends in the field of events data collection and analysis. As the digitalization of information continues to grow and technologies and methods for information retrieval and coding improve, events-data analysis is likely to further expand its already strong position in the study of cooperative and conflictive interactions within and between states.

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[4] For a recent article using Twitter messages to analyze the short-term dynamics 2008–2009 Gaza Conflict, see Zeitzoff (2011).

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