

## **The COW Typology of War: Defining and Categorizing Wars (Version 4 of the Data) by Meredith Reid Sarkees**

David Singer and Mel Small began the Correlates of War Project with an attempt to define war in a way that they hoped would be both discriminating and complex in order to differentiate war from other types of violence. Their starting point was a definition of war as sustained combat involving substantial fatalities: “We must define war in terms of violence. Not only is war impossible without violence (except of course in the metaphorical sense), but we consider the taking of human life the primary and dominant characteristic of war.” (Small, Melvin and J. David Singer. *Resort to Arms: International and Civil War, 1816–1980*. Beverly Hills, CA: Sage, 1982: 205-206.). From this point, their definition of war hinged on two primary criteria: the threshold of battle-related fatalities of troops in combat, and the status of the war participants. Singer and Small ultimately decided on a threshold of 1,000 battle-related deaths as the level of hostilities that differentiates war from other types of conflict. In terms of the second criterion, the status of the war participants, wars had to have participants on both sides that had organizations able to conduct combat (armed forces). Thus their overarching definition of war was: sustained combat, involving organized armed forces, resulting in a minimum of 1,000 battle-related fatalities (later specified as 1,000 battle-related fatalities within a twelve month period).

Singer and Small’s primary interest, however, was in developing a typology that differentiated the various types of war. This typology was based upon their classification of the war participants, and they focused their attention on the members of the interstate system, or states, which by definition had to have the means of exerting their independence and playing a role in international relations (see the dataset of the system membership list). Inter-state wars were those that were conducted between or among members of the interstate system. Extra-

systemic wars were those that were conducted between a system member and a nonstate entity (not a system member). Civil wars were conducted between a state and a group within its borders.

Subsequent changes in some of the classifications were adopted in intermediary releases of the data (see Sarkees, Meredith Reid. “The Correlates of War Data on War: An Update to 1997.” *Conflict Management and Peace Science* 18, no. 1 (Fall 2000): 123–144.) This new version (#4) of the COW war datasets also has incorporated these changes from the initial Singer and Small classifications. Inter-state wars remain the same; extra-systemic wars are now referred to extra-state wars, and some former extra-systemic wars have been re-classified as intra-state wars; the category of civil wars has been expanded to intra-state wars (now including intercommunal wars); and a new category of non-state wars has been added. The remainder of this article will be devoted to summarizing the new typology of wars and defining the major variables used in describing these wars, including the temporal domain; battle-related deaths, or battle-deaths; the “bulk of the fighting”; the war’s duration; the initiator; the outcome; and the location of the wars. It is also possible for conflicts to change classifications, and the conditions under which such transformations take place will be enumerated. For a more complete description, see: Sarkees, Meredith Reid. “Defining and Categorizing Wars,” in Sarkees, Meredith Reid and Frank Whelon Wayman *Resort to War: A Data Guide to Inter-State, Extra-State, Intra-State, and Non-State Wars, 1816–2007*. Washington, DC: CQ Press, 2010: 39-73).

### **The Initial COW Classification**

The classification of wars by J. David Singer and Mel Small originally appeared in 1972 in *The Wages of War 1816-1965: A Statistical Handbook*, which described the two types of

international wars, inter-state and extra-systemic. Small and Singer updated the data on these wars in 1982 in *Resort to Arms: International and Civil War, 1816-1980*, which also included data on civil wars. Since this latter work not only represented an updating and expansion of the data but also included further clarification of some of the coding rules, it will be the primary source for the following discussion of the initial COW categorization of wars.

### **International War**

Wars were classified into two major groupings: international wars and civil wars. International wars were further subdivided into two major types, inter-state and extra-systemic wars. Inter-state wars were defined as those in which a territorial state that qualifies as a member of the interstate system is engaged in a war with another system member. An inter-state war must have: sustained combat involving regular armed forces on both sides and 1,000 battle-related fatalities among all of the system members involved. Any individual member state qualified as a war participant through either of two alternative criteria: a minimum of 100 fatalities or a minimum of 1,000 armed personnel engaged in active combat (*Resort to Arms*, 56).

Extra-systemic wars were those in which the interstate system member engaged in a war with a political entity that was not a system member. Extra-systemic wars were initially defined as those in which the system member's forces were engaged in sustained combat with forces (however irregular and disorganized) of a political entity that failed the requirements for system membership. Since Small and Singer were concerned with the war experience of system members, sustained combat required a minimum of 1,000 battle-related fatalities for the system member alone during each year of the war. Extra-systemic wars were further divided into two major subtypes, depending once more on the political status of the adversary. The first subtype,

the “imperial war,” involved an adversary that was an independent political entity, that was seeking to maintain that independence, and that did not qualify as a member of the interstate system (because of limitations on its independence, insufficient population to meet the interstate system membership criteria, or a failure of other states to recognize it as a legitimate member). The war was classified as “colonial” if, on the other hand, the adversary was already a colony, a dependency, or a protectorate composed of ethnically different people and located at some geographical distance from the given system member, or at least peripheral to its center of government. Small and Singer indicated that internationalized civil wars should be considered international wars as well. In internationalized civil wars, a system member intervenes in a civil war that is ongoing within another state. A state’s involvement in a war outside its borders thus represents international warfare, though such wars were included in the Civil War dataset.

It should be noted that extra-systemic wars derived their identity from the involvement of a system member’s active participation in a war beyond its own “metropolitan” territory and against the forces of a political entity that was not a recognized member of the system (*Resort to Arms*, 56). This distinction of classifying wars on the basis of being peripheral to the center of government (or the “metropole”) is the key to understanding the initial differences between extra-systemic and civil wars. Within an empire, a distinction was sometimes made between a part of the core, called the metropole, and the peripheral area of the empire, often called the colonies. Hence, wars that took place between colonies and the mother country (or extra-systemic wars) were described as wars between the periphery and the metropole. Small and Singer utilized the metropole distinction not only in terms of describing extra-systemic wars but also in differentiating wars **within** the territory of system members as well. In their initial definition, civil wars were those that took place within a metropole of a state, while wars which

took place within a state but between the government and an entity outside the metropole were classified as extra-systemic. It is critical to understand the initial emphasis on the metropole/periphery distinction because the elimination of this distinction was the one major change in the COW war typology (reflected in the 1997 release of the data and detailed in Sarkees, 2000) that is also reflected in the new expanded typology that will be described below.

### **Civil War**

The classification of civil war was built on three dimensions: internality, types of participants, and the degree of effective resistance. In general, a civil war was defined as any armed conflict that involved; (1) military action internal to the **metropole** of the state system member; (2) the active participation of the national government; (3) effective resistance by both sides; and (4) a total of at least 1,000 battle-deaths during each year of the war.

One distinction made here (and conversely in the definition of extra-systemic wars above) was that significant military action had to occur between political entities within the boundaries of the metropole. However, unlike the distinction in extra-state wars, the metropole is not contrasted with distant colonies; here the metropole is the core of the system member itself. When examining civil wars (and adding them to the database), Small and Singer concluded that there were wars that took place within states having characteristics that resembled extra-state conflicts between a metropole and a periphery, particularly when there were areas within the state boundaries that were not well integrated into the central government, or had characteristics that were different from those of the metropole or the capital of the state. In such cases, wars between these distant areas (often seeking autonomy) were more like extra-systemic wars than they were like civil wars that frequently were urban conflicts for control of the capital city.

Consequently, Small and Singer classified wars that took place between the metropole and a periphery within a state as extra-systemic wars as well. Civil wars were then specifically defined as involving military action internal to the metropole of the system member. Given this criterion, it was necessary to construct rules for distinguishing the metropole of a state from its nonintegrated areas, and this distinction between the metropole (or core) of a state and the periphery was reflective of the degree of the internal cohesion of a state. A territory was regarded as integrated (or part of the metropole) if all the following conditions were true: (1) there were no constitutional provisions denying the subjects the right to participate in the government; (2) there were no restrictive provisions based on ethnicity, race, or religion; and (3) districts included in the national capital or federal district were considered to be integrated, regardless of the manner in which they were administered (*Resort to Arms*, 211-212). To reiterate, in terms of wars that took place within the boundaries of a system member, wars that were fought by the central government against actors or territories not integrated into the metropole were considered extra-systemic wars, and wars within the metropole were civil wars. The extent to which this classification seemed to be in conflict with the COW Project's emphasis on the territorial state as the basis of many of its datasets became one of the motivations for the endeavor to expand upon and revise the initial COW war typology.

The second criterion for civil wars was that the national government in power at the time hostilities begin had to be an active participant (*Resort to Arms*, 213). This requirement has made the COW discussion of civil wars more specific and limited than those in other research projects. Internal war, and rebellion as too broad, including conflicts of disparate types. However, in their overall typology of war, they did create space for the other types of internal war that involved other types of actors. Their category of internal war included three subcategories: civil wars

(involving the national government); regional internal war (involving a subnational government); and communal violence (not involving government at any level). Small and Singer did not gather data on the latter two types of war, though this has been part of the recent progress within the COW Project.

### **An Expanded Typology of War**

In 1994, the COW Project began a process of slightly modifying and updating its war typology and coding rules. The motivating factors for these changes included the desires to: expand the war typology to include additional types of armed conflict; modify a coding rule (the metropole distinction); change the coding of certain variables in order to make them more comparable across all the war types; and change some of the terminology and coding practices that had been perceived as Eurocentric. Descriptions of the initial stages of this process were presented by Meredith Reid Sarkees and J. David Singer at conferences in 1996 and 2001, and were published by as “Correlates of War Warsets: An Update” (Sarkees, 2000).

Furthermore, there appeared to be a growing number of armed conflicts and/or important combatants that did not fit comfortably within the existing COW categories. In particular, trends have signaled the importance in international interactions of other subnational (or intranational) and extranational entities alongside the territorial state. In the absence of effective institutions (domestic and/or international), many problems have led to the emergence of new actors and new types of conflict. For instance, the flourishing of nonstate actors has been related to, among other things, the increase in worldwide arms trade and the development of private armies; the growth of international drug trafficking; the expanding power of multinational corporations; and the fact that boundaries are increasingly permeable by people, weapons, drugs; and the formation

of diverse coalitions that acquire weapons and form armies. Separately, and in combination, these forces have contributed to the increasing number of nonstate actors that have the motivation and capacity to engage in warfare both within traditional states and across state borders.

The expanded typology, presented below in Table 1 incorporates several additions and changes to the initial COW war typology. In terms of the additions, the primary one is the addition of wars conducted by nonstate actors. These can be found in four places on the chart. Subsection IV, Non-state Wars, includes those wars conducted by nonsystem member actors that take place beyond the confines of one state. Category IV-A contains those wars that take place in a nonstate territory, or generally the territory of autonomous entities, or territory in pre-state-formation areas (war type 8). Category IV-B includes wars by nonstate entities that take place within two or more states (war type 9). Wars between or among nonstate actors also appear within the category of Intra-state Wars as Regional Internal Wars (war type 6) and Intercommunal Wars (war type 7). Regional Internal Wars and Intercommunal Wars were categories mentioned by Small and Singer as elements of internal wars but were never included in their databases. Both categories take place within the territory of a state. Intercommunal wars involve at least two parties, none of which is a government, while regional internal wars have a local or regional government (not the national government) as one of the parties to the war.

As hinted at above, the expanded typology does contain one major change in the coding rules promulgated by Small and Singer. A consequence of the metropole distinction, which was utilized in both the extra-systemic and civil war categories, was that disparate conflicts were being grouped together, and, conversely, similar conflicts were placed in different classifications. In particular, some wars that took place within the territory of the system member (as identified



by the datasets on entities, on territorial change, and on material capabilities) and which were often commonly referred to as civil wars, were categorized as extra-systemic wars because the area of the conflict was considered part of the periphery, which was not incorporated into the state's metropole. The classification of these wars as extra-systemic wars and thus international wars appeared inconsistent with COW's state-centric perspective in which emphasis is placed on territory as a defining characteristic of system members. Though COW's initial typology highlighted the ways in which intra-state metropole-periphery wars are similar to extra-systemic metropole-periphery wars, it was decided that the metropole distinction would be eliminated in an attempt to maintain the consistency of the territorial focus of the growing number of COW datasets. Thus both the extra-systemic and civil war categories have been redefined (see below). Finally, in an attempt to rectify what some critics saw as the Eurocentric bias within the data, some of the terminology and variable descriptions have been changed. In particular, the variable of battle-related deaths has been redefined, and extra-systemic wars are now referred to as extra-state wars.

Maintaining the focus on the members of the state system, an elemental four-pronged grouping of wars emerged: wars between or among states, wars between a state and nonstate forces outside of the state, wars within states, and wars between or among nonstate actors taking place outside of states. This change involved the deemphasizing of the initial international<en>civil war distinction, and focusing instead on a quadripartite typology of: inter-state wars (definition remains the same); extra-state wars (redefined); intra-state wars (also redefined); and non-state wars (a new category). The new master typology, or expanded typology, of war (shown in Table 1) allows for an examination of the totality of modern war,

including--to the limits of our ability to detect them--all the cases of sustained combat with substantial fatalities over the past 192 years.

**Table 1 The COW Project's Two Typologies of War**

Traditional typology	Expanded typology
I. International wars	I. Inter-state wars (war type 1)
A. Inter-state wars	II. Extra-state wars
B. Extra-systemic wars	A. Colonial--conflict with colony (war type 2)
(1) Colonial	B. Imperial--state vs. nonstate (war type 3)
(2) Imperial	III. Intra-state wars
II. Civil wars	A. Civil wars
	1. for central control (war type 4)
	2. over local issues (war type 5)
	B. Regional internal (war type 6)
	C. Intercommunal (war type 7)
	IV. Non-state wars
	A. In nonstate territory (war type 8)
	B. Across state borders (war type 9)

The primary definitional change in the new typology was removing the distinction between the metropole and the periphery within both categories of extra-systemic (now extra-state) war and civil war. This change ensured that all wars that take place within the recognized territory of a state would fall under the intra-state war category and, conversely, that only wars between a state and a nonstate entity outside its borders would be included in the extra-state war category. This redefinition of terminology has resulted in the reclassification of thirty wars that were included as extra-systemic wars in the 1992 version of the data, so that they are now coded as intra-state wars. Of these thirty (see Table 2), fourteen had been included as extra-systemic in *Resort to Arms* (96-99) and sixteen had been included in subsequent data updates. Those familiar with the extra-systemic list in *Resort to Arms* may also note that two other wars have been removed. On the basis of additional information, war #427, First Kashmir, has been reclassified as an inter-state war and war #409, and Russian Nationalities, has been subdivided into three inter-state wars,.

**Table 2 Extra-systemic Wars Reclassified as Intra-state Wars**

1992 Extra-systemic war number	1992 Extra-systemic war name	Current intra-state war number	Start year
304	Greek	506	1821
312	Albanian	512	1830
315	Belgian Independence	515	1830
316	First Polish	517	1831
319	First Syrian	518	1831
322	Texan	527	1835
323	First Bosnian	528	1836
328	Second Syrian	533	1839
333	Second Bosnian	540	1841
340	Hungarian	554	1848
346	First Turco-Montenegrin	556	1852
352	Second Turco-Montenegrin	562	1858
354	Second Buenos Aires	573	1861
355	Second Polish	580	1863
360	First Cretan	583	1866
366	Mitre Rebellion	600	1874
367	Balkan	601	1875
395	Third Cretan	631	1896
396	Druze-Turkish	630	1895
406	Ilinden	640	1903
408	Yunnan	675	1916
416	Chinese Muslim	703	1928
417	Soviet-Turkistani	711	1931
436	Tibetan	741	1956
437	First Kurdish	752	1961
439	Philippine-MNLF	786	1972
442	Ethiopian-Eritrean	798	1975
443	Kurdish Autonomy	797	1974
451	Ogaden	805	1976
454	Tigrean	808	1978

## **The Coding of Wars: Defining Variables**

In coding wars, or in determining the specific classification of war into which a conflict might fall, there are several criteria that relate to all the categories of war. Each of these criteria will be described in a general fashion, followed by a discussion of how these elements are applied within each of the four categories of war.

### **The Temporal Domain**

As described *Wages of War*, Singer and Small believed that the international system that emerged after the Napoleonic Wars was distinctive. Thus when gathering information about wars, they utilized the same temporal domain of January 1, 1816 to the present.

### **Sustained Combat--Battle-Related Deaths**

As described above, Singer and Small began with a definition of war as sustained combat, involving organized armed forces, resulting in a minimum of 1,000 battle-related fatalities. For most wars, the concept of sustained combat was left relatively undefined by Singer and Small, who argued that there was no temporal definition of sustained combat and that such combat could be lengthy or brief (*Wages of War*, 45). It is only within the category of civil wars that the requirement of sustained combat was more specifically described (see below). However, the criterion of sustained combat has two fundamental purposes. Initially the requirement of sustained combat (or mutual military action) is instrumental in contrasting war with one-sided violence, such as massacres. Thus incidents in which there were large-scale massacres of disarmed combatants (or prisoners) outside of combat operations would not be considered wars. Second, the requirement for sustained combat serves to eliminate from consideration as wars any

hide-and-seek operations that involve no combat over an extended period but nevertheless kill many troops through disease.

The related issue is how Singer and Small then defined what constituted battle-related deaths. They settled on battle-related fatalities among military personnel only as the measure of a war's severity. "This was defined to include not only those personnel killed in combat but those who subsequently died from combat wounds or from diseases contracted in the war theater. It should also be noted that these figures include not only personnel of the system member but native troops from the colonies, protectorates, and dominions who fought alongside them" (*Wages of War*, 48-49).

Though Singer and Small decided on a threshold of 1,000 battle-related fatalities to differentiate wars from lower levels of violence, this requirement was framed in slightly different terms for each of the three categories of war in *Resort to Arms*. In terms of inter-state wars, the requirement was for a total of 1,000 fatalities between or among all the state war participants. Since Small and Singer were primarily interested in examining the war experience of the members of the interstate system, when they examined extra-systemic wars, they gathered information only on the fatalities suffered by the system members (not the nonstate participants). The criterion for an extra-systemic war was that the system member involved in the war had to suffer at least 1,000 battle-related fatalities per year. The requirement was also phrased so that if the war lasted more than a year, the system member's battle-deaths had to reach an annual average of 1,000, a threshold that was established to eliminate colonial or imperial struggles that dragged on for long periods of time, but which suffered variable levels of fatalities (*Resort to War*, 56). The fatality figures for the nonstate participants were not included because "while such deaths did not go unmourned, they often went uncounted or unrecorded" (*Resort to War*, 56).

Thus the lack of reliable information contributed to the decision not to include nonstate deaths in the war threshold. The result was, however, that the battle-death threshold was significantly higher for extra-systemic wars than for inter-state wars.

The same decision was not made by Small and Singer in regard to the definition of battle-deaths in civil wars. Since terrorizing the populace and civilian fatalities are fundamental parts of guerrilla wars, Small and Singer included civilian combat-connected fatalities in their total civil war deaths. This distinction also made practical sense in that in civil wars it is much more difficult to distinguish the combatants from the civilian population. Thus historical accounts of civil wars frequently provide only total fatality figures, combining combatants and civilians. However, since including civilian deaths put the civil war data at odds with the other war categories, the battle-related death definition for civil wars has been changed.

In order to provide consistency among the COW war datasets, the decision was made in 1997 to standardize the definition of battle-related deaths. The current requirement for all categories of wars is for 1,000 battle-related deaths per year (twelve-month period beginning with the start date of the war) among all the qualified war participants. Battle-deaths include not only those armed personnel killed in combat but also those who subsequently died from combat wounds or from diseases contracted in the war theater. In determining if the war battle-related death threshold has been reached, civilian fatalities are excluded regardless of which type of war is under consideration. There are a couple of reasons for including deaths by wounds and disease. Deaths due to disease in the combat zone are an integral repercussion of a state's war participation, and they can be significantly higher than the deaths caused directly by the enemy. Furthermore, it may not be recorded whether a combatant died during actual battle or later from a bullet wound, or the virus that swept through the army hospital, for instance. Most fatality

records do not report separately on deaths by disease; thus it would be easier and more consistent to include them in the battle-related fatalities rather than to try to disaggregate them. Currently, the requirement for 1,000 battle-related deaths per year could only be considered to be an average of 1,000 battle-deaths per year in circumstances in which there was evidence of significant sustained combat within all years of the war yet insufficient evidence to establish concretely the exact fatalities per year. The impact of this change in definition was felt most within the extra-state war category, where we have now gathered data on the deaths among the nonstate war participants. Including the nonstate-participant deaths in the total to meet the war threshold has significantly increased the number of extra-state wars.

Gathering fatality figures is a complex endeavor. Many historical accounts of war contain only vague generalizations about battles that resulted in severe (or light) casualties. Authors frequently utilize the terms *deaths* and *casualties* interchangeably, for instance, noting in two different sentences that a specific war resulted in 1,000 casualties or 1,000 deaths, though generally the term *casualties* refers to the combination of the number of those who died and the number of wounded. Many sources report only total death figures, combining deaths of civilians and combatants.

There are also wide differences even within the death figures provided for a specific war. The death numbers from a variety of sources, each of which claims to be accurate, can vary widely, with one source reporting deaths that are two or three times as high as those reported in other sources. Probably more significant, however, is the reality that war fatalities represent valuable and contestable political information. States often have an incentive to minimize their own losses in battle to protect themselves from criticism for failure or an incentive to inflate their deaths in order to garner international sympathy and support. Conversely, states may also



downplay the fatalities they caused their opponent so that they do not appear to be excessively bloodthirsty, or they may inflate the opponents fatalities as a way of proving the efficacy of their own military campaign.

Although gathering fatality estimates was difficult in the past, especially in extra-state wars that were sometimes fought in remote areas, the process has not necessarily become easier in the present. Even though today there is an impressive array of nongovernmental agencies with resources devoted to gathering statistics on the costs of war (though many are primarily concerned with civilian deaths), governments have also displayed their ability to utilize technology as a means of concealing war fatality figures.

In many cases, battle-death figures are not available, and sources provide only casualty numbers, which include deaths and those wounded. In dealing with casualty numbers, scholars have developed techniques for estimating battle-deaths when given casualty figures. Bodart found that in nineteenth-century wars there were about 10 killed for every 35 wounded in battle, but 10 to 15 percent of those classified as “wounded” later died of wounds, producing a final ratio of killed to wounded very close to 1:3 (Gaston Bodart, *Losses of Life in Modern War*. Oxford: Clarendon, 1916). Consequently, we utilize a 3:1 ratio of wounded to killed in order to calculate the number of battle-related deaths when only casualty estimates are available. However much we have attempted to discern accurate battle-death statistics, we reiterate Small and Singer’s caution: “Despite these multiple cross-checks and a large dose of skepticism at every turn, we must reemphasize the fact that our battle death figures are only estimates (*Resort to Arms*, 73).” The figures can best be seen as general guides concerning the relative magnitude of the costs of war participation.

## **Who Is Fighting Whom? Organized Armed Forces**

Singer and Small decided to base their typology of war on the characteristics of the war participants. The key determination in the classification of wars was based on the judgment of who was fighting whom. To begin, they thus needed a list of those entities that might be involved in international politics (including war). Consequently, they developed a list of what they referred to as the interstate system members. Membership in the interstate system was based on criteria of population, territory, independence, sovereignty, and diplomatic recognition. Since states generally possess organized armed forces (a requirement in the definition of war), the members of the interstate system were considered to be the predominant actors in war. Any individual member state qualified as a war participant through either of two alternative criteria: a minimum of 100 fatalities or a minimum of 1,000 armed personnel engaged in active combat. Extra-systemic (now extra-state) wars involved system members fighting against another entity, and the goal of identifying these other entities led to the creation of the States, Nations, and Entities dataset, which not only included the members of the interstate system but also identified other autonomous entities and dependencies, which might be participants in extra-state wars (Phil Schafer. "States, Nations, and Entities from 1492 to 1992." Ann Arbor: University of Michigan, 1995, later updated to the Geopolitical Units dataset).

## **The Bulk of the Fighting**

Once the participants in the war have been identified, the question of "who is fighting whom?" devolves into the issue of describing the war in a way that identifies the primary combatants. This is done by determining which of the parties involved in the war were doing the "bulk of the fighting." Singer and Small do not specifically mention this criterion when

describing their initial war classifications, though they did utilize it as the basis for war transformations (which will be described below). However, they did require that inter-state wars must include system members as sufficiently active participants on each side of the war. They also clearly utilized a related judgment when delineating wars that had both inter-state and intra-state components, such as the Franco-Spanish War of 1823, which was divided into two separate wars--a civil war and an inter-state war. As wars have become more complex, involving not only multiple state actors but a plethora of nonstate entities as well, the task of ensuring that wars are placed within the appropriate categories has become more complicated. Thus we have decided to make the "bulk of the fighting" criterion a bit more explicit.

There are a number of measures that could be used to try to capture the essence of which of several participants on one side of a war is doing the bulk of the fighting. Probably the easiest measure (favored by historian Mel Small) is merely the judgment of historians about who the major war participants were. A slightly more operational measure would be to ascertain which party had the greater number of troops in the theater of war; however, a party's being there does not necessarily mean that it was fighting. Alternatively, one could argue that the party that suffered the largest number of fatalities did the bulk of the fighting, or compute ratios of deaths or casualties per troops committed. Yet all these indicators seem to measure who suffered the most in the war and to downplay the role of participants who were able to perhaps utilize technology to fight on a less personal level and thus reduce their fatalities. Consequently, we have instead decided to utilize the determination of which party was causing the greatest number of battle-deaths as the measure of which combatant was doing the bulk of the fighting. Though the information needed to make this determination may be slightly more difficult to discern than the number of fatalities suffered, this definition ensures that we are identifying the participants

engaged in the violence that is at the core of war. It also allows us, for instance, to classify states that use bombs or missiles to cause significant fatalities (while suffering few themselves) as the major war participants.

## War Duration

The coding rules governing the duration of wars have remained unchanged from *Resort to Arms* and rely on the war's start date, end date, and breaks in the hostilities.

Each war's *opening date* is that of the formal declaration, but only if it is followed immediately by sustained military combat. If hostilities precede the formal declaration and continue in a sustained fashion up to and beyond that latter date, the first day of combat is used. Even in the absence of a declaration, the sustained continuation of military incidents or battle, producing the requisite number of battle deaths, is treated as a war, with the first day of combat again used for computing duration (*Resort to Arms*, 66).

The war then continues until its termination, or as long as there is sustained military combat resulting in 1,000 battle-related deaths per year. The end date may be the date of an armistice or cease-fire agreement, as long as conflict does not resume thereafter. If there is a delay between the cessation of military action and the armistice, or if the armistice fails to halt the hostilities, then the end date is the day that most clearly demarcates the close of sustained military conflict. The date of the final peace treaty would not be used unless it coincided with the end of combat.

In the data-files that present listings of the wars (rather than listing the individual participants), the overall dates for the wars indicated in fact represent the maximum duration of the war (or the minimum start date and the maximum end date). Within the participant datasets themselves, each individual war participant is described in terms of the dates that it entered and left the war. Frequently participants join an ongoing war at a later date, while in other multiparty wars one party may be defeated or just withdraw from the war before the

others. In such cases, the entity's active participation period (start date to end date) delineates the period of its own forces' involvement in sustained military combat. Relatedly, for wars that require participants to be members of the interstate system, a state may be included as a war participant only for the period during which it is a system member. For example, Baden, Bavaria, and Württemberg entered the Franco-Prussian War of 1870-1871 on the first day (July 19, 1870). Even though they had troops in active combat during the entire war (until 1871), their war participation is coded as ending in November 1870, when they became integrated into the new German empire and thus ceased to be independent system members.

Coding the end date of a war or a combatant's participation in a war is not always clear-cut and can be related to the difficulties in ascertaining fatality figures. Wars (especially civil wars) may not necessarily end through a cease-fire or an agreement of any sort but may instead peter out as the rebels just cease fighting or retreat to fight another day. In such cases a judgment has been made about the date at which the last sustained combat took place that contributed to 1,000 battle-related deaths within a year. In essence, a war ends if: (1) there is a truce or other agreement that ends combat for a year or more; (2) if the apparent defeat of one side (absent a formal surrender or truce) ends combat for one year or more; or (3) if a twelve-month period passes without 1,000 battle-deaths. In the last case, the termination date for the war is the last day in which it can be said that 1,000 battle-deaths were suffered during the previous twelve months (Wording from Jeffrey Dixon, "Suggested Changes to the COW Civil War Dataset 3.0," 9).

There must be clear evidence that fighting has shrunk to this level. If we have only an overall total fatality figure for multiple years, and we cannot find how many died within a particular twelve-month period, unless we have specific evidence of a lull, we continue to classify the conflict as a war as long as there are on average 1,000 battle-deaths per year.

A war's duration is generally calculated by subtracting the start date from the end date, and resulting in a measurement of the war's duration in months or days. One exception to this procedure concerns wars in which there is a break in the fighting. Small and Singer raised the concern about a cessation of hostilities arising out of a truce, a temporary cease-fire, or an armistice agreement. In general, if the fighting stopped for thirty days or less, no break in the war was coded; however, if there were a cessation of hostilities that endured for more than thirty days, this break was marked by essentially ending participation (end date 1) and then resuming the war on a second start date. This break then led to a reduction in the war's overall duration measure equal to the length of the interruption.

To illustrate, the three-week truce (December 19, 1933 to January 8, 1934) arranged by the League of Nations during the Chaco War is not counted as a break, and the war is treated as if it had run continuously for the three years from June 15, 1932 through June 12, 1935, for a duration of 35.9 months. On the other hand, because a formal truce lasted for two of the total six months between the onset and termination of the Second Schleswig-Holstein War (February 1, through August 20, 1864), that war is treated as having a duration of only 3.6 months (*Resort to Arms*, 66).

In wars there are periods when the level of violence drops for a time and then rises again. For instance, fighting may be informally halted during a rainy season, only to resume when weather conditions improve. In a sense, these breaks in fighting are not the same. Truces, cease-fires, and armistice agreements represent a commitment to end hostilities, at least on some level, whereas temporary lulls in the fighting do not. Thus we continue the practice of treating them in slightly different fashion. Temporary lulls in the fighting will not be recorded as breaks in the fighting; however, should such a lull last for more than a year and there are not 1,000 battle-related fatalities within that year, the war will be coded as having ended. Should the hostilities resume after that point, a new war will have begun. A break in the fighting that is the result of a specific agreement such as a truce, cease-fire, or armistice agreement, however, will continue to

be coded as a break in the war (with secondary start dates and end dates) as long as it lasts over thirty days. Such a break can last up to a year in length. If hostilities resume after more than a year, a new war will be coded.

These restrictions on the length of a break do not apply to individual participants who withdraw from a multiparty war that remains ongoing with other participants. In such instances, one combatant can withdraw from a war and reenter it at any time. It is important to note that should a combatant cease its war participation and then reenter the war on the other side, that is not coded as a break in the entity's participation. Instead the combatant is given a second participant record with the new start and end dates.

### **War Transformations**

Wars themselves are often not as clearly delineated as our typologies and can often contain elements of different types of wars, and a war can, over its life span, metamorphose from one type to another. For instance, wars can be partially civil wars between the government and a rebel group yet can also include interventions by other states. COW has attempted to deal with such complexity by relying on the two major determinants: the principle of the mutual exclusivity of wars, and the classification of wars based upon the decision concerning which parties are doing the bulk of the fighting. Since wars are classified by the status of the participants, *mutual exclusivity* merely means that wars involving the same participants should not simultaneously appear in more than one war classification. This principle is utilized to prevent confusion or the multiple recording of fatalities that can result from having a war appear with two different names and in two different categories. It is possible for a state to be involved in two different wars at the same time, assuming that they involve different participants. A state -

could be involved in a civil war and an inter-state war at the same time, or even two civil wars (as discussed below). Yet a single war is never entered simultaneously at two points in the database. For instance, we would not enter the Vietnam War of the late 1960s as simultaneously an inter-state war and an intra-state war. It is assigned to one or the other category during a specific period based on its predominant characteristics.

Wars can also be complex, involving more actors than the standard two-party conflict. COW has attempted to capture this complexity through the concepts of internationalized wars and war transformations. Since the classification of any war is based on the types of participants involved, a war must thus change if the nature of the participants should fundamentally alter. For example, the nature of an inter-state war between two system members does not significantly change when one (or more) additional states join in the conflict, since the war remains one among system members. Extra-state and civil wars, on the other hand, are wars between a state and a nonstate entity either outside, or within, its borders. Such wars are classified as internationalized when other states intervene. The state intervener must qualify as a war participant either by committing over 1,000 troops to the conflict or by suffering 100 battle-deaths. The intervener may join the conflict on either the side of the government or the nonstate participant. This type of change may be a relatively minor one within the COW classification system. Within the datasets, a variable is included indicating whether the war is internationalized or not, and individual records are included for each system member involved that code the side of the war on which they are participating (for instance, on the side of the government or the side of the rebels in a civil war). This procedure holds as long as the initial combatants continue doing the bulk of the fighting. If, on the other hand, there is a change in the parties that are conducting the conflict that is sufficiently significant to alter the character of the war or the nature of the



actors, then the primary classification of the war also must change. If the party that is doing the bulk of the fighting changes, the classification of the war must change as well. Since COW has provided a mutually exclusive typology of wars, when the character of a war changes, the war in one category ends and a new war in another category begins. Probably the most well-known example that demonstrates these levels of change would be the Vietnam War. The war started out as a civil war in 1960 between the government of South Vietnam and the National Liberation Front (also known as the Viet Cong), and it was transformed into an internationalized civil war with the involvement of the United States in 1961. In 1965, however, the United States fundamentally altered the type of conflict when it started bombing North Vietnam, making this into a conflict between two system members, or between the United States and its ally South Vietnam on one side and North Vietnam on the other. At that point, the civil war ceased and an inter-state war had begun.

There are two general circumstances under which COW has decided that there is sufficient significant change to cause a shift in war classification. The first is when the outside intervener takes an action that fundamentally alters the nature of the conflict, for instance, in the Vietnam case, discussed above. The second and more common form of shift takes place when a state intervener takes over the bulk of the fighting from one of the original war participants. It thus replaces one of the parties as the major combatant, and the classification of the war must change to reflect the reality of who is fighting whom. As described above, the *bulk of the fighting* is defined in terms of which combatant is causing the greatest number of deaths among the opposition. Transformations in this regard are frequently marked by an increase in the armed forces committed to the war by the intervener, which then takes over the dominant combat role. Frequently, such transformations take place within civil wars, or wars between the central

government and a rebel group. If the outside state intervener is fighting on the side of the rebels and then takes over the bulk of the fighting, the conflict becomes an inter-state war between the intervener and the central government (such as when the United States took over the bulk of the fighting from the Northern Alliance against the Taliban government of Afghanistan in 2001). If the outside state is intervening against the rebels on the side of the government and takes up the bulk of the fighting, the war becomes an extra-state war between a state and a nonstate actor outside the intervener's territory.

This process of wars changing categories can work the other way as well. If a major combatant decides to withdraw from a conflict and the conflict continues with other parties, that specific war may end and the conflict may be classified as a different type of war based on the categorization of the war participants. For instance, the USSR had been involved in an extra-state war in Afghanistan against the mujahideen. When the Soviet troops withdrew, the extra-state war ended, though the conflict continued as a civil war when the Afghan government then took over the bulk of the fighting in its conflict with the mujahideen. Similarly, the United States and the "Coalition of the Willing" were involved in an inter-state war against Saddam Hussein's government in Iraq. When Iraq was defeated and withdrew from the war, the inter-state war ended and the conflict continued as an extra-state war between the Coalition and the Iraqi resistance.

Though transformations most commonly take place in the context of civil wars, they can take place within virtually any type of war: civil or intra-state to extra-state; intra-state to inter-state; intra-state regional to intra-state civil; extra-state to intra-state; extra-state to inter-state; extra-state to non-state; inter-state to intra-state; inter-state to extra-state; non-state to inter-state; and non-state to extra-state. The most complex set of transformations has taken place in

Afghanistan, which over the past thirty years has experienced a series of wars, beginning with intra-state war #810, the Saur Revolution in 1978. This war was followed by intra-state war #812, the First Afghan Mujahideen Uprising in 1978<en>1980, which was transformed by the USSR taking over the bulk of the fighting into extra-state war #476, the Soviet Quagmire in 1980<en>1989. The extra-state war was transformed by the withdrawal of the USSR into intra-state war #851, the Second Afghan Civil War in 1989<en>2001. The civil war was transformed again by the intervention of the United States and its allies into inter-state war #225, the Invasion of Afghanistan in 2001, which then became extra-state war #481, Afghan Resistance, 2001<en>present after the defeat of the Taliban government. Table 3 lists the major transformations that have taken place.

**Table 3 War Transformations**

War Transformed From			War Transformed Into		
War number	War name	Dates	War number	War name	Dates
<b>Inter-state war into extra-state war</b>					
189	Vietnamese-Cambodian	9/24/1977–1/8/1979 10/7/2001–	475	Khmer Insurgency	1/9/1979–9/25/1989
225	Invasion of Afghanistan	12/22/2001	481	Afghan Resistance	12/23/2001–present
227	Invasion of Iraq	3/19/2003–5/2/2003	482	Iraqi Resistance	5/3/2003–present
<b>Inter-state war into intra-state war</b>					
40	Franco-Mexican	4/16/1862–2/5/1867	587	Queretaro	2/6/1867–5/14/1867
176	Communist Coalition	3/23/1970–7/2/1971 10/23/1975–	785	Khmer Rouge	7/13/1971–4/17/1975
186	War over Angola	2/12/1976	804	Angolan Control	2/13/1976–5/15/1991
187	Second Ogaden phase 2	7/23/1977–3/9/1978	808	Second Ogaden phase 3	3/10/1978–12/3/1980
215	Bosnian Independence	4/7/1992–5/13/1992	877	Bosnian–Serb Rebellion	5/14/1992– 12/31/1994
<b>Extra-state war into inter-state war</b>					
327	Uruguay War	2/16/1843–7/18/1851 5/11/1860–	19	La Plata	7/19/1851–2/3/1852 10/15/1860–
352	Garibaldi Expedition	10/14/1860	37	Neapolitan	1/19/1861
373	Serbian-Turkish	6/30/1876–4/23/1877	61	Second Russo-Turkish	4/24/1877–1/31/1878

385	Third Franco-Vietnamese	4/25/1882–6/14/1884	67	Sino-French	6/15/1884–6/9/1885
404	Second Spanish-Cuban	2/24/1895–4/21/1898	79	Spanish-American	4/21/1898–8/12/1898
410	Spanish-Philippine	8/30/1896–5/1/1898	79	Spanish-American	4/21/1898–8/12/1898

**Extra-state war into intra-state war**

472	East Timorese phase 2	10/16/1975–7/4/1977	806	East Timorese phase 3	7/18/1976–5/26/1979
475	Khmer Insurgency	1/9/1979–9/25/1989	857	First Cambodian Civil	9/26/1989–10/23/1991
476	Soviet Quagmire	2/22/1980–2/15/1989	851	Second Afghan Mujahideen	2/16/1989–10/6/2001

**Extra-state war into non-state war**

469	Angolan-Portuguese	2/3/1961–10/14/1974	1581	Angola Guerrilla	10/15/1974–10/22/1975
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**Intra-state war into inter-state war**

503	Spanish Royalists	12/1/1821–4/6/1823	1	Franco-Spanish	4/7/1823–11/13/1823
506	Greek Independence	3/25/1821–4/25/1828	4	Russo-Turkish	4/26/1828–9/14/1829
551	Milan Five-Day Revolt	3/18/1848–3/23/1848	10	Austro-Sardinian	3/24/1848–3/30/1849
631	Second Cretan	3/10/1896–2/14/1897	76	Greco-Turkish	2/15/1897–5/19/1897
650	Second Albanian Revolt	3/?/1910–10/16/1912	100	First Balkan	10/17/1912–4/19/1913
681	Western Ukrainian	11/1/1918–2/13/1919	109	Russo-Polish	2/14/1919–10/18/1920
748	Vietnam phase 1	1/1/1960–2/6/1965	163	Vietnam phase 2	2/7/1965–4/30/1975
756	Second Laotian phase 1	3/19/1963–1/12/1968	170	Second Laotian phase 2	1/13/1968–4/17/1973
782	Pakistan-Bengal	3/25/1971–12/2/1971	178	Bangladesh	12/3/1971–12/17/1971
805	Second Ogaden phase 1	7/1/1976–7/22/1977	187	Second Ogaden phase 2	7/23/1977–3/9/1978
851	Second Afghan Civil	2/16/1989–10/6/2001	225	Invasion of Afghanistan	10/7/2001–12/22/2001
872	Nagorno-Karabakh	12/26/1991–2/5/1993	216	Azeri-Armenian	2/6/1993–5/12/1994
900	Kosovo Independence	2/28/1998–3/23/1999	221	War for Kosovo	3/24/1999–6/10/1999

**Intra-state war into extra-state war**

601	Bosnia and Bulgaria Revolt	7/3/1875–4/12/1877	373	Serbian-Turkish	6/30/1876–4/23/1877
812	First Afghan Mujahideen	9/1/1978–2/21/1980	476	Soviet Quagmire	2/22/1980–2/15/1989

**Intra-state regional war into intra-state civil war**

545	Mayan Caste phase 1	1/15/1847–8/16/1848	553	Mayan Caste phase 2	8/17/1848–3/4/1855
772	Cultural Revolution phase 1	1/9/1967–9/4/1967	776	Cultural Revolution phase 2	9/5/1967–9/1/1968

**Non-state war into inter-state war**

1572	Palestine	11/29/1947– 5/14/1948	148	Arab-Israeli	5/15/1948–1/7/1949
1581	Angola Guerrilla	10/15/1974– 10/22/1975	186	War over Angola	10/23/1975– 2/12/1976

**Non-state war into extra-state war**

1571	Hyderabad War	8/15/1945–9/12/1948	461	Indo-Hyderabad	9/13/1948–9/17/1948
1582	East Timorese phase 1	8/11/1975– 10/15/1975	472	East Timorese phase 2	10/16/1975– 7/17/1976

**Non-state war into intra-state war**

1527	Anti-Rosas	2/24/1839– 12/31/1840	538	First Argentina phase 2	1/1/1841–12/6/1842
1534	Taiping Rebellion phase 1	12/1/1850– 10/24/1860	567	Taiping Rebellion phase 2	10/25/1860–2/9/1866
1538	Han-Miao	3/25/1854– 10/24/1860	570	Miao Revolt phase 2	10/25/1860–5/1/1872
1541	Han-Panthay	5/19/1856– 10/24/1860	571	Panthay Rebellion	10/25/1860– 12/26/1872

**Initiator and Outcome**

The final variables that apply generally to all wars are those of the war initiator and the war outcome. In both of these cases, the general procedures utilized by Small and Singer have been maintained. In determining which combatant was the war initiator, Small and Singer were merely determining which party started the war. Specifically, they relied on the consensus of historians to classify the initiator as the actor whose battalions made the first attack in strength on their opponent's armies or territories (*Resort to Arms*, 194). They emphasized that this was not in any way a moral judgment: "As our language should make very clear, we are not labeling any government the 'aggressor' in these wars, or trying to reach a firm, data-based conclusion as to which participant 'caused' the war, whether by action, threat, or other provocation" (*Resort to Arms*, 194). As Small and Singer made clear, the initiator was not necessarily the party that provoked the war, and this distinction is particularly important for those seeking to examine the stages in conflict escalation. Though in most cases the initiator was one party, it could be several

combatants that acted in concert in the initial attack, as in the Boxer Rebellion, in which Japan, the United Kingdom, Russia, France, and the United States are coded as the initiators. Where determining the initiator can be tricky is if one side enters the other's territory, without having to fight, and the other side is the first to engage in combat. Is the initiating side the side that seizes undefended territory or the side that tries to drive them off? Small and Singer (Resort to Arms, 194) seemed ambivalent on this point, giving different interpretations with regard to the Mexican-American and Sino-Indian inter-state wars. This ambivalence is especially problematic when considering extra-state wars of imperialism, in which a European power would often invade an autonomous entity with a poorly defended border. If only a little disputed territory is occupied and then there is a massive attack by the other side, there is a better case that the attacker, rather than the occupier, was the initiator. On the other hand, if the occupying army is marching through core territory and even attempting to take the capital city of its target, and the invaded side then launches a massive offensive against the dug-in troops of the occupier, then it seems clear that the invader was the initiator. The Small and Singer definition of the war initiator is different from that used in the Militarized Interstate Dispute (MID) dataset, where all the states that are on the side of the initiator are listed as the initiating side. Furthermore, the initiator of the war need not necessarily be the same as the initiator of the MID, since a MID can be started by a show of force, whereas the initiator of a war begins the actual combat.

Similarly, Small and Singer had no operational indicators for determining the outcome of a war or the side that was victorious in the war. Instead of developing complex schemas for weighing the relative benefits attained in a war, they admitted to merely following the consensus among the acknowledged specialists in deciding which side "won" each war (Resort to Arms, 182). They noted that determining the consensus on the winner was difficult in only a few cases

and that among the inter-state wars, only two wars in the 1982 list were coded as ties: the Korean War of 1950-1953 and the Israeli-Egyptian War of Attrition in 1969-1970. In terms of coding the individual combatants as winners or losers, they treated “every nation that qualified as an active participant on the victorious side as a ‘victor,’ regardless of its contribution to that victory or the costs it sustained; the same holds for all those that fought on the vanquished side in these inter-state wars” (Resort to Arms, 182). In several instances, a combatant could be coded as an ultimate winner despite its complete defeat in an earlier stage of the war:

On occasion, some of the nations we labeled victors suffered far more than the vanquished. Pyrrhic victors like Poland and Belgium in World War II were defeated on the field of battle and returned only at war’s end as political victors. Despite their total absorption by the “vanquished,” we consider them to have been part of the winning coalition that shared in the spoils in 1945 (Resort to Arms, 182).

This coding is also somewhat complex in those cases in which a combatant switches sides during the war. In such cases, the combatant will have two separate participant records and two separate outcome determinations, both as a winner and a loser. For instance, for most of World War II, Italy was on the side of the Axis powers and has one participant record for the period from 1940 to 1943 on this side. Here Italy is coded as having lost (or being on the losing side). After that point, however, Italy then participates in the war on the side of the Allies and thus has a second participant record for the 1943-1945 period, for which Italy is then coded as a winner, or being on the victorious side.

As the Project began to gather more information on intra-state wars in particular, it became clear that there were more outcomes than merely winning, losing, or having a tie. Thus several new outcome codes have been developed. Though this variable may continue to evolve, at this point the following outcome codes are being used: 1 = Side A wins; 2 = Side B wins; 3 =

compromise (a solution is reached in which both sides gain something); 4 = war is transformed into another category; 5 = war ongoing; 6 = stalemate (fighting ceases without a satisfactory agreement); 7 = conflict continues but at below war-level fatalities.