Whither War? An Empirical Assessment of the Patterns of War

Steven V. Miller

Department of Political Science



Goal for Today

- 1. Discuss basic patterns in inter-state war.
- 2. Address the debate on the "decline of war."

Confrontations and War

A militarized interstate confrontation (or dispute) is any threat, display, or use of force from one state to another.

 Gibler and Miller (Forthcoming): there have been 1,958 of these from 1816 to 2014.

Most of these (mercifully) don't go very far.

- The typical confrontation lasts a month or so and doesn't claim lives.
- Most common highest militarized actions: clash, attack, show of force.

Confrontations and War

War has typically commanded the most attention in this field.

• Operationally: a subset of all confrontations with at least 1,000 battle-related deaths (excluding civilian deaths).

What does the typical war "look like?"

 If all you know about war is the world wars (or what the U.S. has done), you'd be misled about what war typically looks like.

Is war on the decline?

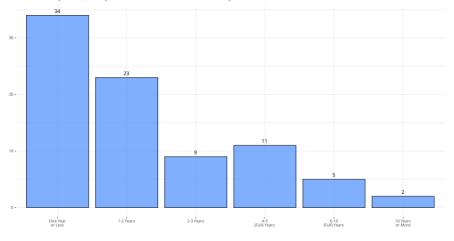
• Kinda depends on how you look at it (and don't lump all war types together).

Table 1: Central Tendencies of Inter-state Wars (Gibler and Miller, Forthcoming)

Category	Median	Mean	Example
(Min.) Duration	449.5	740.238	First Kashmir War (438)
Participants	3	4.821	First Taiwan Straits Crisis
(Min.) Fatalities	7,478	330,254.8	Austro-Sardinian War (7304)
(Max.) Fatalities	12,157.5	399,725.8	Russian Civil War (12783)

How Long do Inter-State Wars Last?

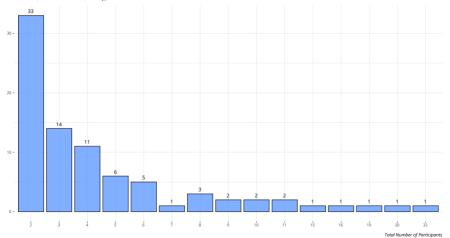
40% of wars last a year or less, and only about a third of inter-state wars last more than two years.



Data: Gibler and Miller (Forthcoming). Selects on all confrontations where minimum fatalities exceed 1,000.

The Number of Participants in Inter-State Wars

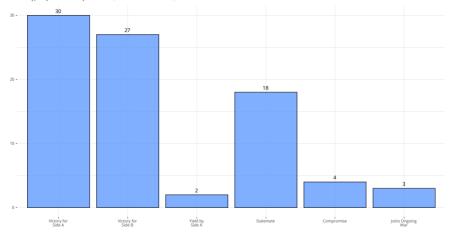
Even here, the median misleads. The typical war is bilateral.



Data: Gibler and Miller (Forthcoming). Selects on all confrontations where minimum fatalities exceed 1,000.

The Outcomes of Inter-State Wars

Wars typically end in a victory for one side, at least on the battlefield, but -30% of wars end in a stalemate.



Data: Gibler and Miller (Forthcoming). Selects on all confrontations where minimum fatalities exceed 1,000.

Pop Quiz!

What do you think are:

- The deadliest wars (min/max fatalities)?
- The *least* deadly wars (min/max fatalities)?
- Longest/shortest wars?
- Most participants in wars?

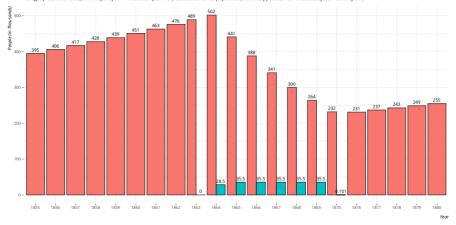
Table 2: The Deadliest Inter-State Wars (Gibler and Miller, Forthcoming)

MIC No.	War Name	Min. Fatalities	Max. Fatalities
258	World War II	15,390,806	17,442,565
257	World War I	7,486,110	9,484,050
157	Second Sino-Japanese War	800,000	1,200,000
611	Vietnam War	883,003	1,124,302
51	Korean War	568,980	966,832

Bonus points to those who object the Paraguayan War should be in here.

The Paraguayan War Was Among the Biggest Single Disasters for Any State (Paraguay) in War

Paraguay lost around 30,000 troops a year in the seven-year war, lost about half its population, and disappeared from the state system for six years.



Total Population Yearly Fatalities for Paraguay in Paraguayan War

Data: Gibler and Miller (Forthcoming), Correlates of War National Material Capabilities (v. 6,0)

Table 3: The Least Deadly Inter-State Wars (Gibler and Miller, Forthcoming)

MIC No.	War Name	Min. Fatalities	Max. Fatalities
173	Second Taiwan Straits Crisis	1,165	1,587
1206	Football War	1,169	1,854
1480	The War of Attrition	1,187	2,424
25	Belgian Revolution	1,251	1,900
1528	Platine War	1,300	1,900

Table 4: The Longest Inter-State Wars (Gibler and Miller, Forthcoming)

MIC No.	War Name	Min. Duration	Max. Duration
1353	The Secret War	4,039	4,069
611	Vietnam War	3,993	3,993
2115	Iran-Iraq War	3,213	3,213
1590	Paraguayan War	2,376	2,376
258	World War II	2,335	2,335

Table 5: The Shortest Inter-State Wars (Gibler and Miller, Forthcoming)

MIC No.	War Name	Min. Duration	Max. Duration
184	Changkufeng Incident	12	42
606	Hungarian Uprising	23	23
1206	Football War	25	25
4283	Afghanistan War (!!)	94	94
1533	First Central American War	99	129

The usual caveat about the Afghanistan War applies.

• Like the Iraq War, the *inter*-state component was brief. The *extra*-state component lasted forever.

Table 6: The Most Participants in Inter-State Wars (Gibler and Miller, Forthcoming)

MIC No.	War Name	Num. Side A	Num. Side B	Total
258	World War II	22	10	32
4273	Iraq War	19	1	20
51	Korean War	2	17	19
4283	Afghanistan War	15	1	16
257	World War I	4	11	15

The Decline of War?

Is war on the decline? Pinker (2011) says "yes."

- Argument: human beings are becoming less violent and more altruistic.
- The more pacific nature of post-WW2 is indicative of a powerful trend.

What can we say about this argument? And the overall trends of war?

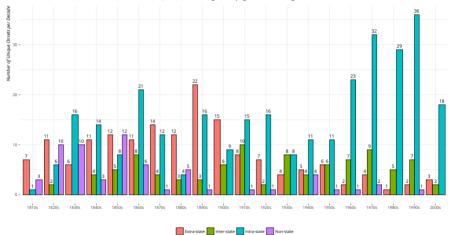
First Things First: Type Matters

It's a mistake to pool all war types together (c.f. Gibler and Miller, Forthcoming).

- Inter-: state(s) v. state(s)
- Intra-: state v. domestic non-state actor
- Extra-: state v. (in)dependent non-state actor
- Non-: non-state actor v. non-state actor

The Number of Unique War Onsets by Decade and CoW War Type, 1816-2007

The information here doesn't settle the decline-of-war debate, but it does caution against lumping all conflict forms together.



Data: Correlates of War War Data (v. 4.0 [v. 4.1 for intra-state wars])

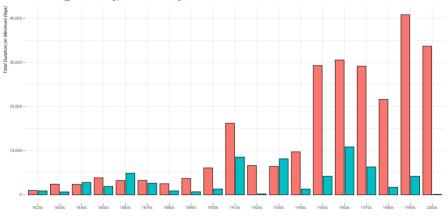
The Decline of War?

How do we quantify this?

- magnitude: (i.e. state-time in war)
- severity: raw battlefield deaths
- intensity: magnitude or severity, standardized
- prevalence: battle deaths, by world population

Total Minimum Duration by Inter-State Confrontation Type and Decade of Confrontation Onset

The data don't suggest a clear declining pattern in terms of the magnitude of inter-state conflicts.

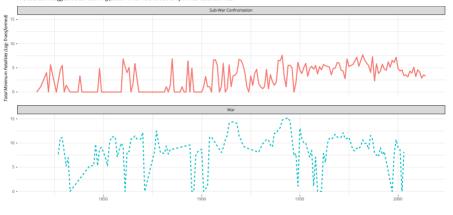


Sub-War Confrontation War

Data: Gibler and Miller (Forthcoming). Be mindful there are always going to be fewer wars than sub-war conflicts.

Total (Minimum, Log-Transformed) Fatalities by Inter-State Confrontation Type and Year

The data don't suggest a clear declining pattern in terms of the severity of inter-state conflicts.



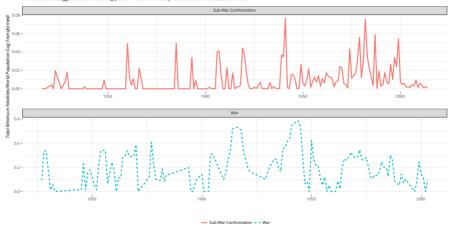
- Sub-War Confrontation - War

Data: Gibler and Miller (Forthcoming). Be mindful there are always going to be fewer wars than sub-war conflicts.

Browneeller (2021) cautions against doing the quick-and-dirty transformation of variables drawn from a power law distribution.
That said, be mindful those two mountains in the middle of the war annel would be a fol larear if I didn't at this.

Total (Minimum, Log-Transformed) Fatalities over World Population by Inter-State Confrontation Type and Year

The data don't suggest a clear declining pattern in terms of the prevalence of inter-state conflicts.



Data: Gibler and Miller (Forthcoming) and Correlates of War National Material Capabalities (v. 6.0). Be mindful there are always going to be fewer wars than sub-war conflicts.

Broumoeller (2021) coutions against diving the quick-and-dirty transformation of yarables drawn from a power law distribution.

That said, be mindful that we mountains in the middle of the war panel would be a lot larger if I dain't a obti.

Possible Objection

The decline-of-war advocates will typically note that we haven't seen a World War II in over 70 years.

- Which, sure, and thank goodness for that.
- There's also assuredly a peace that's grown from that (c.f. Gleditsch, 2002; Goertz et al., 2016).

Retort:

- We're talking about a rare event, and selecting on the rarest of those rare events.
- There's a problem in assessing central tendency in a distribution that is decidedly not normal.

Another Way of Thinking About This

Gibler and Miller (Forthcoming) code 1,958 confrontations from 1816 to 2014. Of those:

- 84 are operationally a war (minimum fatalities >= 1000), 1,874 are not a war.
- The proportion of wars to all confrontations is .042.

Of the 84 wars:

- The median war claimed 7,478 troops in battle.
- The median absolute deviation is 8,367, the 95% interval of which maxes at 19,925.
- There are 24 wars with at least more than 19,925 fatalities (p = .012).

Consistent with Pinker's (2011) argument, four of those are after World War II while the other 20 are before it.

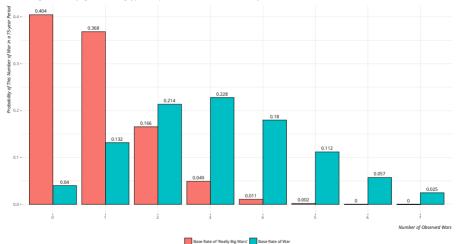
A Thought Experiment

The year is 2022. We haven't observed a World War II in, basically, 75 years. What is the probability of us *not* observing this where:

- p = .042, the overall base rate of war vs. not-war in the Gibler and Miller confrontation data?
- p = .012, the overall base rate of a "really big war" in the Gibler and Miller confrontation data?

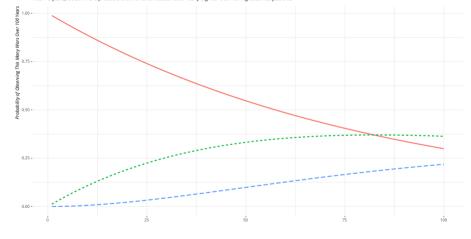
The Probability of the Number of (Observed) Wars in 75 Years, Given Assumed Rates of War

Knowing how rare 'really big wars' are, it's highly probable (p = .404) that we haven't observed one 75 years after WW2.



The Probability of Observing a Set Amount of 'Really Big Wars' Over a 100-Year Period

After 75 years, it's still more probable that we haven't observed a 'really big war' than having observed just one.



Conclusion

Most wars don't look like World War I and World War II, and thank goodness.

- The typical war is bilateral, about a year in length, with only a few thousand fatalities.
- That's not to say 'really big wars' aren't interesting. They're just not typical.

We still have a lot of work to do re: understanding systemic patterns in war.

- There's a clear post-WW2 peace, if in Western Europe (and Latin America to a lesser extent).
- There's no robust support for the "decline of war" hypothesis.
- War varies by type, and don't lump them together.

Table of Contents

Whither War? An Empirical Assessment of the Patterns of War Introduction Basic Statistics About War The Decline of War? Conclusion