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# New Opportunities for Analyzing Revolutions: Presenting the 21st century Revolutionary Database V1.1

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## Revolutions as an object of studies

New rise of revolution in the 21st century:

1. Color revolutions (2000-2009)
2. Arab spring and its “echo” (2010-2014)
3. Third wave without common name (2018-a.d.?)

New revolutions require **new approaches to studying “revolutions”** (Lawson, 2017), new analysis became possible with **Nonviolent and Violent Campaigns Outcomes (NAVCO)** (Chenoweth & Lewis, 2013, 2022)

NAVCO does not focus on revolutions, but on “maximalist campaigns”, i.e. prolonged durable movements, aimed at challenging the regime (**selection bias**) + “**streetlight effect**”, i.e. mostly successful events are included (Dworschak, 2023)





## Criteria of revolution

We rely on the following key consensus features of revolutions:

1. **Mass mobilization.** This almost automatically excludes coups that may lead to a rapid and violent overthrow of the existing regime (e.g. replacing an electoral democracy with an autocracy), but which do not imply mass mobilization. Thus, only those episodes that involve at least 1,000 participants are included.
2. **An attempt to overthrow or replace the existing government by non-institutional means.** This excludes so-called “quasirevolutionary episodes”



## Database of the XXI century revolutions

Taking into account **criticism and limited time span** of NAVCO (2.1 [1900-2014] and 1.3 [1900-2019]), Mark Beissinger's database from his book *The Revolutionary City* (2022), we compiled our own database, covering the episodes from 2000 to 2024

Our aim is **systematic description of revolutionary episodes that meet our criteria** that are both successful and unsuccessful in the equal share, their tactics, goals and specific characteristics

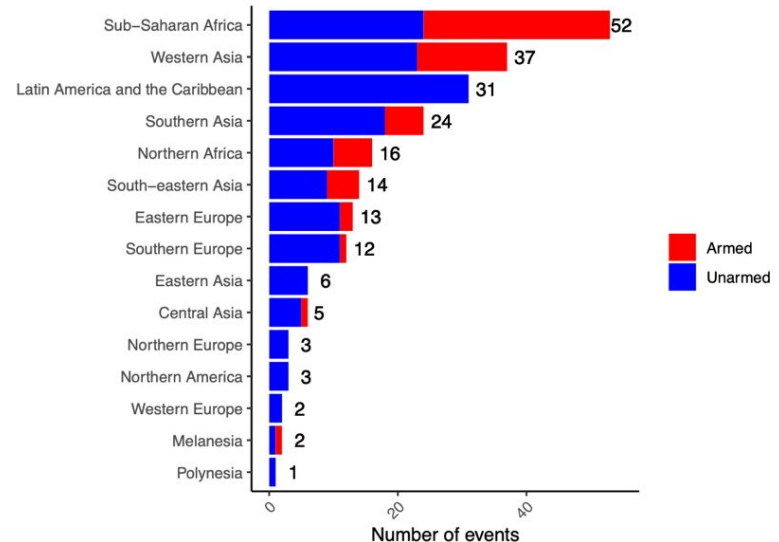




## Chronological and geographical parameters

### Variables

- Unique episode number
- Episode name
- Event start year and date
- Event end year and date
- Country name
- Three-letter ISO 3166-1 alpha-3 country code
- The region to which the country where the event took place belongs



Regional distribution of episodes



## Degree of revolutions' success

### Success

full achievement of the main established goals by the rebels with the overthrow of the existing government by non-institutional methods



### Limited success

some concessions towards the rebels with the failure to overthrow the existing government by non-institutional methods



### Failure

preservation of the status quo usually with the crackdown of protests





## Goals

1. **Regime change** (80% of cases) – to change institutions and political landscape dramatically
  - a. **Democratic** – to change the regime to more democratic one through getting power through the rebellion, when pro-democratic forces do not have opportunities to topple the regime via legal means
  - b. **Islamist** – to create a global khalifat, based on Sharia laws in their most radical interpretation (this goal is unique for the XXI century)
2. **Separatism** (20% of cases) – to gain independence/autonomy from a sovereign state on a particular territory
3. **Social\*** – to solve problems of social injustice, with democratic, political, legal and other transformations being only a tool to solve this main task
4. **Other** – aims cannot be classified as one of the aforementioned types, can be overlapped by mentioned goal types.

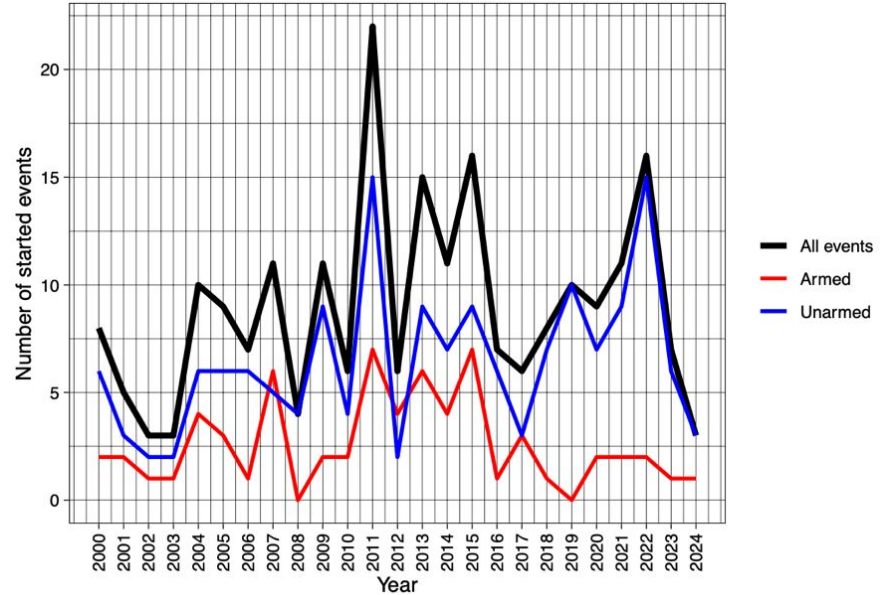


## Revolutionary tactics

**Armed revolutions** – with the use of firearms

**Unarmed revolutions** – using methods of civil resistance and improvised weapons (stones, sticks, Molotov cocktails, etc.)

Differentiation from classical violent/nonviolent dichotomy – it is almost unavoidable to completely follow nonviolent discipline that is why almost all of the revolutions use some violence (Kadivar & Ketchley, 2018)



## Revolutionary tactics

Movements that aim at overturning dictatorships, have large potential audiences, and can mobilize many in key cities are likely to have a comparative advantage in **nonviolent tactics**.

In contrast, movements that have a limited support base and core support confined to the periphery are more likely to have a comparative advantage in **violence** and are unlikely to be able to mount effective nonviolent mobilization.

(Gleditsch et al., 2021, p. 17)

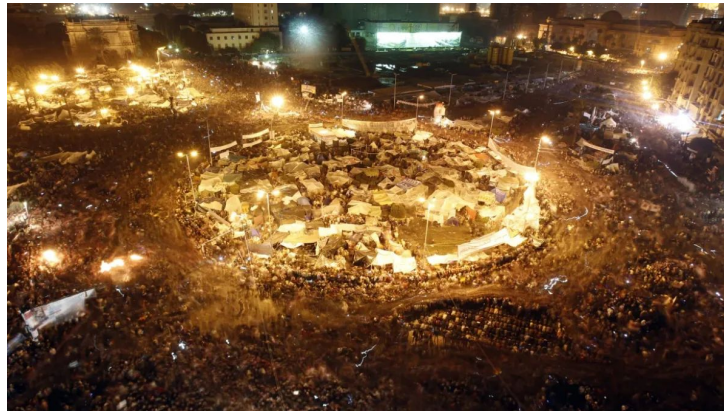




## Number of participants

Number of participants is critical to the success of revolution, granting an opportunity for a broad social coalition (Chenoweth & Stephan, 2011; Dahlum, 2023)

Our estimate of the number of participants with **an upper and lower bound** helps both to conduct an uncertainty analysis and to use the average number of participants, which many media outlets, both large and local, may exaggerate this amount.





## Military and security forces involvement

The role of siloviki of different kinds is critical for revolutions as they are a third actor whose switch of loyalty may affect the whole revolutionary process (Barany, 2016)

**Military and security forces defection** – manifestations of disloyalty by the military that occur through switching sides, outright refusal to support the regime, support for the opposition, and refusal to follow orders from regular armed forces and/or security forces (Dahl et al., 2023). Non-resistance or support for revolutionaries by military and/or security forces must be widespread and take place in areas significant to the revolution.

**Coupvolution** (i.e. endgame coup) – a revolutionary mass mobilization in the first stage accompanied by a military coup in the second stage of the revolutionary process (Koehler & Albrecht, 2020). It is a maximization of military defection that might lead to the failure of initial goals of revolutions due to different goals of military officers.



## Foreign involvement and ethnic component

Foreign support also highly assist the rebels to get resources for their revolutionary action and succeed further (Kirisci & Demirhan 2021; Kalin et al., 2022)

**Foreign involvement** - should not be expressed in statements by state leaders, but in the sending of troops, financial support, arms supplies or other forms of direct, rather than rhetorical, support.

**Ethnic component** – most revolutionaries were from one ethnic group in a multi-ethnic country, which in many cases risks escalating unarmed conflicts into armed ones (Pischedda, 2020; Mustasilta & Svensson, 2023).





## Key differences from NAVCO

- Study of revolutions
- Study of events or conflicts instead of prolonged campaigns
- Armed/unarmed classification of episodes
- Different set of goals, relevant for XXI century (avoiding goals of “self-determination” and “fight against occupation as not widespread anymore)
- Approximation of number of participants aimed at setting the confidence intervals
- Fixed dates of episodes
- More broad classification
- Higher coverage



## Comparison with other sources

	NAVCO 1.3 or 2.1	CNTS	Beissinger's Revolutionary episodes dataset	CSRA	Historical regimes data
<b>Years</b>	1900-2019	1815-2020	1900-2014	2000-2024	1789-2016
<b>Number of cases</b>	622	2046	345	228	297
<b>Unit of analysis</b>	<p>Maximalist campaign</p> <p>Campaign is 'a series of observable, continuous, purposive mass tactics or events in pursuit of a political objective'</p> <p>Maximalist objectives include 'regime change, secession, or self-determination'</p>	<p>Revolutions</p> <p>'Any illegal or forced change in the top government elite, any attempt at such a change, or any successful or unsuccessful armed rebellion whose aim is independence from the central government'</p>	<p>Revolutionary episode</p> <p>'a mass siege of an established government by its own population with the aim of displacing the incumbent regime and substantially altering the political or social order'</p>	<p>Revolutionary episode</p> <p>Revolution is a 'an effort to transform the political institutions and the justifications for political authority in a society, accompanied by formal or informal mass mobilization and noninstitutionalized actions that undermine existing authorities'</p>	<p>Regime change/breakdown. A narrower - popular uprising</p> <p>No definition, only operational rules</p>
<b>Degree of violence</b>	<p>violent/nonviolent</p> <p>Nonviolent - 'do not directly threaten or harm the physical wellbeing of the regime, its agents, or its citizens'. Violent - 'involves the use of force to physically harm or threaten to harm the opponents'</p>	--	<p>armed/unarmed</p> <p>armed - 'whether opposition was armed. Excludes riots lightly armed with stones, sticks, shields, or Molotov cocktails'</p>	<p>armed/unarmed</p> <p>armed - 'revolutionaries predominantly used fabric weapons' unarmed - 'revolutionaries predominantly used civil resistance methods or improvised weapons - sticks, stones or even Molotov cocktails'</p>	--
<b>Number of participants</b>	+	--	+	+	--
<b>Goals</b>	+	--	+	+	--
<b>Outcomes</b>	<p>+</p> <p>success/limited/failure/ ongoing</p>	--	<p>+</p> <p>success or ongoing</p>	<p>+</p> <p>success/limited/failed/ongoing</p>	--
<b>Self-determination cases are separated</b>	+	--	+	+	--



## How to use it? Most common research designs

<b>Research question</b>	<b>Estimand</b>	<b>Unit of analysis</b>	<b>Dep. variable</b>	<b>Ind. variable</b>
Which regime types are more prone to onset of revolution?	Probability of revolutions onset in a country-year conditional on regime types	Country-year (Panel data)	Onset of revolution (1 - onset of revolution, 0 - no revolution)	Regime type
How many participants of unarmed revolution is enough to succeed?	Probability of unarmed revolution success conditional on number of participants	Revolution (event)	Success (=1) vs. Fail (=0)	Number of participants
Do unarmed revolutions lead to democratization?	Average treatment (=unarmed revolution) effect on treated since the start of revolution (0 -> 10 years after treatment)	Country-year (Panel data)	Democracy index	Unarmed revolution



## Ex.1: Onset

**RQ:** Which regime types are more prone to onset of revolution?

**Estimand:** Probability of revolutionary onset in a country-year conditional on regime type

**Unit of analysis:** Country-year (Panel data)

**DV:** Onset of revolution (1 - onset of revolution, 0 - no revolution)

**IV:** Regime type (V-Dem classification)

**Estimator:** TWFE logistic regression adjusted for GDPpc, oil rent, education level, children mortality (all t-1)

Country	Year	Revolution	Regime Type
Tunisia	2008	0	Electoral Autocracy
Tunisia	2009	0	Electoral Autocracy
Tunisia	2010	1	Electoral Autocracy
Tunisia	2011	0	Electoral Autocracy
Tunisia	2012	0	Electoral Democracy



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**RQ:** Which regime types are more prone to onset of revolution?

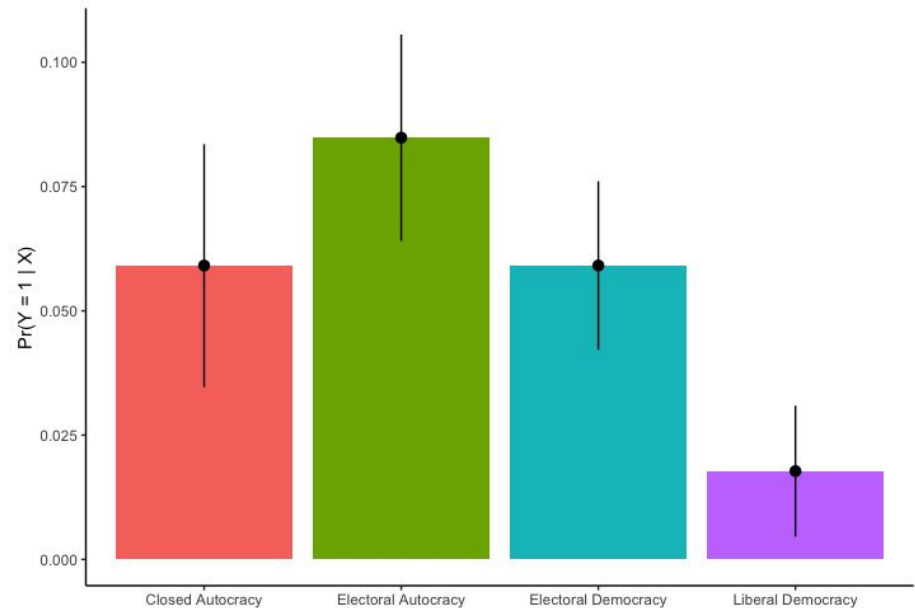
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## Ex.2: Success

**RQ:** How many participants of unarmed revolution is enough to succeed?

**Estimand:** Probability of unarmed revolution success conditional on number of participants

**Unit of analysis:** Country-year (Panel data)

**DV:** Success (=1) vs. Fail (=0)

**IV:** Number of participants

**Estimator:** Logistic regression with G-estimation and adjustment for population, regime type, GDP pc, oil rent

Country	Year	Success	Participants (mean)
Tunisia	2010	1	300'000
Bahrain	2011	0	300'000
Djibouti	2011	0	30'000
Egypt	2011	1	11'000'000
Jordan	2011	0	8'000



## Ex.2: Success

**RQ:** How many participants of unarmed revolution is enough to succeed?

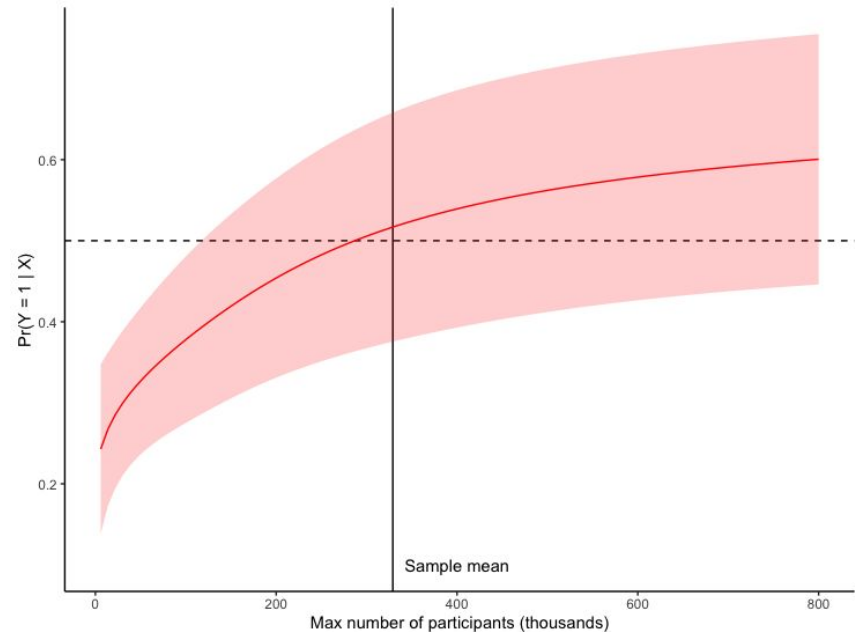
**Estimand:** Probability of unarmed revolution success conditional on number of participants

**Unit of analysis:** Country-year (Panel data)

**DV:** Success (=1) vs. Fail (=0)

**IV:** Number of participants

**Estimator:** Logistic regression with G-estimation and adjustment for population, regime type, GDP pc, oil rent





## Ex.3: Outcome

**RQ:** Do unarmed revolutions lead to democratization?

**Estimand:** Dynamic ATT (onset + 10 years)

**Unit of analysis:** Revolution (event)

**DV:** V-Dem electoral democracy index

**IV:** 10 years after revolution (=1), 0 otherwise

**Estimator:** Panel matching for diff-in-diff

Country	Year	Treatment	Regime Type
Tunisia	2008	0	Electoral Autocracy
Tunisia	2009	0	Electoral Autocracy
Tunisia	2010	1	Electoral Autocracy
Tunisia	2011	1	Electoral Autocracy
Tunisia	2012	1	Electoral Democracy



## Ex.3: Outcome

**RQ:** Do unarmed revolutions lead to democratization?

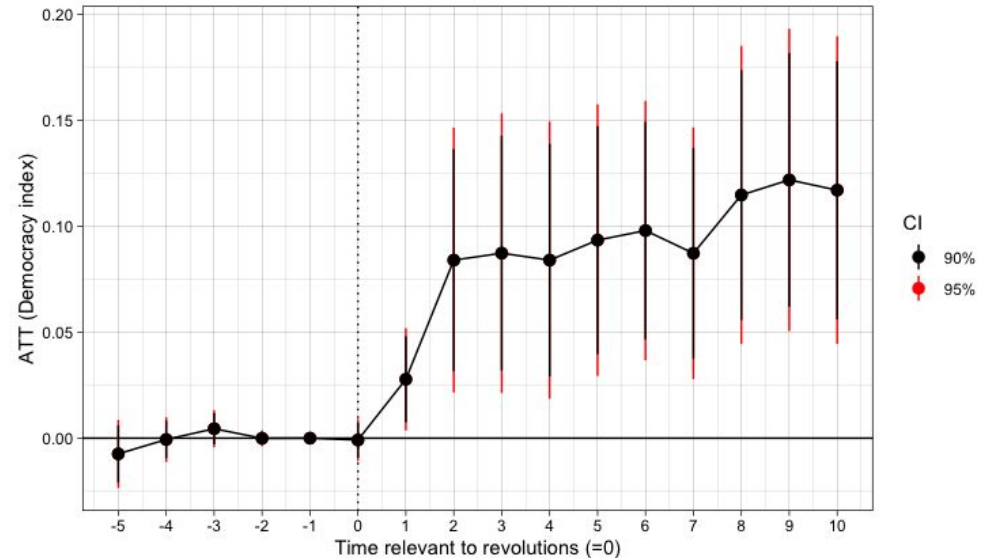
**Estimand:** Dynamic ATT (onset + 10 years)

**Unit of analysis:** Revolution (event)

**DV:** V-Dem electoral democracy index

**IV:** 10 years after revolution (=1), 0 otherwise

**Estimator:** Panel matching for diff-in-diff





## Our database helps to...

- Observe both successful and unsuccessful revolutions of the XXIst century
- Underline the key theoretical features, unique for the XXIst century
- Identify new key characteristics of the revolutionary process and their role
- Verify the existing findings on onset, results, and consequences of revolutions



## References

- Banks, A. S., Wilson, K. A. (2024). *Cross-National Time-Series Data (CNTS)*. Databanks International. Jerusalem, Israel; <https://www.cntsdata.com/>
- Baraby, Z. (2016). *How Armies Respond to Revolutions and Why*. Princeton University Press.
- Beissinger, M. R. (2022). *The Revolutionary City: Urbanization and the Global Transformation of Rebellion*. Princeton University Press. <https://doi.org/10.2307/j.ctv2175r9q>
- Chenoweth, E., & Shay, C. W. (2019). *NAVCO 2.1 Dataset* (Version 2.0) [Dataset]. Harvard Dataverse. <https://doi.org/10.7910/DVN/MHOXDV>
- Chenoweth, E., & Shay, C. W. (2020). *List of Campaigns in NAVCO 1.3* [Dataset]. Harvard Dataverse. <https://doi.org/10.7910/DVN/ON9XND>
- Chenoweth, E., & Stephan, M. J. (2011). *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict*. Columbia University Press. <https://www.istor.org/stable/10.7312/chen15682>
- Dahl, M., Rivera M. & Gates S. (2023). Beyond Defection: Dissent Campaign Strategies and Security Force Disloyalty. In *Mobilization and Democracy Workshop*, Oslo.
- Dahlum, S. (2023). Joining forces: Social coalitions and democratic revolutions. *Journal of Peace Research*, 60(1), 42–57. <https://doi.org/10.1177/00223433221138614>
- Dworschak, C. (2023). Civil Resistance in the Streetlight: Replicating and Assessing Evidence on Nonviolent Effectiveness. *Comparative Politics*, 55(4), 639-A-17.
- Gleditsch, K. S., Dahl, M., Gates, S., & Gonzalez, B. (2021). Accounting for Numbers: Group Characteristics and the Choice of Violent and Nonviolent Tactics. *The Economics of Peace and Security Journal*, 16(1), Article 1. <https://doi.org/10.15355/epsi.16.1.5>
- Kadivar, M. A., & Ketchley, N. (2018). Sticks, Stones, and Molotov Cocktails: Unarmed Collective Violence and Democratization. *Socius*, 4, 2378023118773614. <https://doi.org/10.1177/2378023118773614>
- Kalin, I., Lounsbury, M. O., & Pearson, F. (2022). Major power politics and non-violent resistance movements. *Conflict Management and Peace Science*, 39(3), 241–265.
- Kirisci, M., & Demirhan, E. (2021). Resource Wealth as Leverage: Natural Resources and the Failure of Non-Violent Campaigns. *Government and Opposition*, 56(1), 102–120. <https://doi.org/10.1017/gov.2019.10>
- Knutsen, C. H., Teorell, J., Wig, T., Cornell, A., Gerring, J., Gjerløw, H., Skaaning, S.-E., Ziblatt, D., Marquardt, K. L., Pemstein, D., & Seim, B. (2019). Introducing the Historical Varieties of Democracy dataset: Political institutions in the long 19th century. *Journal of Peace Research*, 56(3), 440–451. <https://doi.org/10.1177/0022343318823866>
- Koehler, K., & Albrecht, H. (2021). Revolutions and the Military: Endgame Coups, Instability, and Prospects for Democracy. *Armed Forces & Society*, 47(1), 148–176. <https://doi.org/10.1177/0095327X19881747>
- Lawson, G. (2019). *Anatomies of Revolution*. Cambridge University Press.
- Mustasilta, K., & Svensson, I. (2023). Divided We Fall: Ethnic Cleavages, Movement Cohesion, and the Risk of Escalation to Civil War in Non-Violent Uprisings. *Civil Wars*, 25(1), 103–136.
- Pischedda, C. (2020). Ethnic Conflict and the Limits of Nonviolent Resistance. *Security Studies*, 29(2), 362–391. <https://doi.org/10.1080/09636412.2020.1722854>

