All Things Considered: Detecting Partisan Events from News Media with Cross-Article Comparison

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Motivation

- The same story reported by left and right media

News Story: *Biden pushes for gun legislation after visiting Uvalde.*

The Washington Post (left):
E1: [Jaydien]ARG0, . . ., [said]pred [he asked the president: "Could you please make our schools safer and send more police, please?"]ARG1
E2: [Biden]ARG0 . . . [noting]pred: "[You couldn't buy a cannon when the Second Amendment was passed]ARG1."

New York Post (right):
E1: [You]ARG0 couldn't [buy]pred [a cannon]ARG1 when the Second Amendment was passed.
E2: Biden has made that claim before, . . ., and they have been repeatedly [declared]pred [false]ARG1 [by fact-checkers]ARG0.

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- How do even nonpartisan, fact-based news outlets unobtrusively bias their reporting?

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New York Post (right):
E1: [You]$_{ARG0}$ couldn't [buy]$_{pred}$ [a cannon]$_{ARG1}$ when the Second Amendment was passed.
E2: Biden has made that claim before, . . ., and they have been repeatedly [declared]$_{pred}$ [false]$_{ARG1}$ [by fact-checkers]$_{ARG0}$.

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- RQ1: How do partisan events relate to ideology prediction?

- RQ2: How to automatically detect partisan events without large-scale supervision?
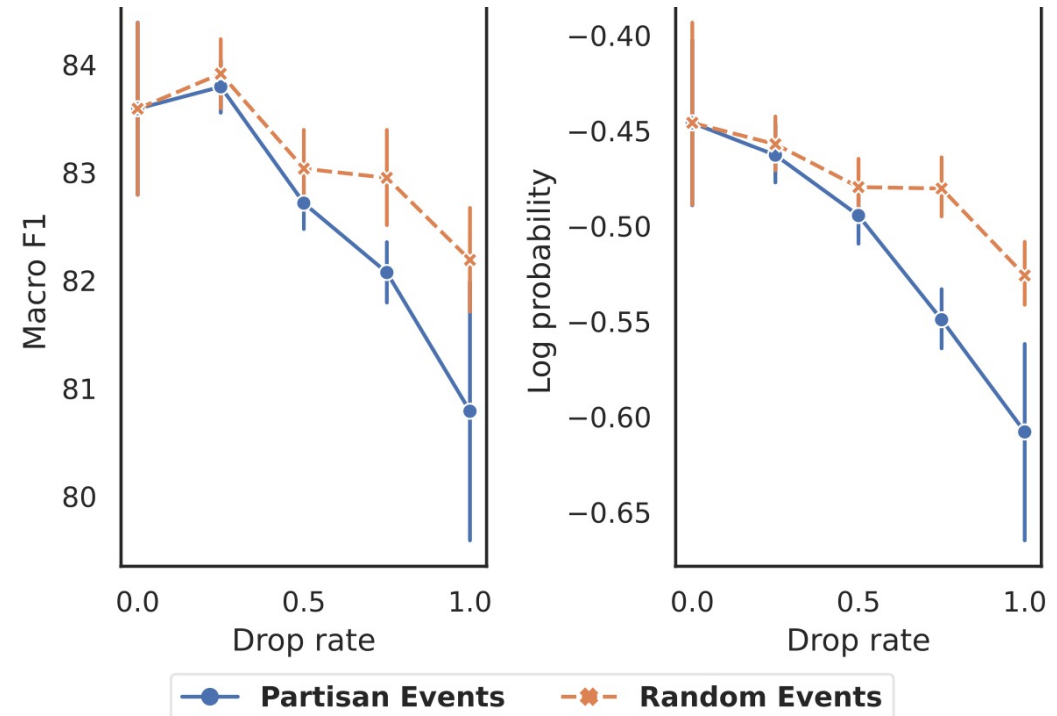
Partisan event & ideology prediction

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  - 50 articles (25 left and 25 right) covering:
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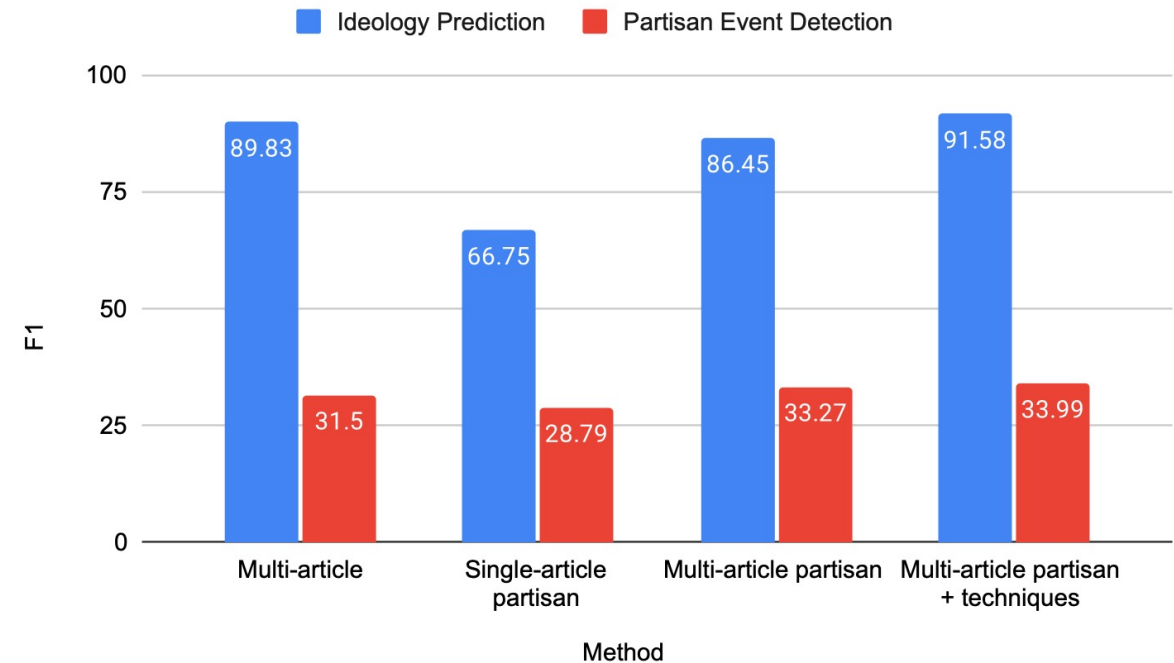
Partisan event detection

- Idea: partisan events should benefit ideology prediction

$$\max_{\mathcal{E}_\theta, q_\phi} \sum_{(\mathbf{x}, y) \in \mathcal{D}} \mathbb{E}_{\mathbf{m} \sim \mathcal{E}_\theta(\mathbf{x})} \left[\log q_\phi(y \mid \mathbf{m} \odot \mathbf{x}) \right]$$

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- Additional designs
  - Avoid selecting common events as partisan events
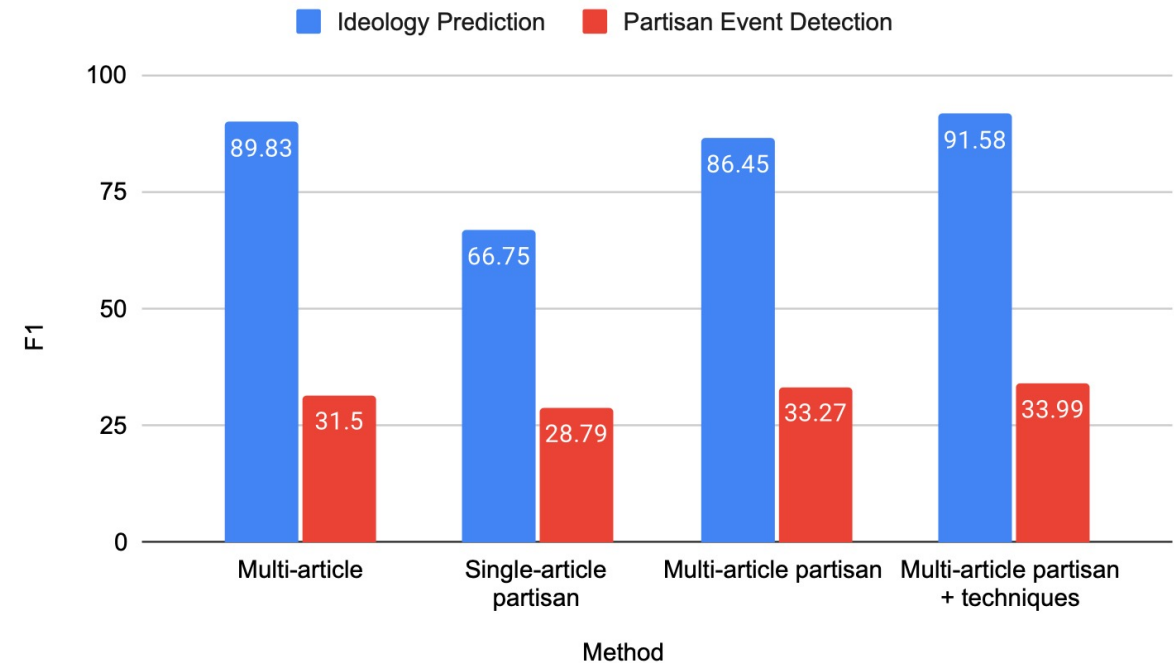 - Equip model with political knowledge through pre-training

Partisan event detection

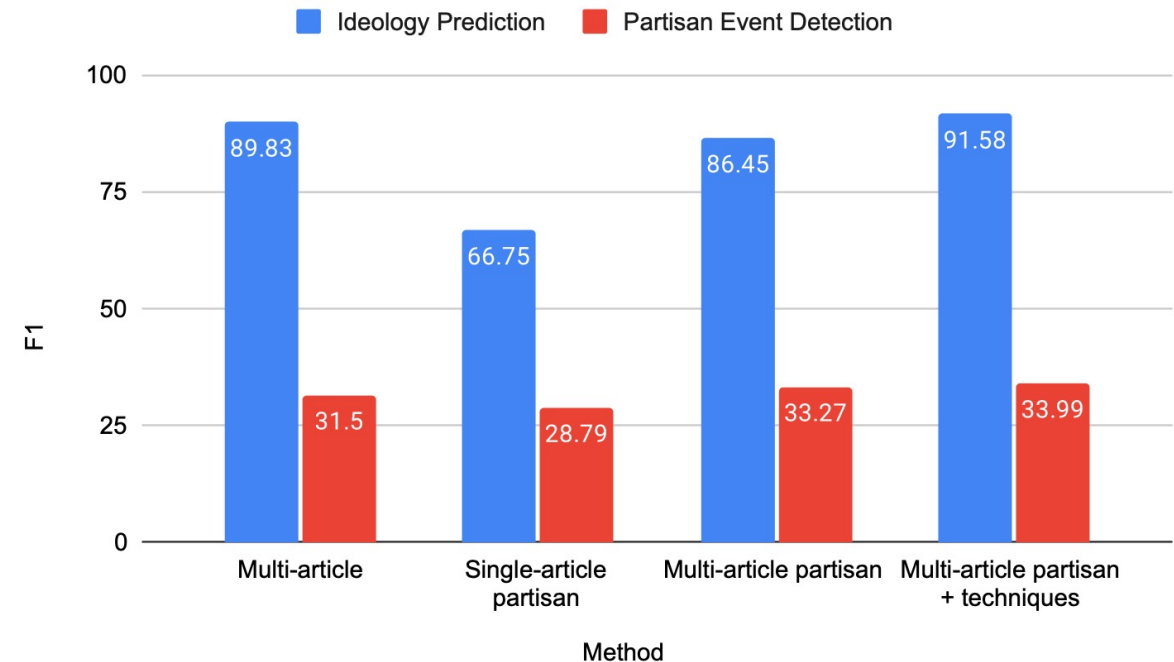- Cross-article content comparison is important

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- Event modeling helps ideology prediction

- Code is available at:
  https://github.com/launchnlp/ATC

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