Event Coreference Data (Almost) for Free: Mining Hyperlinks from Online News

Bugert & Gurevych, AKBC 2021

TECHNISCHE
UNIVERSITÄT
DARMSTADT

UKP

Event Coreference Resolution

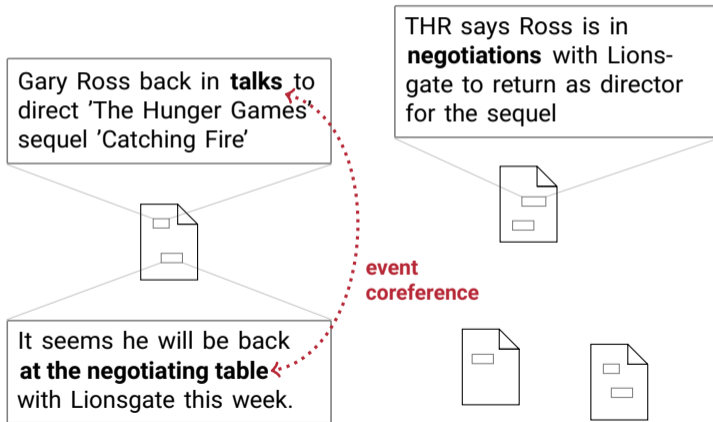Gary Ross back in **talks** to direct 'The Hunger Games' sequel 'Catching Fire'

It seems he will be back **at the negotiating table** with Lionsgate this week.

event coreference

Task definition:

1. Find event mentions
2. Cluster mentions referring to the same event

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Event Coreference Resolution

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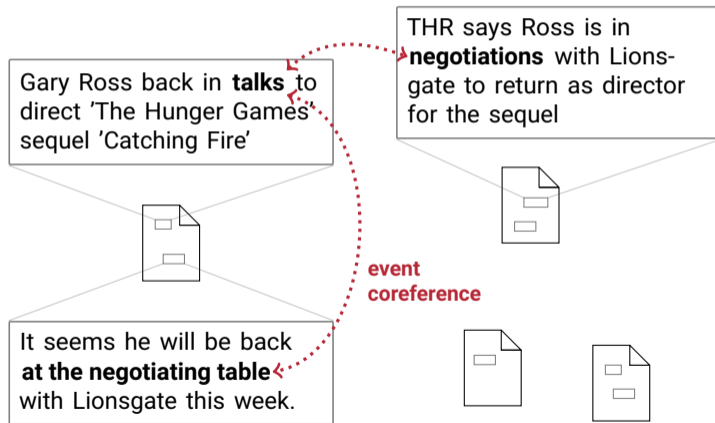2. Cluster mentions referring to the same event

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Event Coreference Resolution across Document Boundaries

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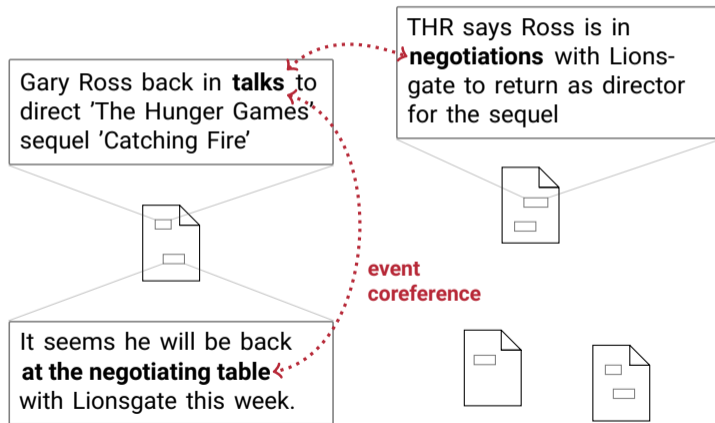# Event Coreference Resolution across Document Boundaries

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Many mentions at once in the cross-document case: computational complexity **becomes a challenge**!
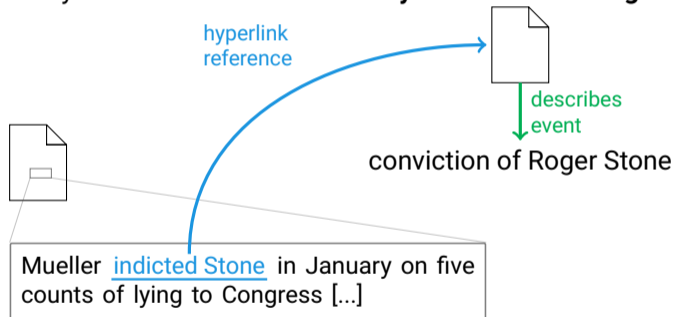
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Hyperlinks in Online News $\approx$ Event Coreference Annotations

- many mentions also means **costly & time-consuming** data annotation $\rightarrow$ how to avoid this?

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Hyperlinks in Online News ≈ Event Coreference Annotations

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Mueller indicted Stone in January on five counts of lying to Congress [...]

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hyperlink
reference

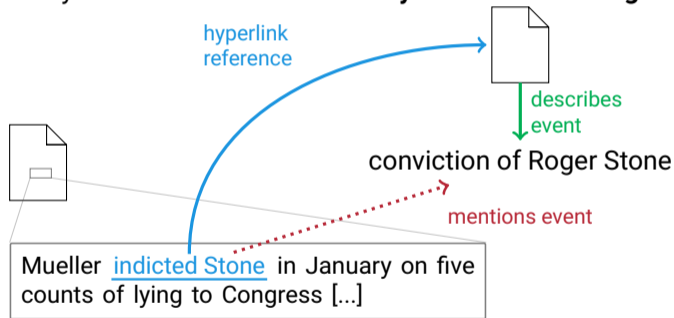Mueller indicted Stone in January on five counts of lying to Congress [...]

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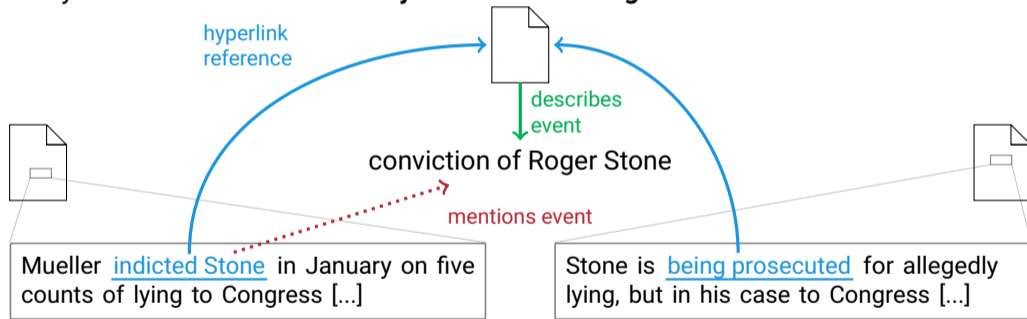Mueller indicted Stone in January on five counts of lying to Congress [...]

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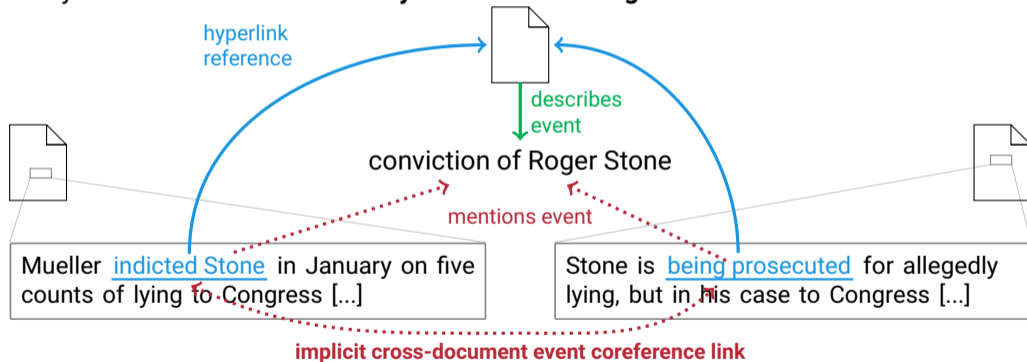Mueller _indicted Stone_ in January on five counts of lying to Congress [...]

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implicit cross-document event coreference link

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- Answer: by retrieving **hyperlinks** from online news which resemble **event coreference links**
    - noisier data than human annotation, but large amounts can be obtained far cheaper & faster

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- Is it useful?

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- Is it useful? **Yes.** A system trained on hyperlink data performs comparable to a system trained on gold data.

- Come visit our stand in gather.town for details.
  Data and code will be available soon™.

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