

# MultiOpEd: A Corpus of Multi-Perspective News Editorials

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Goal: to study the argumentation structures in news

- MultiOpEd – an open-domain English news editorial corpus that induces various argumentation-related tasks.
- Case Study – perspective summarization with relevance and stance auxiliary tasks.



Written by:

Dr John Lee



Writing in this [magazine](#) a month ago, I applauded the British government's stated aim of trying to follow the science in dealing with COVID. Such promises are easier made than kept. Following science means understanding science. It means engaging with rival interpretations of the limited data in order to tease out what is most important in what we don't know. Instead, the government in the UK (and many other places) seems uninterested in alternative viewpoints. The chosen narrative — that lockdown has saved countless lives — has been doggedly followed by all spokespeople. No doubt is allowed. We have been seeing the groupthink response to a perceived external threat that Jonathan Haidt describes so lucidly in his excellent book on human moral thinking, *The Righteous Mind*.

It has now become a matter of faith that lockdown is vital. Not only is it believed to be causally responsible for 'flattening the curve', but it is feared that releasing it too soon may cause a second spike in cases and 'economic disaster' (presumably due to further huge numbers of deaths). On what evidence is this made?

Even if you could understand why lockdown was imposed, it very rapidly became apparent that it had not been thought through. Not in terms of the wider effects on society (which

## 4 reasons state plans to open up may backfire — and soon

States are opening up their economies. Scientists fear this isn't going to end well.

By Brian Resnick | @B\_resnick | brian@vox.com | Updated May 12, 2020, 11:20am EDT

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This month, Missouri **allowed concerts** to resume for the first time since the state's stay-at-home order started at the beginning of April. Yes, concerts, where people usually pack together, breathing the same air. Apparently, the Missouri government believes it will be safe if people attending stand 6 feet apart.

It's not just concerts: Under Gov. Mike Parson's direction, all businesses in the state can **resume operations**, provided that employees and customers keep some distance between themselves. (The exception: St. Louis will remain in lockdown.) Meanwhile, the number of daily new **positive cases** is still trending upward in Missouri.

What's happening in Missouri is beginning to happen in many parts of the country even though most states still fail, **as this New York Times interactive shows**, to meet the White House's criteria for doing so: having a downward trajectory of cases over a two-week span,

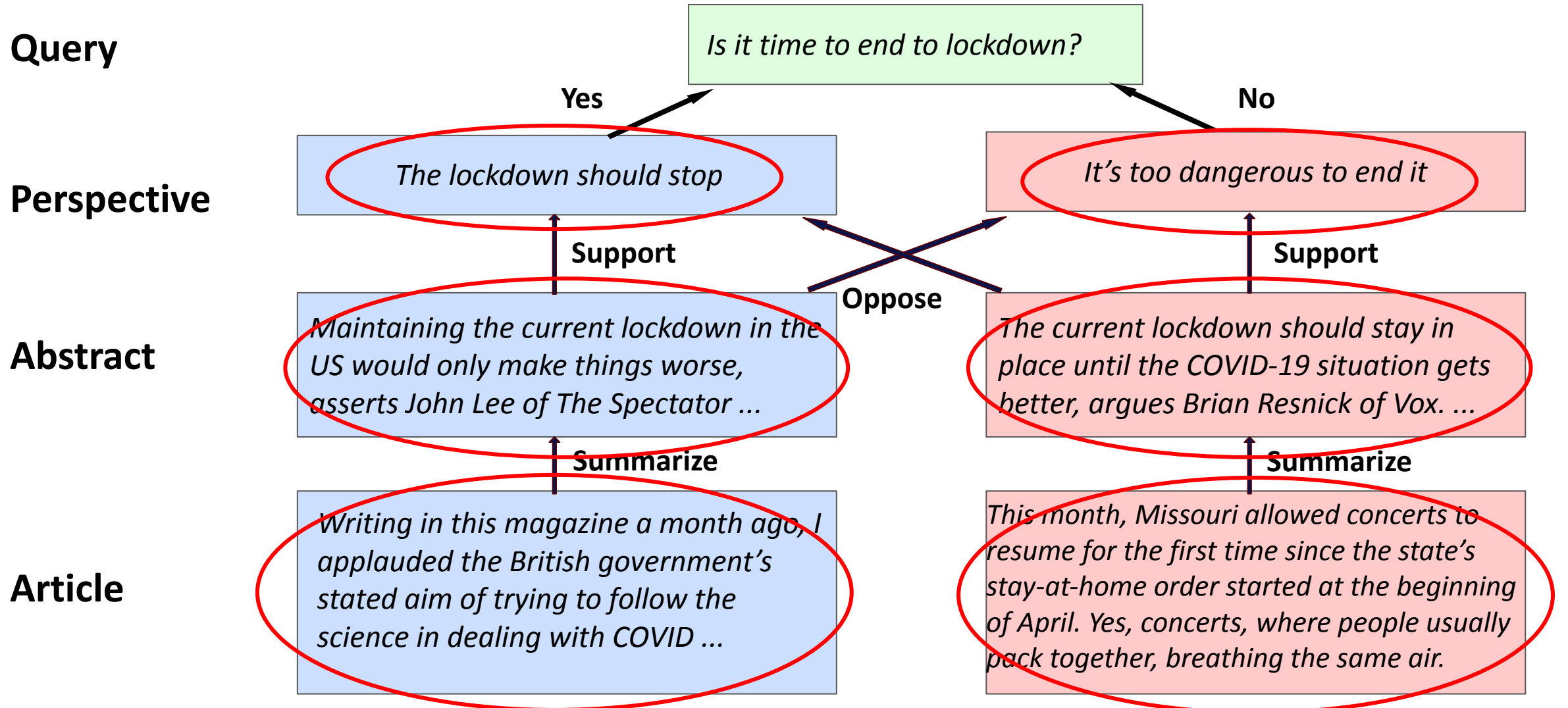
### Perspectives:

The lockdown should stop

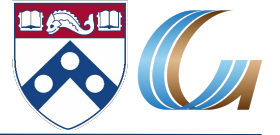
Challenge: argumentation structure in news editorials is often implicit [El Baff et al. 2018].

### Perspectives:

It's too dangerous to end it



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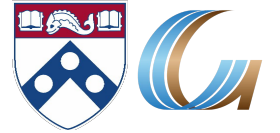
IS IT TIME TO END THE LOCKDOWN?

The lockdown should stop

It's too dangerous to end it



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## Abstract

Maintaining the current lockdown in the US would only make things worse, asserts John Lee of The Spectator. It is crashing the economy, causing far more damage than the virus could. Around 99.9% of infected people recover.

Of those who have died, 90% had pre-existing conditions. While the lockdown may prevent some infections, once it ends that may have been for nothing. People who aren't getting infected now might just get infected later.

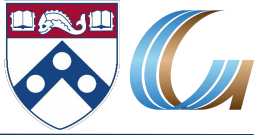
Countries that had harsh lockdowns might see new waves emerge as traveling resumes. The economic downturn resulting from maintaining the lockdown is going to cause great damage to health; we must end it.

The current lockdown should stay in place until the COVID-19 situation gets better, argues Brian Resnick of Vox. The vast majority of Americans have yet to be infected and develop immunity. Ending quarantine measures could allow the virus to spread rapidly. We need to conduct more testing, contact tracing and isolate infected people more effectively. States just aren't doing enough testing to accurately analyze the spread and handle new outbreaks. For now, staying in isolation is the best solution. The number of infected is finally reaching its peak; we still need to continue lockdown measures to ensure that the virus's spread is curtailed.

## Article

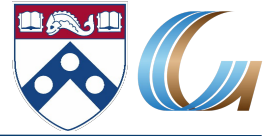
«KEEP ON READING AT THE SPECTATOR

KEEP ON READING AT VOX»

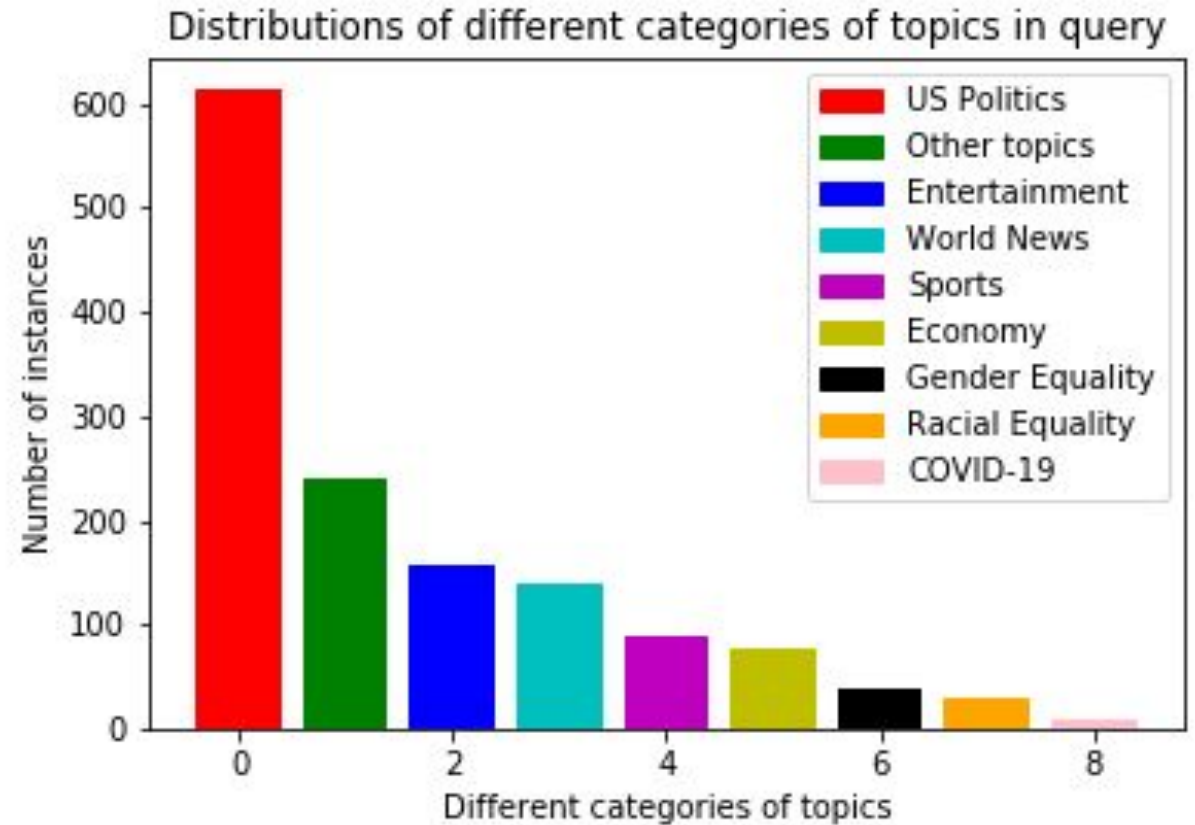


- Stance Annotation
  - which side supports/opposes the query
- Implicit Reference Resolution in Perspectives
  - “It’s too dangerous to end ~~it.~~” the lockdown.
- Topic annotations
  - US Politics, Entertainment, World News, etc.

# Dataset Statistics

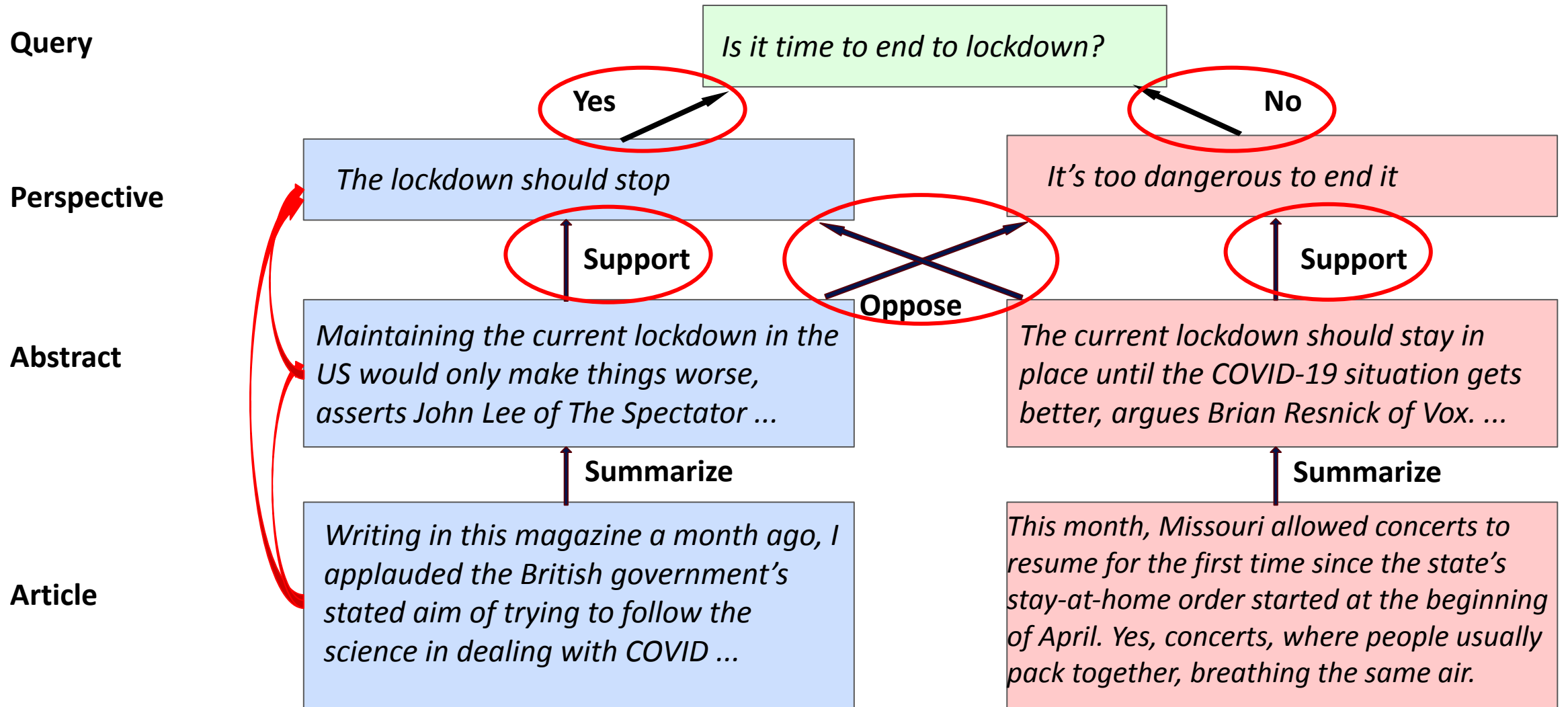
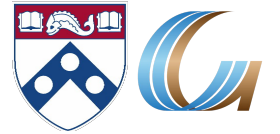


Instance	Size	Avg. Len.	Min	Max
<i>Query</i>	1,397	7.4	3	15
<i>Perspective</i>	2,794	6.1	2	10
<i>Abstract</i>	2,794	101.9	47	160
<i>Article</i>	2,584	918.6	74	7,608

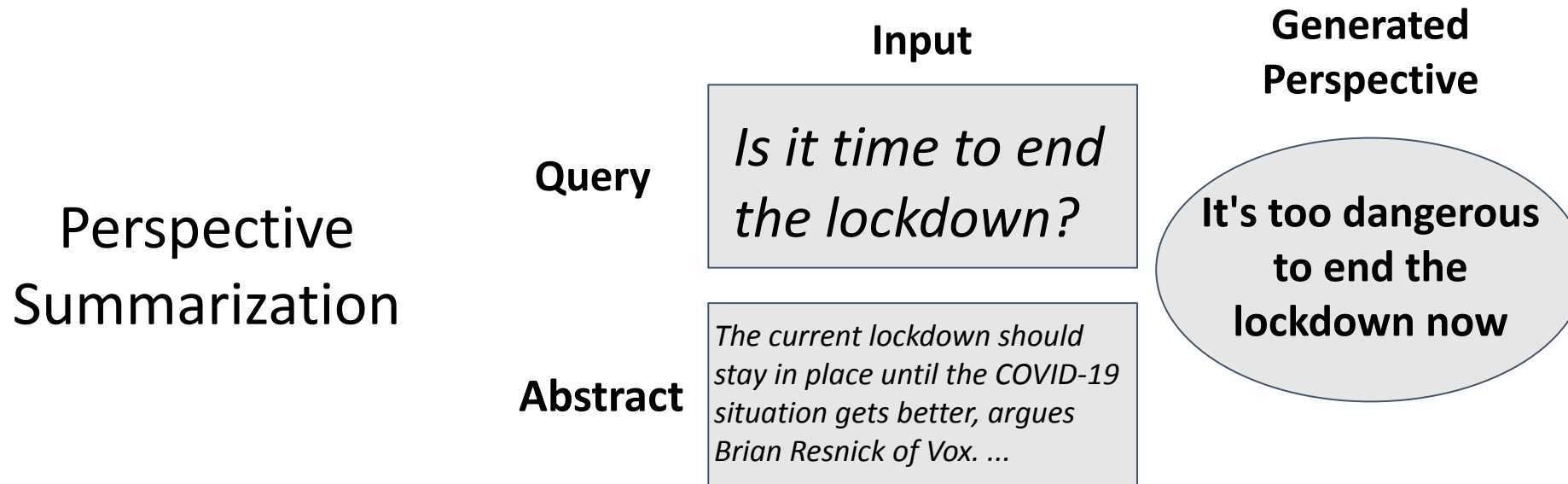




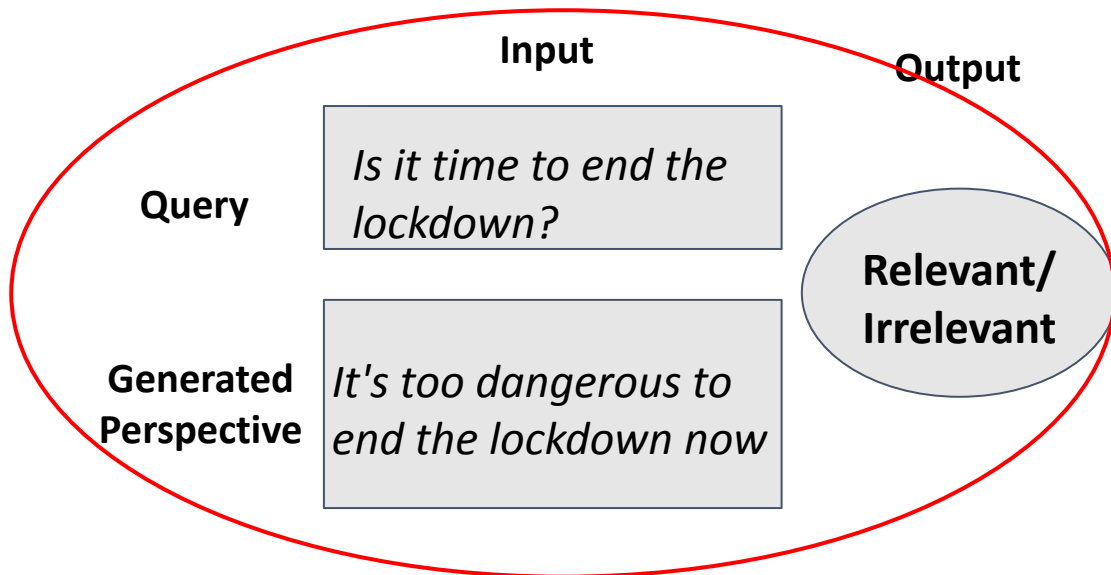
# Induced Tasks



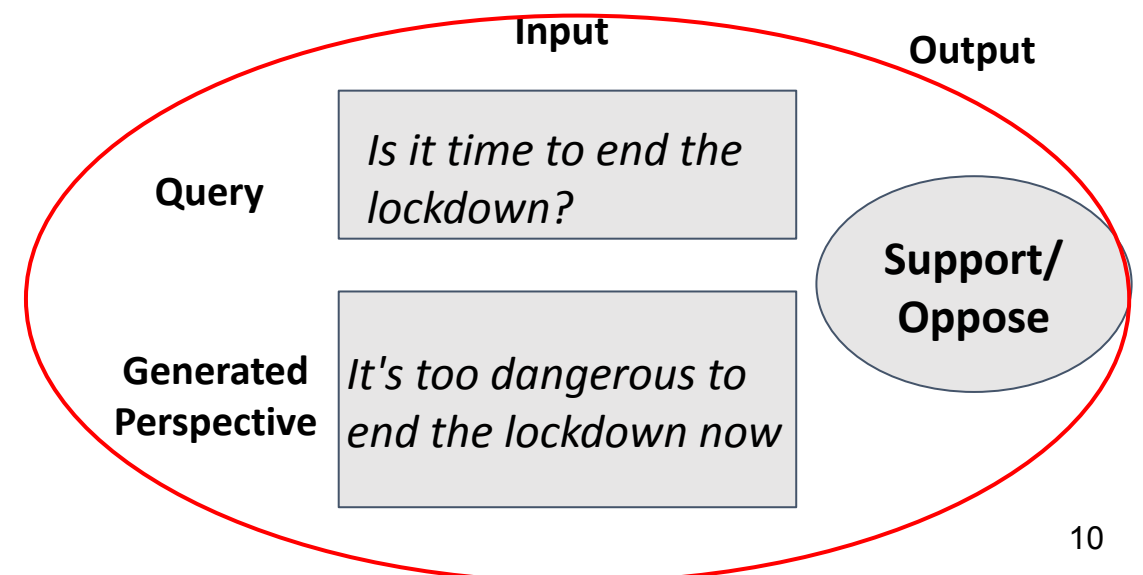
# Case Study – Perspective Summarization



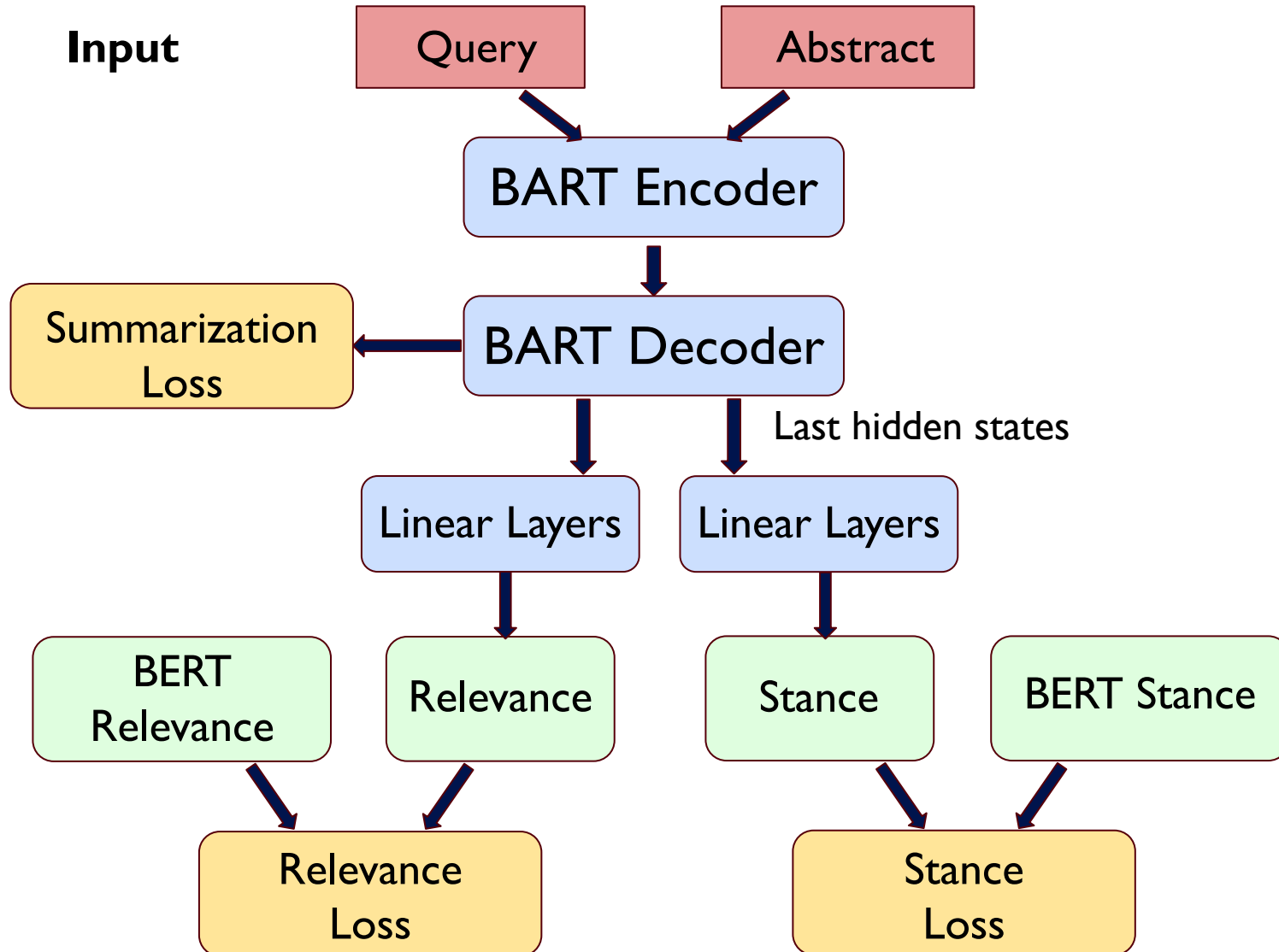
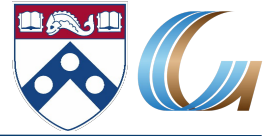
## Relevance



## Stance



# Case Study– Perspective Summarization



$$\mathcal{H}_Q = \text{EOS}(\mathcal{D}_{\text{BART}}(\mathcal{E}_{\text{BART}}(\mathcal{Q})))$$

$$\mathcal{H}_A = \text{EOS}(\mathcal{D}_{\text{BART}}(\mathcal{E}_{\text{BART}}(\mathcal{A})))$$

$$\tilde{y}_{\text{stance}} = \text{SOFTMAX}(W_s^T [\mathcal{H}_Q, \mathcal{H}_A])$$

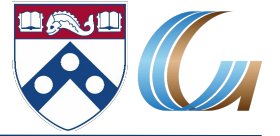
$$\tilde{y}_{\text{rel}} = \text{SOFTMAX}(W_r^T [\mathcal{H}_Q, \mathcal{H}_A])$$

$$\mathcal{L}_{\text{REL}} = \text{MSELOSS}(y_{\text{rel}}, \tilde{y}_{\text{rel}})$$

$$\mathcal{L}_{\text{STANCE}} = \text{MSELOSS}(y_{\text{stance}}, \tilde{y}_{\text{stance}})$$

$$\mathcal{L} = \mathcal{L}_{\text{SUM}} + \alpha_1 \cdot \mathcal{L}_{\text{REL}} + \alpha_2 \cdot \mathcal{L}_{\text{STANCE}}$$

# Results and Analysis



Model	ROUGE <sub>1</sub>	ROUGE <sub>2</sub>	ROUGE <sub>L</sub>	BERTSCORE	REL. %	STANCE %
BART	28.24	11.34	26.96	88.67	91.91	72.32
+ <i>Rel</i>	28.35	11.51	27.12	88.69	92.98	72.68
+ <i>Stance</i>	28.19	11.53	26.93	<b>88.75</b>	91.25	73.39
+ <i>Rel &amp; Stance</i>	<b>29.18</b>	<b>11.92</b>	<b>27.94</b>	88.74	<b>94.64</b>	<b>74.29</b>

Query	Should trump accept democrats' gov't spending bill?
<b>BART</b>	A shutdown is the best deal he can get.
<b>+ REL</b>	Trump should accept the gop budget.
<b>Gold</b>	This deal is the most achievable compromise.

Query	Is apple's iphone x technology any good?
<b>BART</b>	Apple's new iPhone X offers many great opportunities
<b>+ STANCE</b>	Apple's new face-recognition technology raises many ethical issues
<b>Gold</b>	Apple's new Iphone X raises many security concerns

- MultiOpEd – an open-domain news editorial corpus that induces various argumentation-related tasks.
  - Abstraction over the editorial
  - Pairs of editorials with opposing stances
  - Multiple argumentation-related tasks together
- Case Study – perspective summarization with relevance and stance auxiliary tasks.

Thanks!

Our data and code:



We would like to thank Daniel Ravner, the CEO of [www.theperspective.com](http://www.theperspective.com), for kindly granting access to data from the site for academic research.