

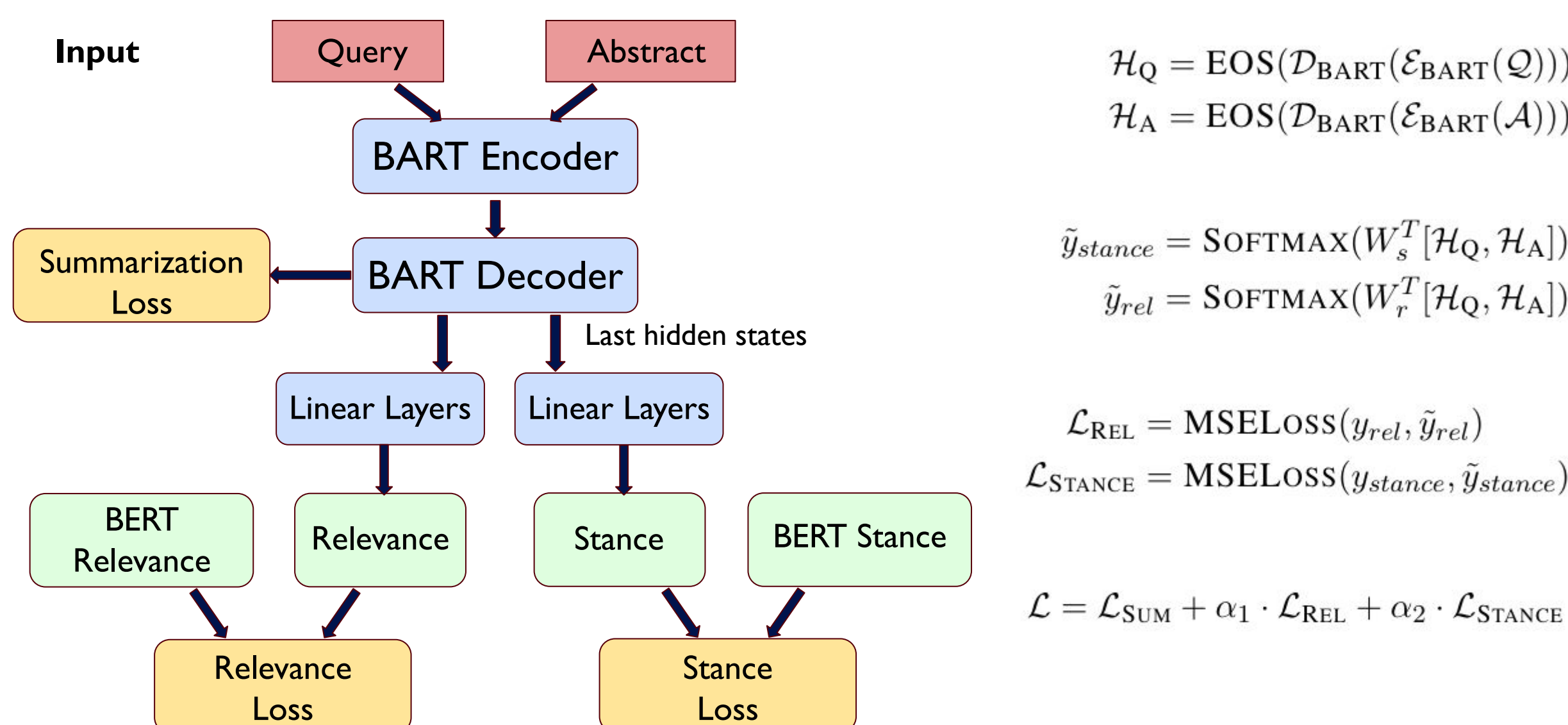
1. Introduction

The goal of this work is to identify and comparatively analyze the perspectives expressed in news editorials, but one main challenge to studying the argumentation structure in news editorials is that its elements are often not expressed explicitly. Rather, they follow subtle rhetorical strategies combining emotional anecdotes with hidden claims. This makes it difficult to identify and analyze the arguments in news editorials computationally.

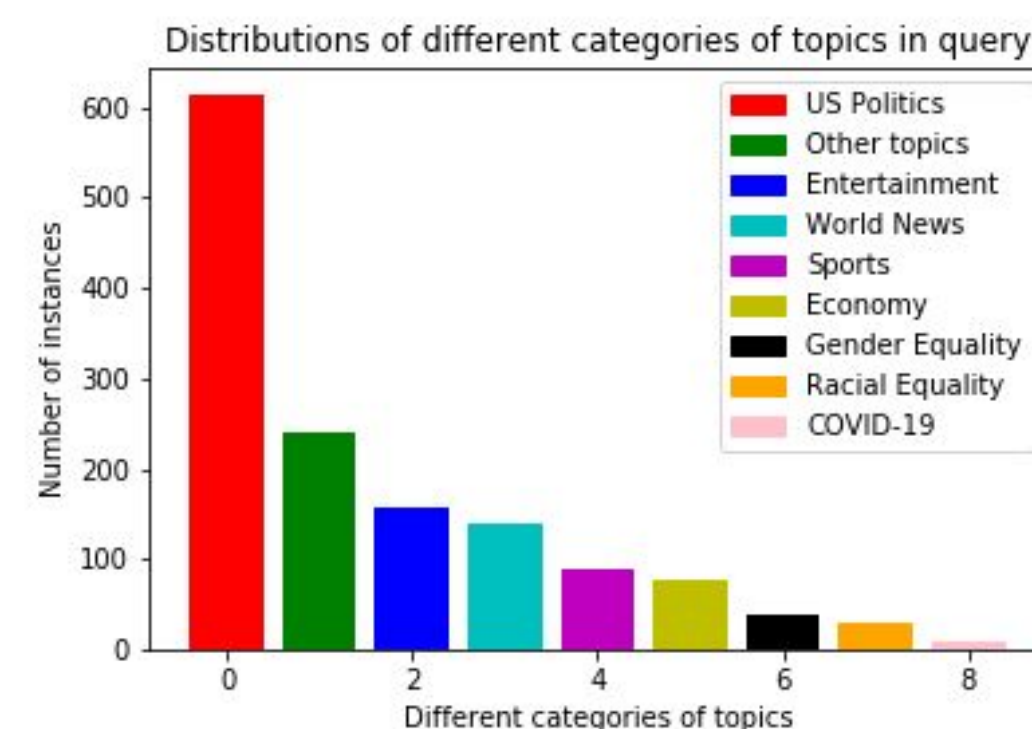
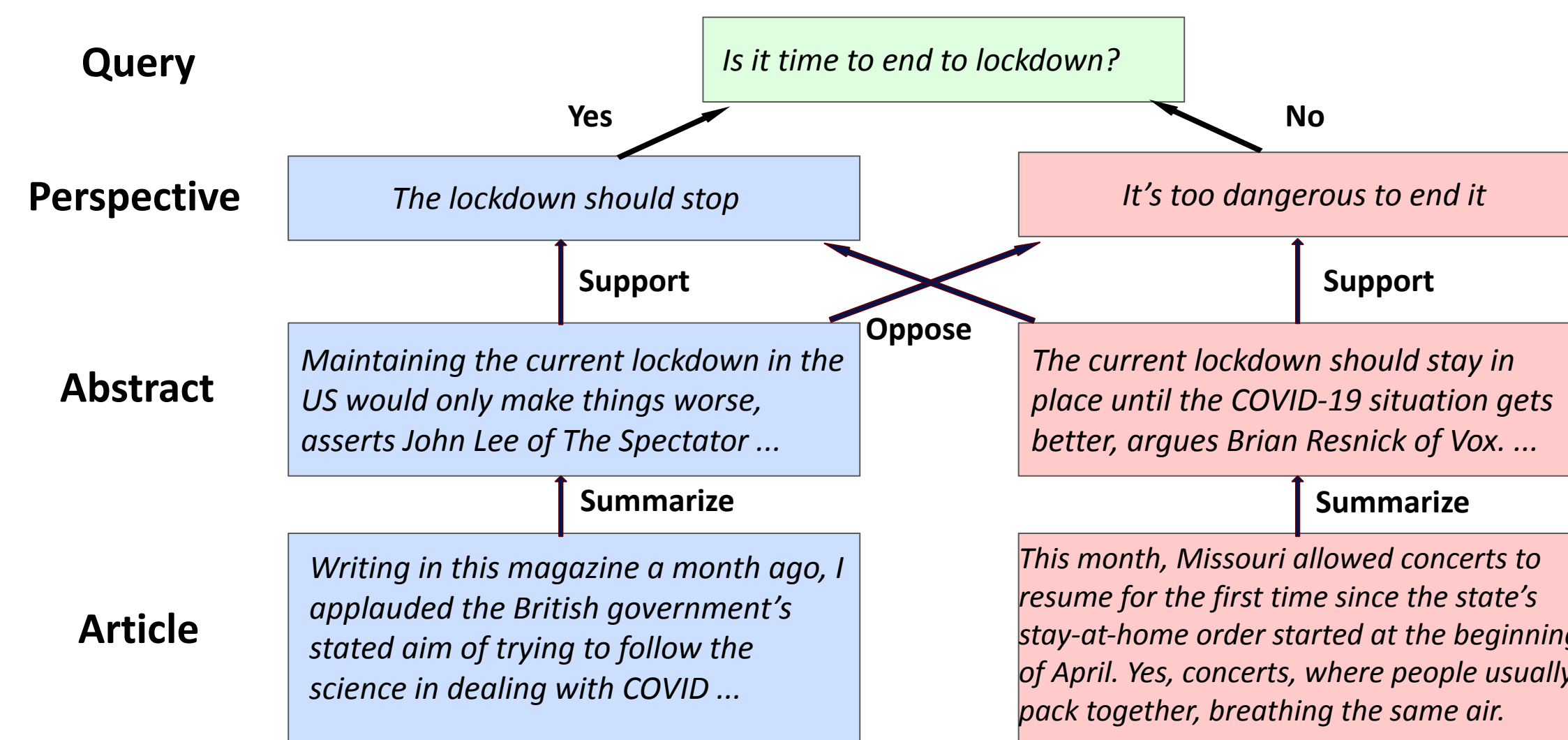
To alleviate such problem, we present MultiOpEd, an open-domain English news editorial corpus that supports various tasks pertaining to the argumentation structure in news editorials.

To demonstrate the benefits of modeling different induced tasks on the argumentation structure, we conduct a case study of Multi-task Perspective Summarization. Our analysis shows that modeling stance and relevance classification jointly with the summarization task improves the overall quality of the perspective generated.

4. Multi-task Perspective Summarization



2. Dataset Structure and Statistics



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

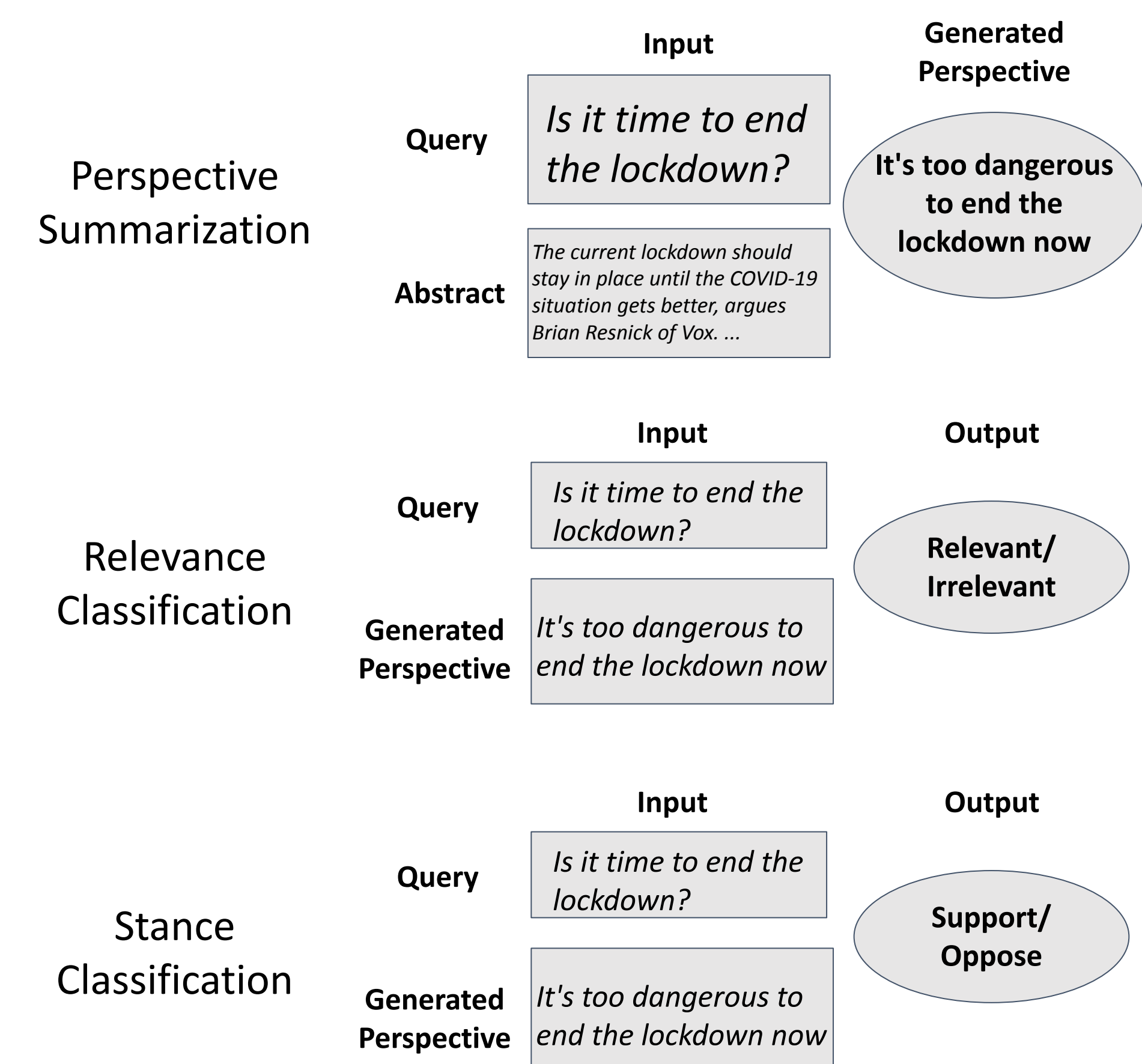
5. Results and Analysis

Model	ROUGE ₁	ROUGE ₂	ROUGE _L	BERTSCORE	REL. %	STANCE %
BART	28.24	11.34	26.96	88.67	91.91	72.32
+ Rel	28.35	11.51	27.12	88.69	92.98	72.68
+ Stance	28.19	11.53	26.93	88.75	91.25	73.39
+ Rel & Stance	29.18	11.92	27.94	88.74	94.64	74.29

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

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

3. Induced Tasks



6. Conclusion

- 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 – multi-task perspective summarization
 - stance and relevance auxiliary tasks help improve the overall quality of the perspective generated.

We hope that MultiOpEd can present opportunities and challenges to future research in argumentations.

Our data and code:



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