News is More than a Collection of Facts

Moral framing of news

Framing refers to **the way information is presented** to shape audience perceptions of an issue, e.g., by emphasizing some aspects of an event while downplaying others.

In this work, we focus on the **moral dimension of framing**, which evaluates actions, behaviors, or situations as right or wrong based on the underlying moral principles.

AI-based summarization may overlook the article framing

Basic approach

... In the letter, the NGOs said, "We, Japanese environmental NGOs concerned about climate change, were terribly dismayed by your new climate change plan." ...

Summarizer

... The NGOs criticized the US plan ...

Our approach

... In the letter, the NGOs said, "We, Japanese environmental NGOs concerned about climate change, were terribly dismayed by your new climate change plan." ...

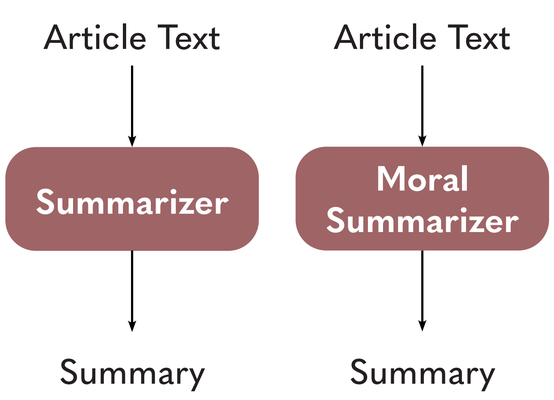
moral-laden words

Summarizer

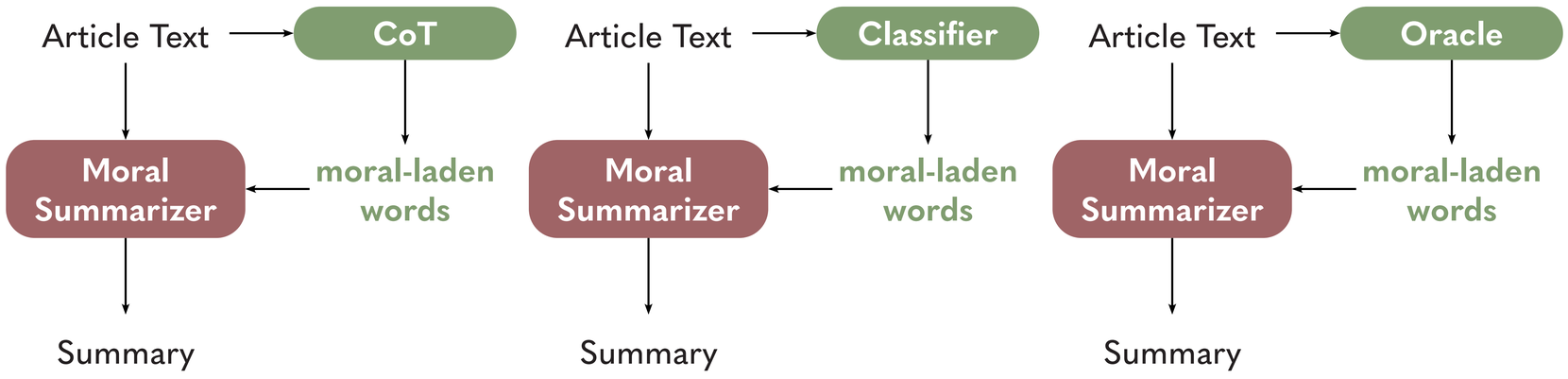
... [The NGOs] were "terribly dismayed" by the new plan ...

Moral frame preserving news summarization

Basic prompts



Word-preserving prompts



Automated Evaluation

Prompting the model to preserve moral-laden words **does not affect the overall summary quality**.

Llama-3-70B-Instruct is the best-performing tested model.

Supervised classification beats Chain-of-Thought in detecting moral-laden words (47.2 vs. 22.3 F_1).

Crowd Evaluation

Classifier and **Oracle** are the best-performing methods.

Preserving moral-laden words leads to **higher evaluation scores**.

There is **no correlation** between crowd and automated evaluations (i.e., human evaluation is needed).

Expert Evaluation

All moral-sensitive approaches **outperform the basic approach**.

Preserving a **spokesperson words verbatim** is important.

LLMs can **add or modify** the moral framing of the article.

Takeaways

Prompting LLMs to retain moral-laden words in the summary **improves moral framing preservation while maintaing overall summary quality**.

A sufficient word-level moral-ladenness prediction performance is required, but then a **better moral-ladenness prediction performance does not correlate** with better moral framing preservation.

Explaining how the summarization models identify moral-laden words and decide which ones to preserve is critical to mitigate moral framing addition or modification.

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