Multitask Prompted Training Enables Zero-Shot Task Generalization

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Presented by Giuseppe Attanasio

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Solving tasks the model was not trained for

Training on multiple tasks using prompts

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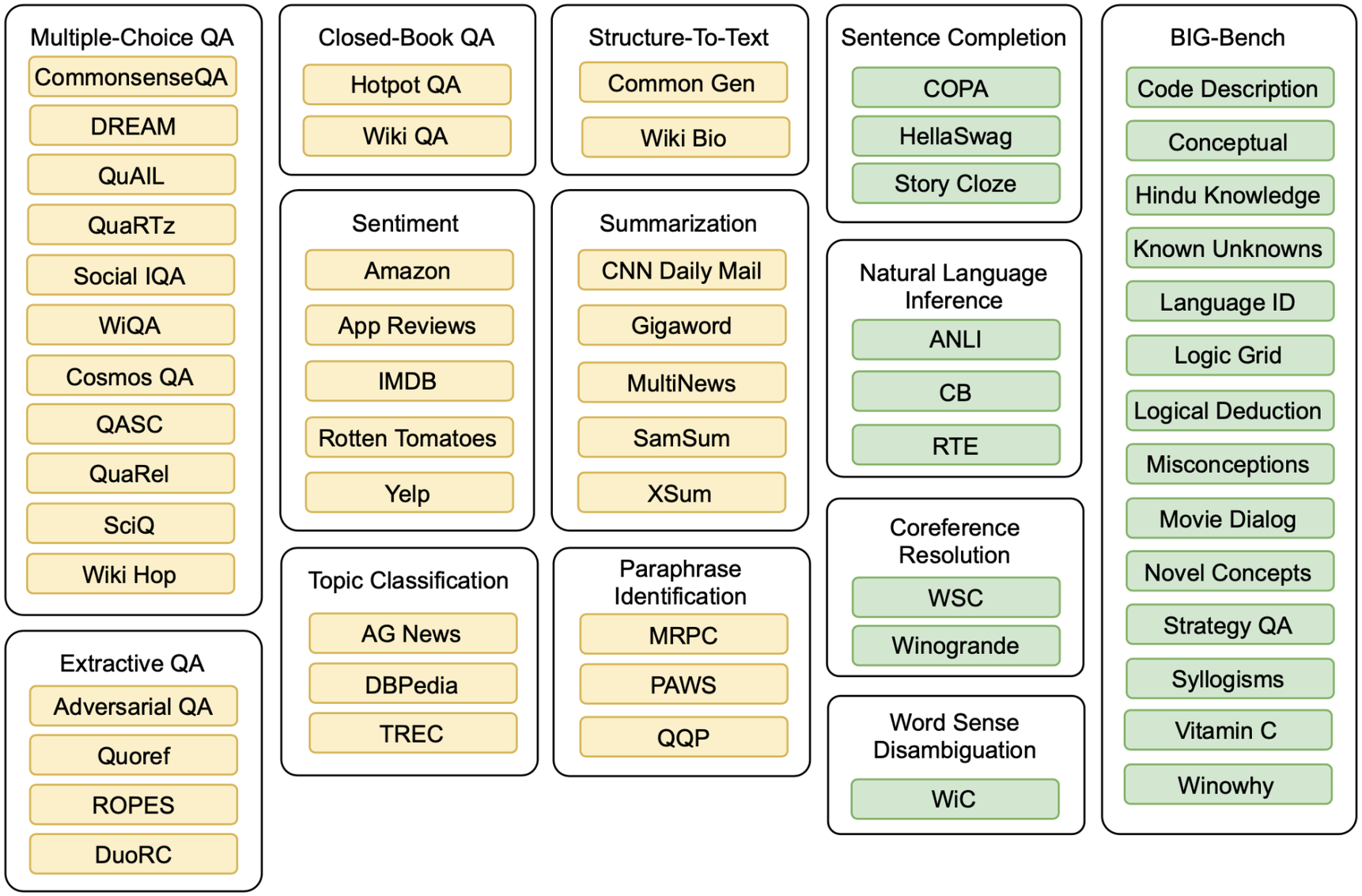
Solving tasks the model was not trained for

TELL ME HOW!

Multitask, Zero-Shot



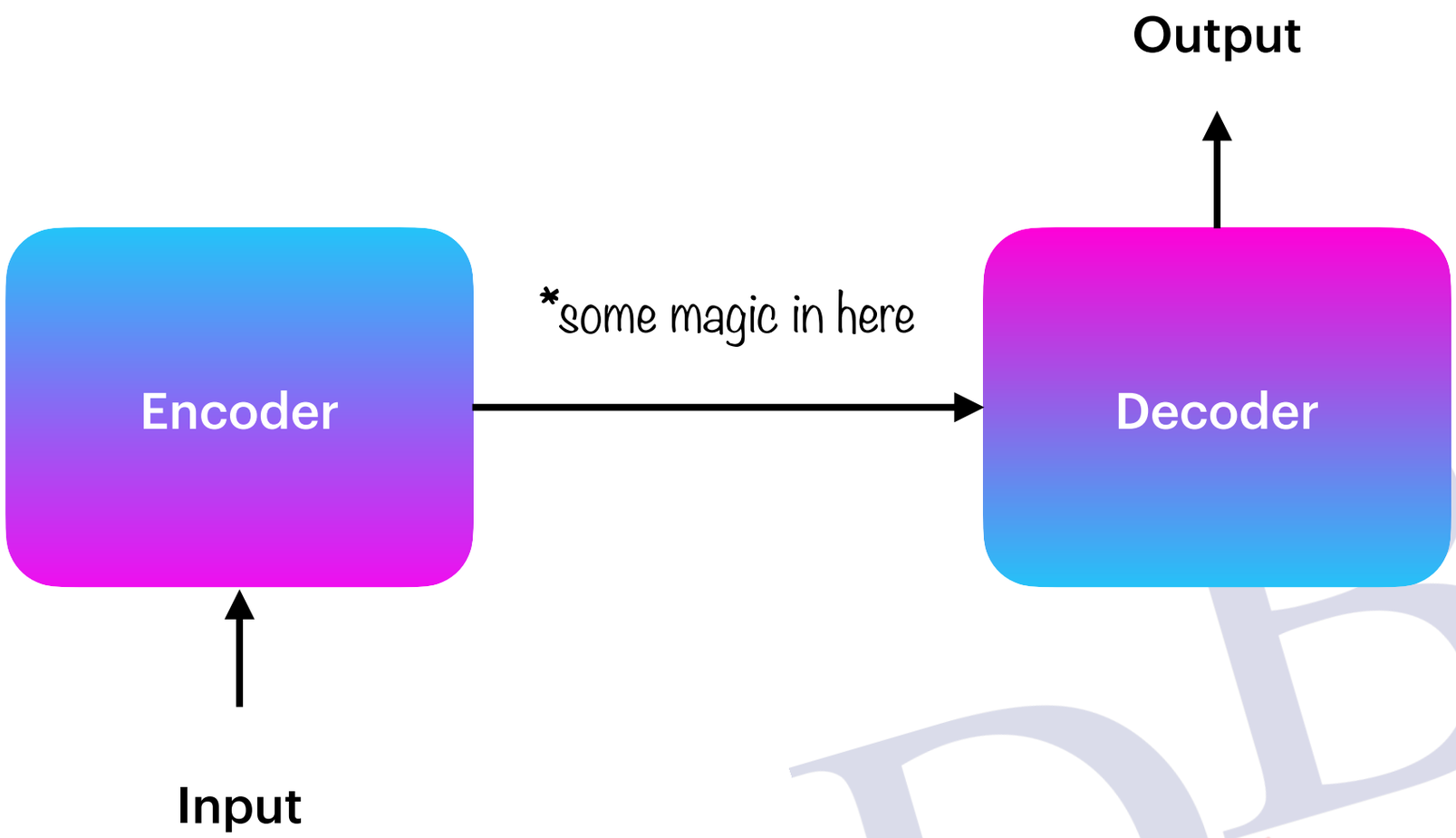
Crazy, right?

Prompting

(A clever NLP trick)

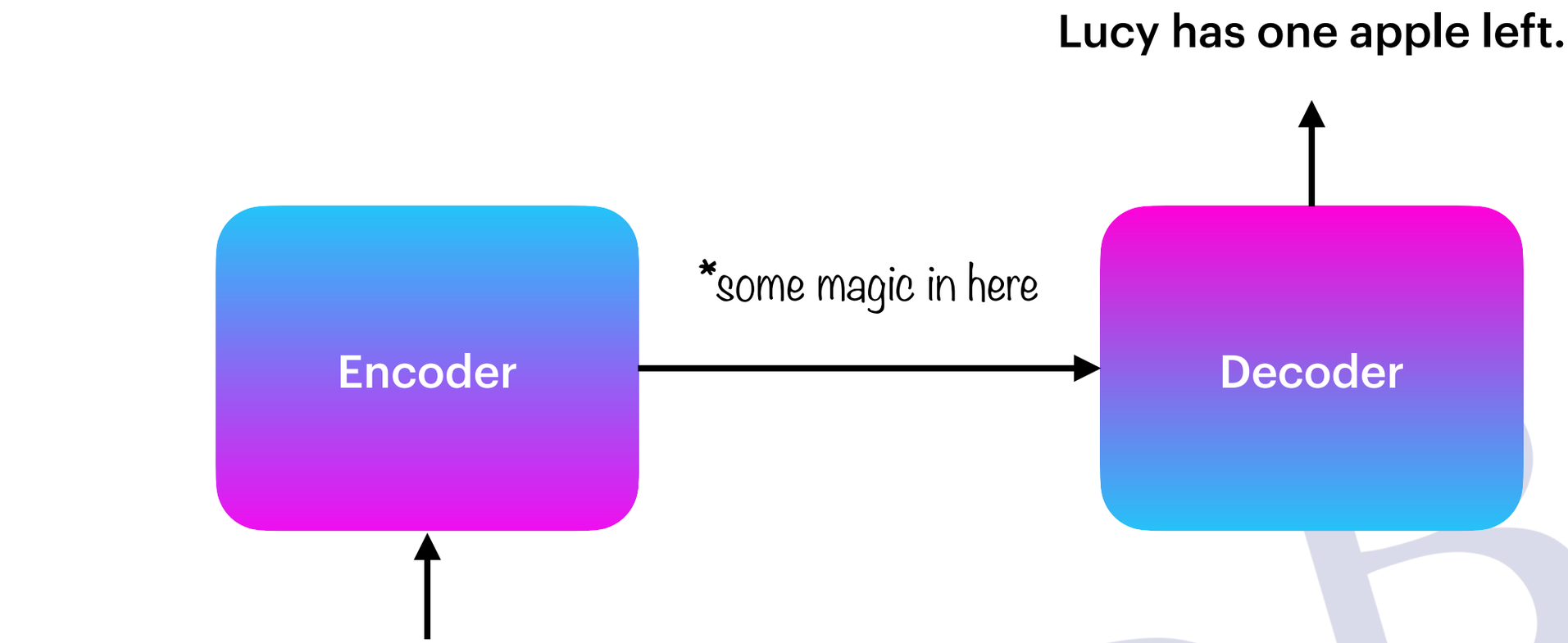
Prompting

Key ingredient: a S2S model



Prompting

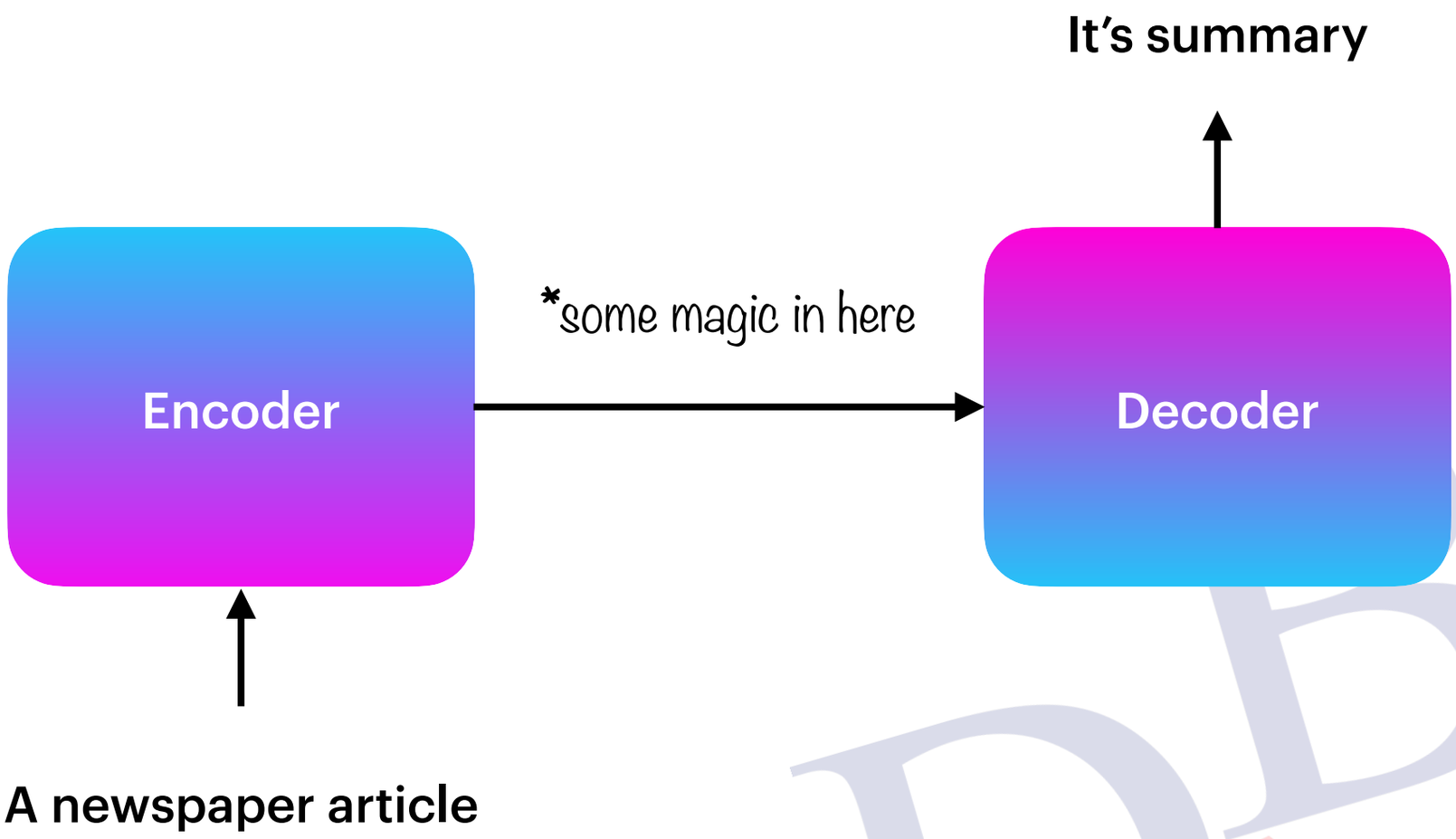
Key ingredient: a S2S model



Lucy has three apples.
She sells two of them.
How many apples does Lucy have left?

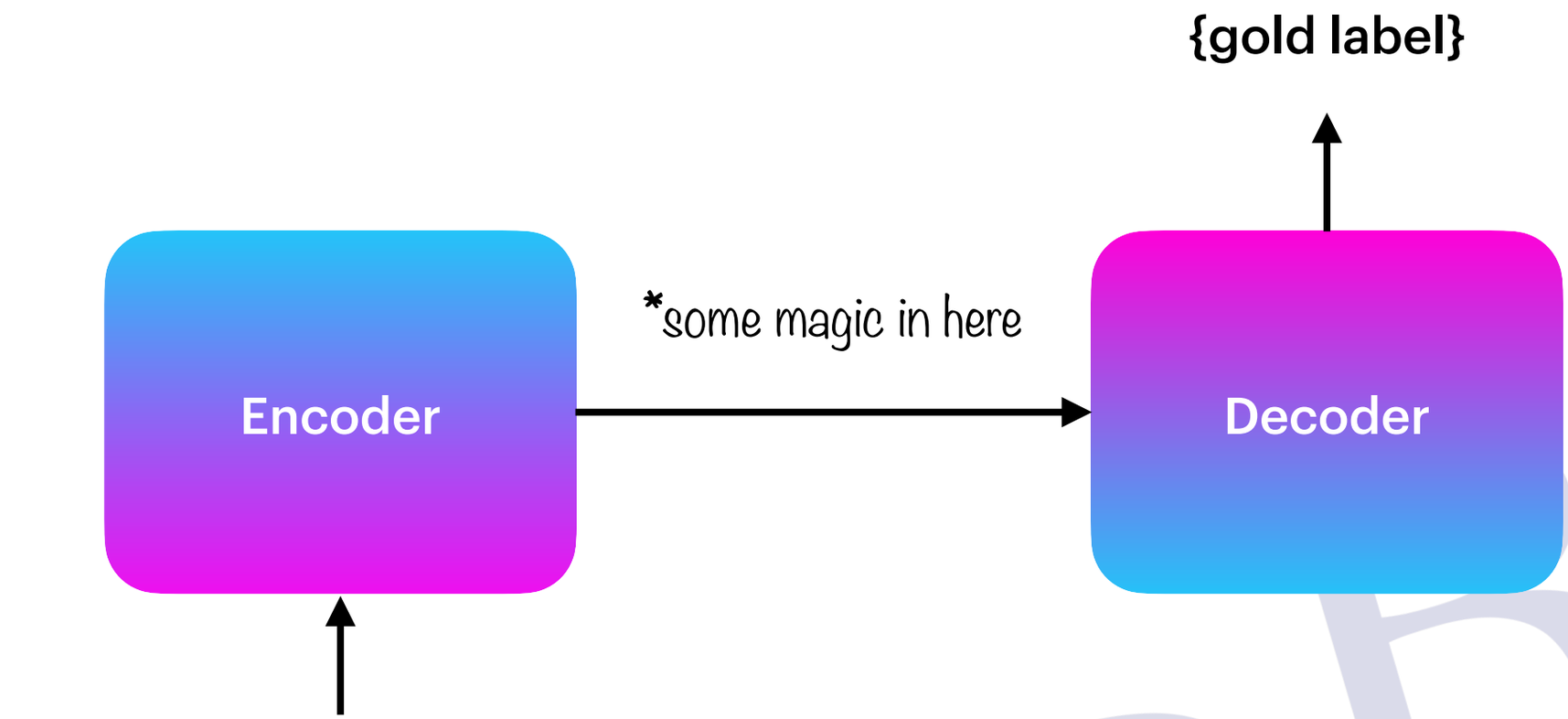
Prompting

Key ingredient: a S2S model

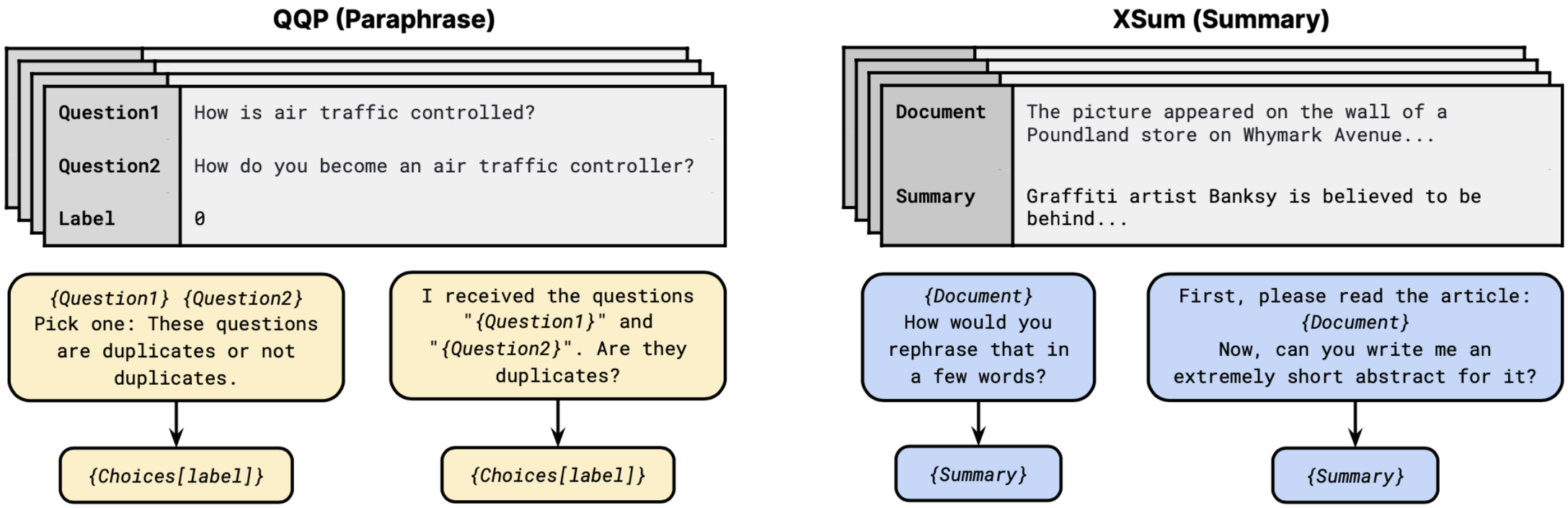


Prompting

Key ingredient: a S2S model



Unified Prompt Format



- Prompt: a input, output template
- Both formal and **creative** prompts
- ~8 prompts per dataset

Amazon Review Polarity

{title}, {content}, {label}

Input Template:

Input Template:

```
You are considering whether to buy a product. You look at the reviews.
Would the following review {{answer_choices[0]}} or
{{answer_choices[1]}} the chances of you buying the product?
Review title: {{title}}
Product review: {{content}}
```

Target Template:

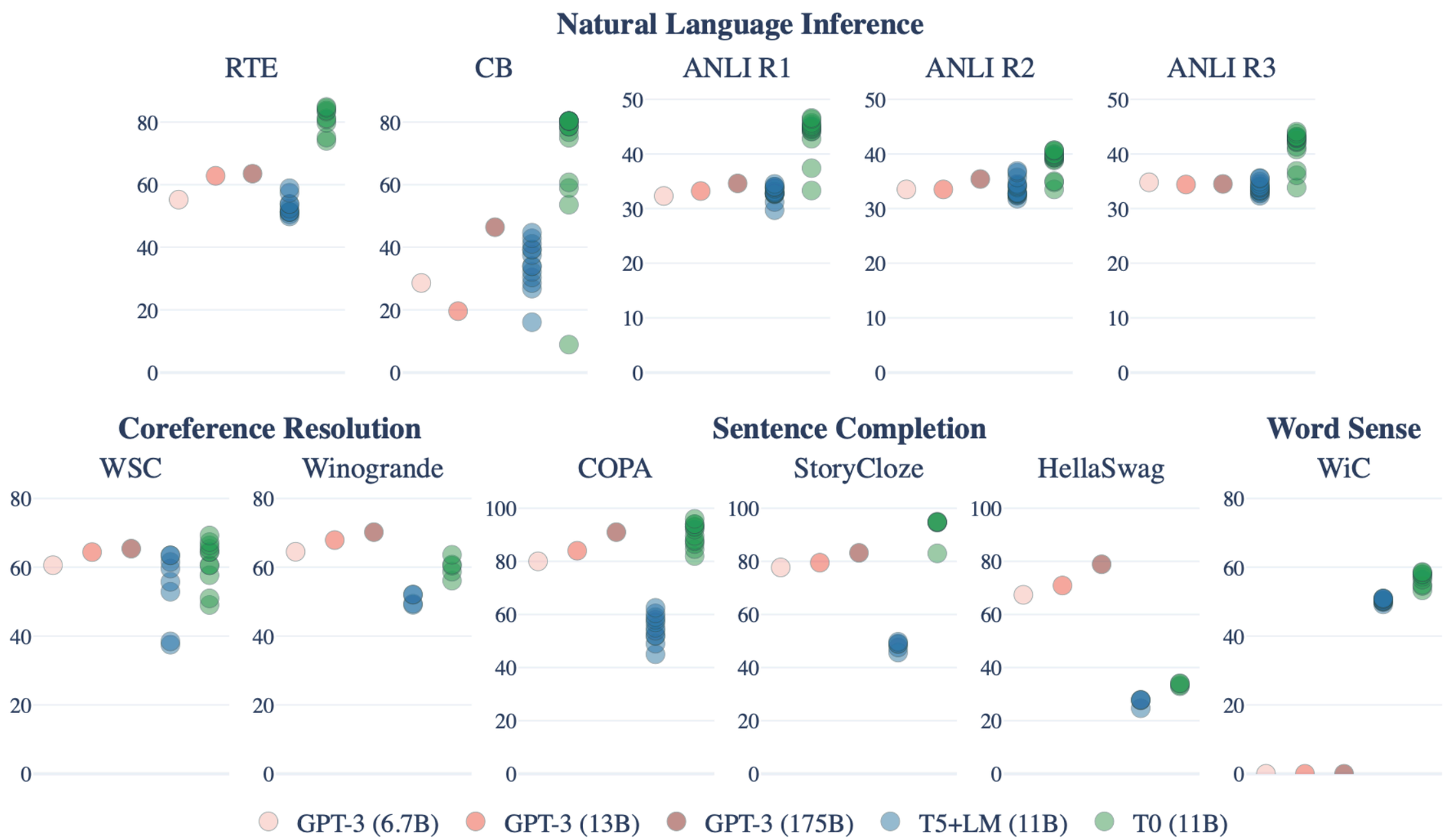
```
{{answer_choices[label]}}
```

Answer Choices Template: `decrease ||| increase`

Results

Held-out tasks

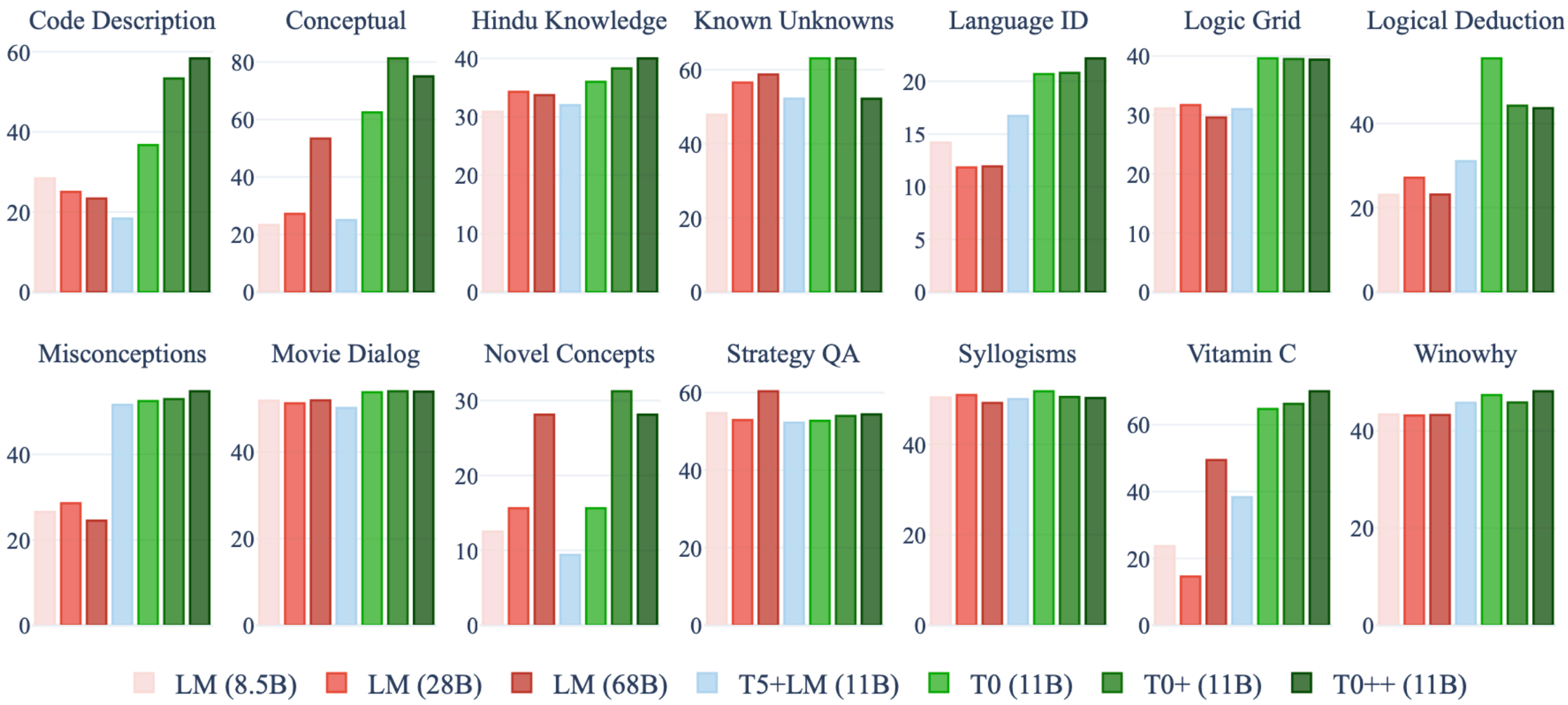
Classic tasks



Held-out tasks

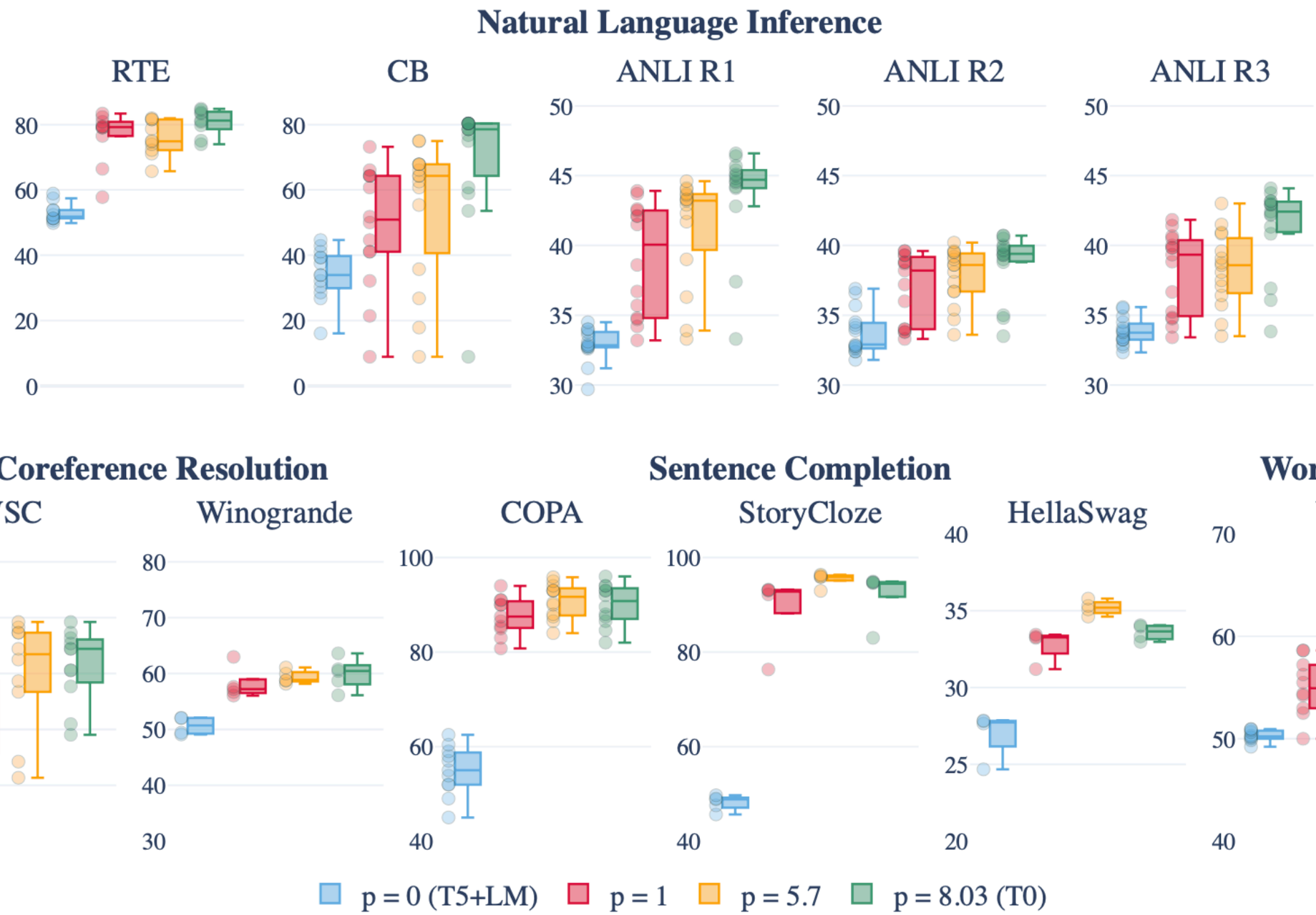
BIG-bench suite

arXiv-ed yesterday!



On the number of prompts

More is better



My takes

- If you do NLP, prompting is a now thing
- Crazy, beautifully formulated, effective idea
- Community effort, one-year long project
- Gap between builders and users
- Is it true generalization?

And yours?