# Justify Your Prompts!

Eduardo Calò, David M. Howcroft, Leo Leppänen, Saad Mahamood,
Simon Mille, **Patrícia Schmidtová**, Emiel van Miltenburg
Utrecht University · University of Aberdeen · University of Helsinki · University of Jyväskylä · Shopware · ADAPT, Dublin City University · Charles University · Tilburg University

Last Words
CL 2026

*If we cannot try infinitely many different prompts, how do you justify the prompt you're using?*

## Tiny changes, different results

*formatting* · *spelling* · *phrasing* · *information structure*

- People rarely discuss how they chose a specific prompt.

## Five ways to justify a prompt

*(adapted from psychology, Lakens 2022)*

### 1. Embrace the variation

Use many paraphrases. Report the average and the range.

*Costly; the prompt set and size still need justifying.*

### 2. Resource constraints

Appeal to reasonable effort. Show how the prompt evolved.

*Where is the line? If results hinge on the prompt, say so.*

### 3. No justification

Say so honestly. Fine when the prompt is not the focus.

*Weak ground for strong claims.*

### 4. Evidence based

Show that the prompt plausibly works for this model.

- **Good enough:** a pilot study shows the outputs suffice.
- **Locally optimal:** automatic prompt search.
- **Representative:** average user prompts.

*Needs measurable output quality. A local optimum is not a global one.*

### 5. Prior research

Build on earlier prompts or guidelines.

- **Exact:** reuse the same prompt.
- **Conceptual:** follow best practices or examples.

*May not carry over to other models. Used before does not mean good.*

## Your research goal sets the bar

*(what role does the LLM play in the experiment?)*

**Exploratory: vary prompts, document** → **Confirmatory: justify the prompt strongly**

### *Tool*

Prompts should resemble real users' prompts.

### *Object of study*

Vary prompts to test how robust a finding is.

### *Measuring instrument*

The prompt is the measurement protocol.

### *Sociotechnical actor*

Prompts encode norms. State assumptions.

### *Keep a prompt lab notebook. Report:*

- ☑ justification philosophy
- ☑ candidate prompts
- ☑ candidate scores
- ☑ techniques used
- ☑ selection criteria
- ☑ final prompt(s)

*Prompts are here to stay. Let's start justifying them!*

*Future work: Compiling best practices.*