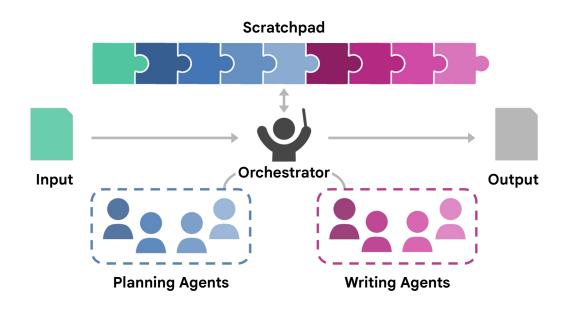


# Agents' Room: Generating Narratives through Multi-step Collaboration

Fantine Huot · Reinald Kim Amplayo · Jennimaria Palomaki · Alice Shoshana Jakobovits · Elizabeth Clark · Mirella Lapata

### Agents' Room – A collaborative generation framework



a multi-agent framework for complex writing tasks that decomposes the task into subtasks assigned to specialized agents

#### Central orchestrator

- Decomposes the task
- Assigns subtasks to agents

### Specialized Agents

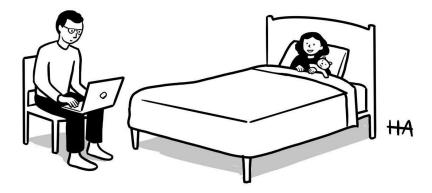
- LLM-based
- Zero-shot or fine-tuned
- Planning and writing

### Memory / State

- Shared scratchpad
- Collaborative communication

# Tell Me A Story – Long-form fiction dataset

https://github.com/google-deepmind/tell\_me\_a\_story



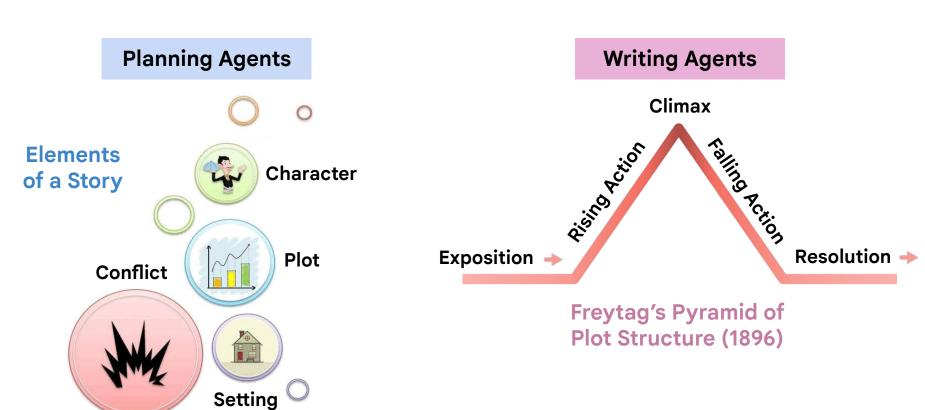
"Please tell me a story about a puppy who goes to Jupiter on her birthday to solve a mystery and is a mermaid, using an engaging and humorous tone, in approximately a thousand words, in the style of Ernest Hemingway."

# A high-quality dataset of human-written prompts and stories

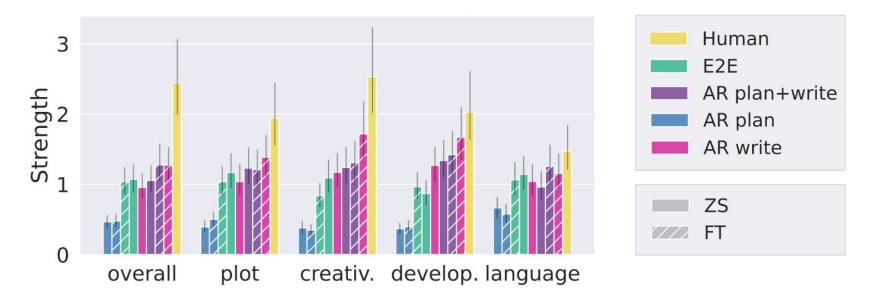
- Expert human writers
- Collected during writing workshops in multiple rounds: drafting, review, and revision
- ~350 stories
- ~2k words per story

Image Source: the New Yorker

## Specialized agents inspired by literary theory



### Agents' Room are preferred over baselines by human raters



- Human-written stories are preferred overall
- Agents' Room (AR) outperforms baseline systems (End-to-End, E2E)
- Fine-tuned (FT) agents outperform Zero-shot (ZS) agents

### Takeaways

## Come say hi at our poster!

- Agents' Room, multi-agent collaborative writing framework, that generates stories that are preferred over baseline systems.
- Tell Me A Story, a high-quality dataset of human-written prompts and stories.
- Evaluation suite, automated and human, for long-form creative writing.

