

Seeing Stories Think: Visual Interfaces for Understanding Algorithmic Storytelling

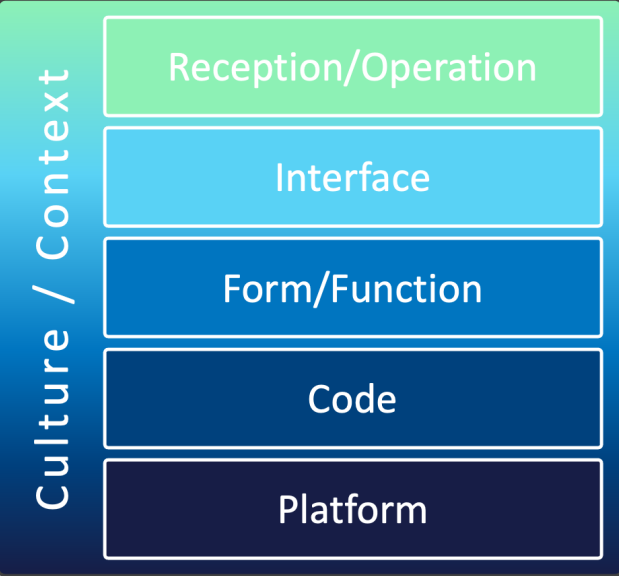
Jakob Kusnick

Center for Digital Narrative, University of Bergen, Norway

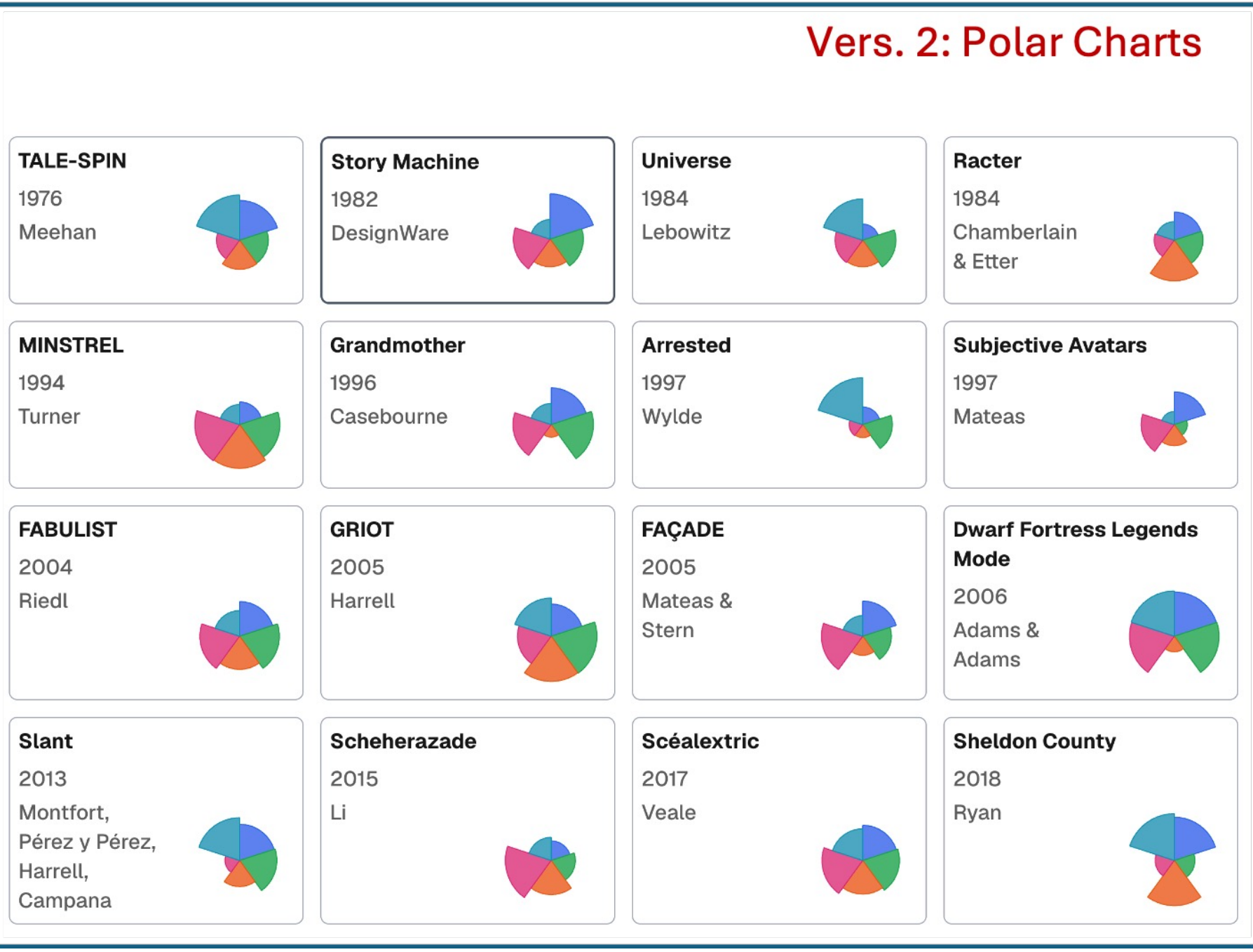
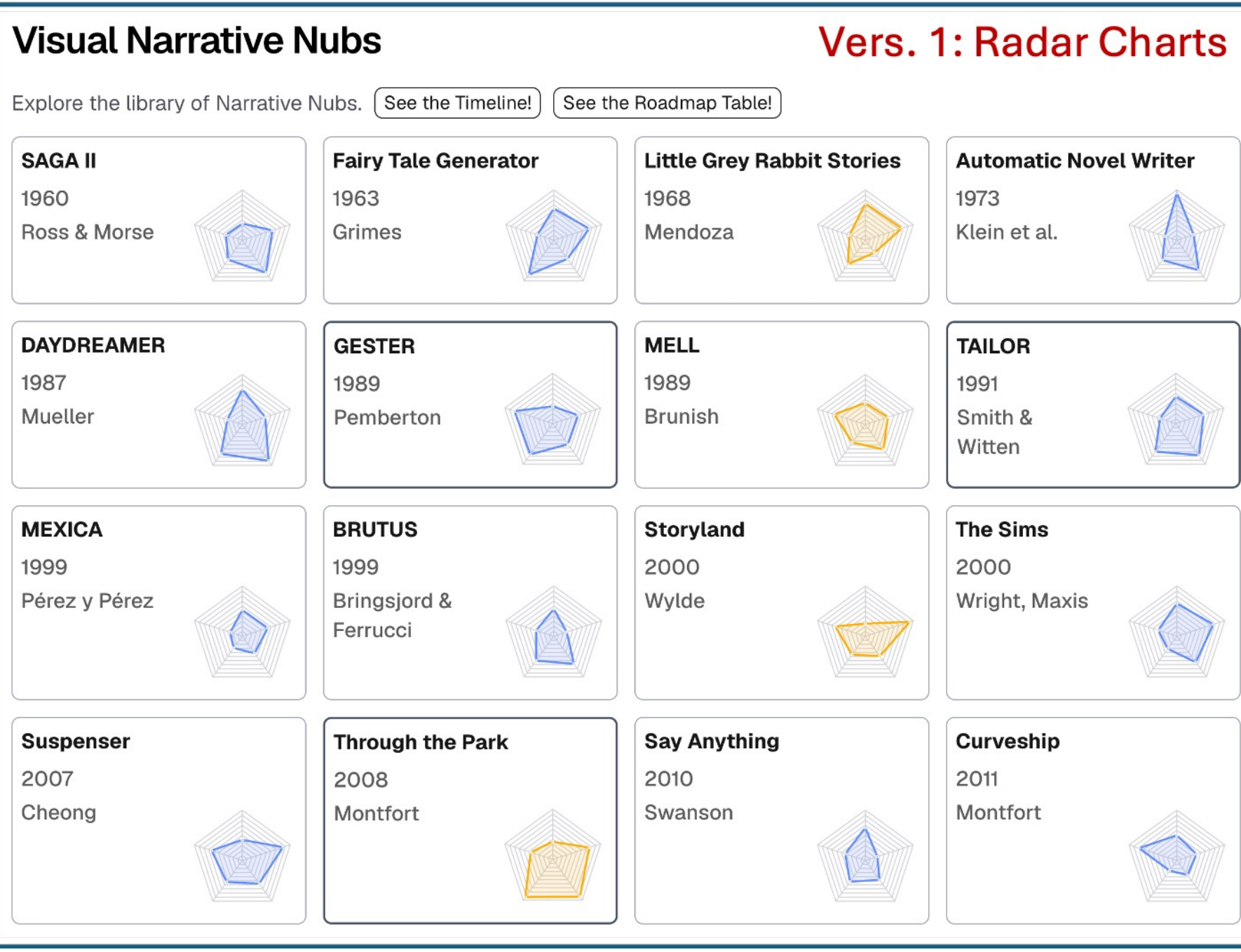
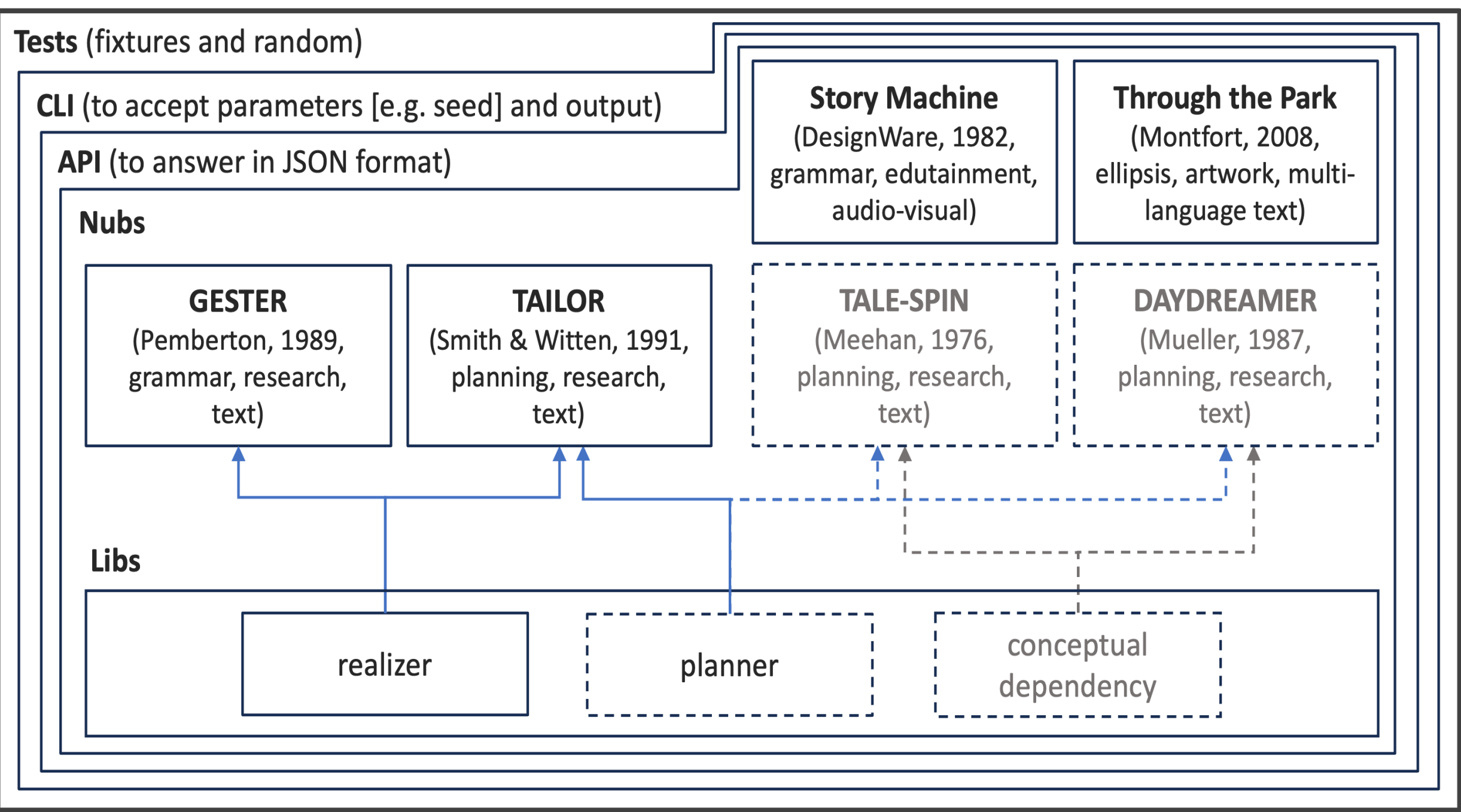


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Visual Narrative Nubs, as proposed by this poster, is an interface for the visual analysis of computational story generators and provides a tangible “playground” for researchers, pupils, and the interested public. The interface builds on **Narrative Nubs**, a collaborative research project that investigates the history of story generators through abstracted rational reconstructions (Habermas, 1979). These miniature reimplementations in Python 3, called “nubs,” capture the essence of the original systems while minimizing their complexity (Montfort & Kusnick, 2026). The nubs support a range of explorative activities, including research, education, and artistic practice.



◀ We focus on form and function of story generators, along with their cultural embeddings, narratological cosmology, and creative approaches. Four nubs exist currently and share one submodule (the realizer) with more to come in the future. The nubs also share a common API and command-line interface (CLI) as well as a test-suite surrounding them. ▶



The Museum of Story Generators offers an entry-point for exploring the vivid history of story generators by making them visually comparable. In addition to the code repository of Narrative Nubs, I envision a graphical user interface (e.g., responsive web-application) as an exhibition space. There, overview visualizations like grid-view or timeline detail the chronology of computational story generators.

◀ Micro-visualizations, like radar or polar charts, create visual signatures for the individual systems and highlight differences in the systems’ architecture, generative approach, and constraints. This aligns well with Narrative Nubs’ focus on conceptual distillation.

Close Reading of a TAILOR nub example story provides insights into parameters, entities, story events, network connections, story world, trajectories and visuospatial analogies such as tension and fortune throughout the narrative.

TAILOR

1991 by Smith, Witten

↶

☐ Seed: 4281351409

☒ Long

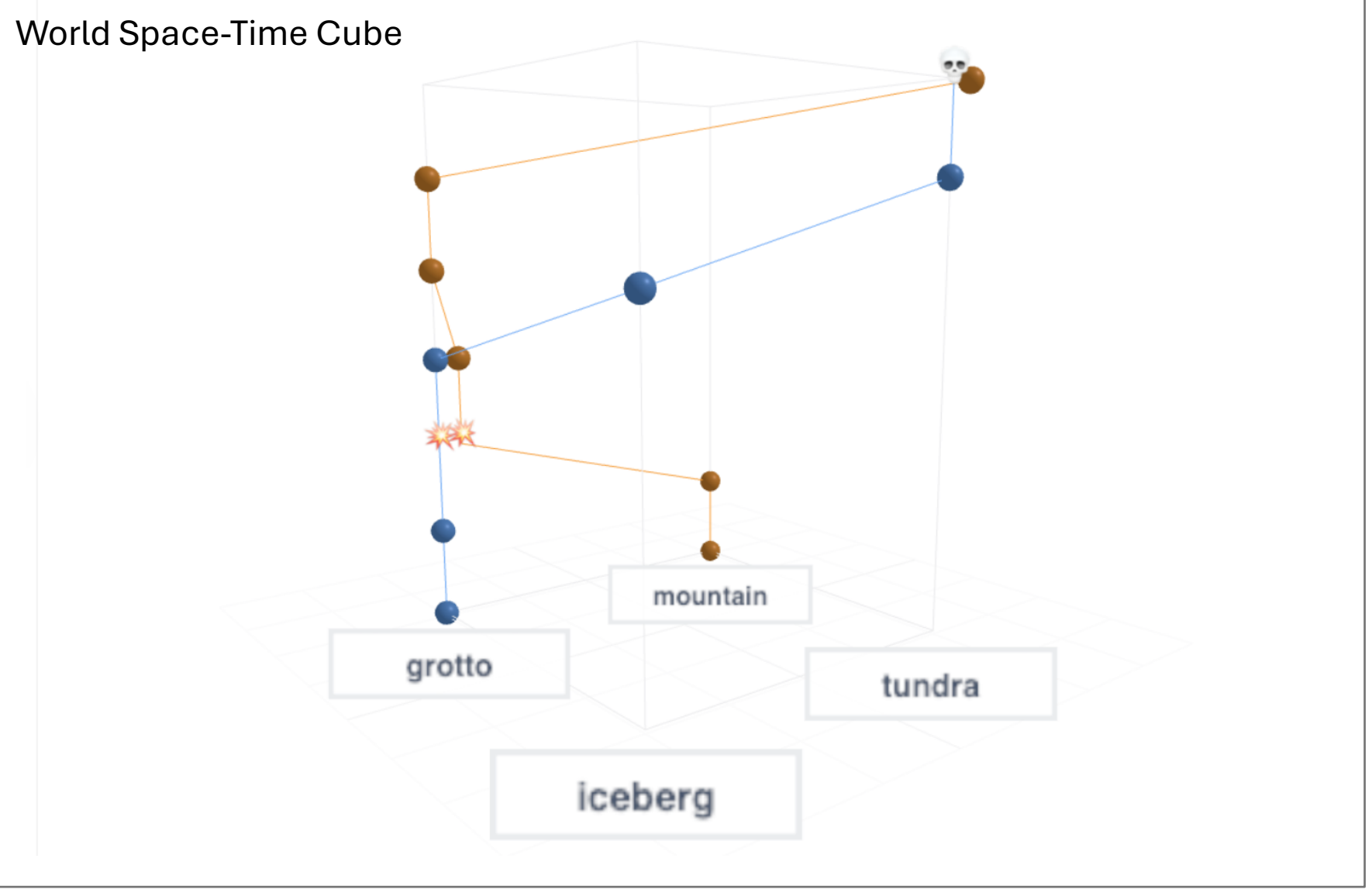
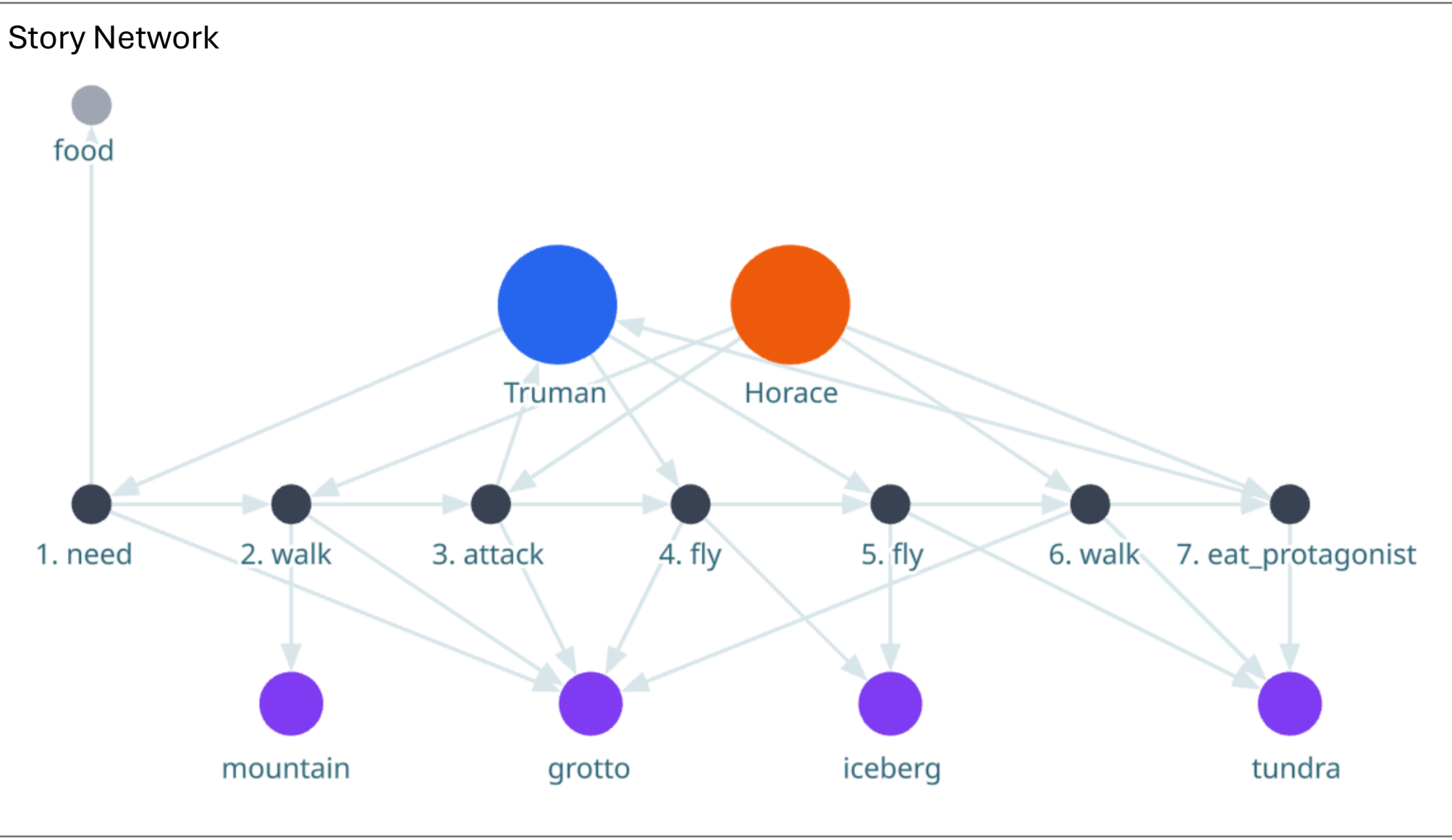
☐ Raw

Generate Story

Generate 100 Stories

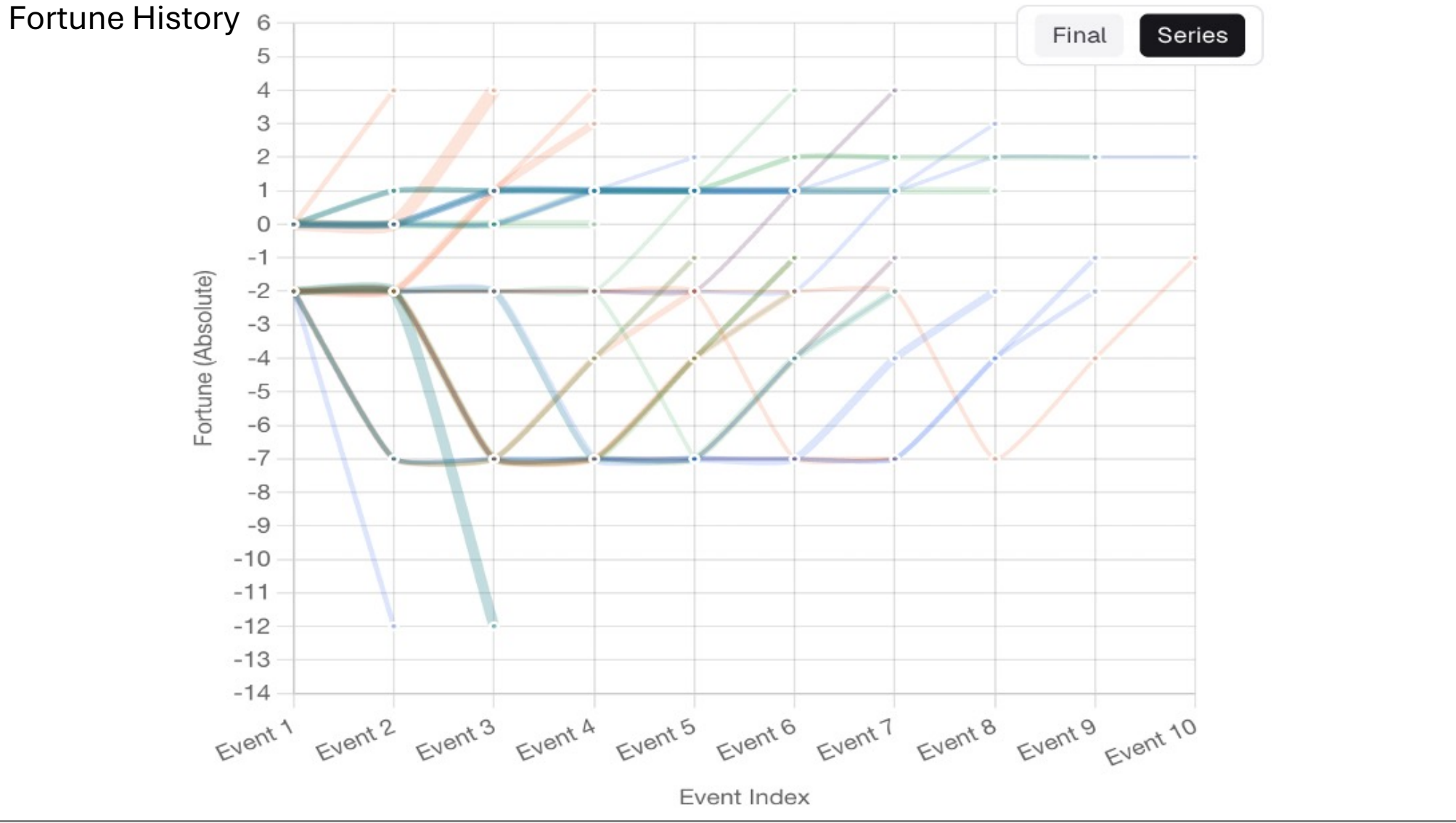
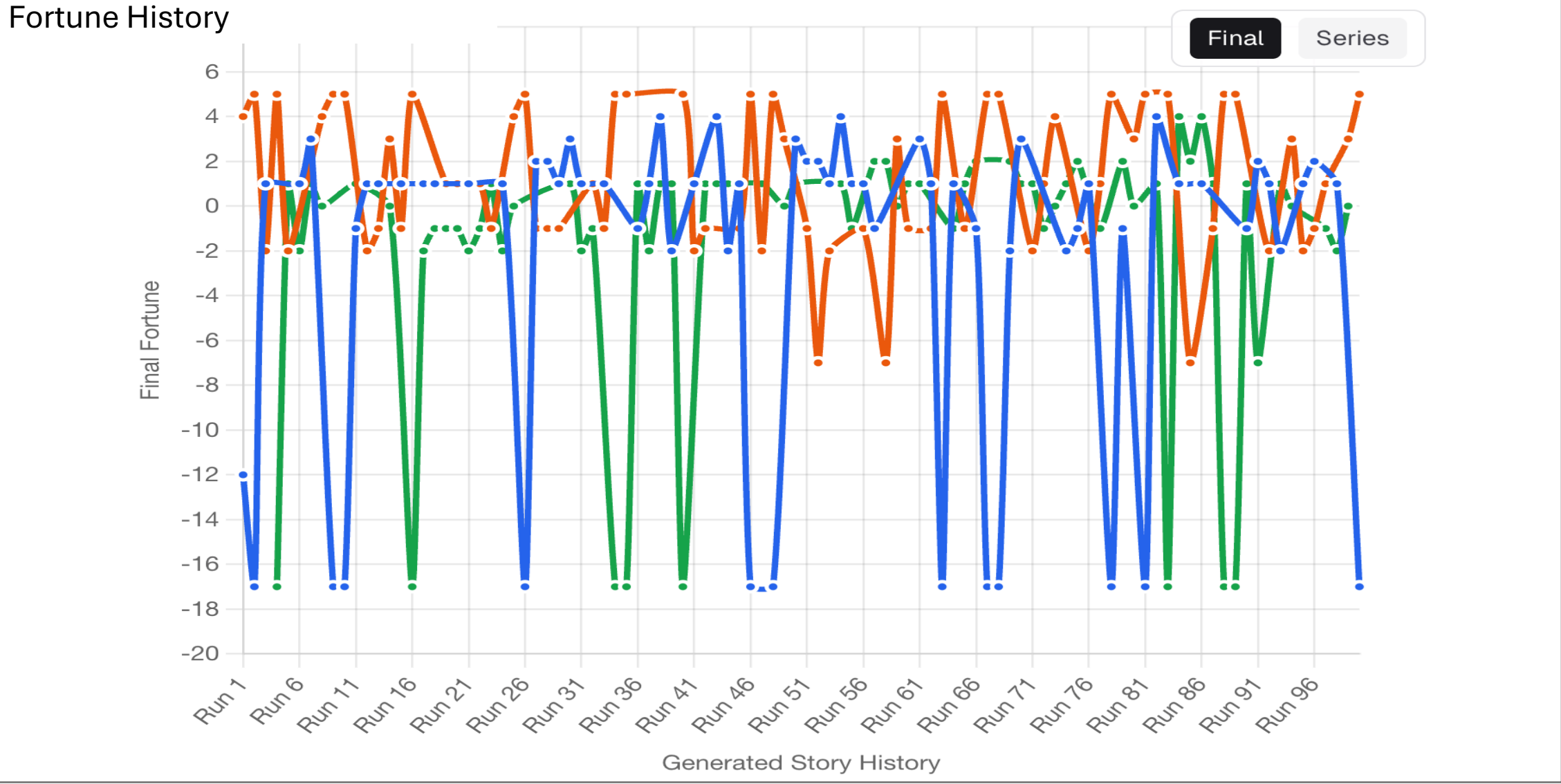
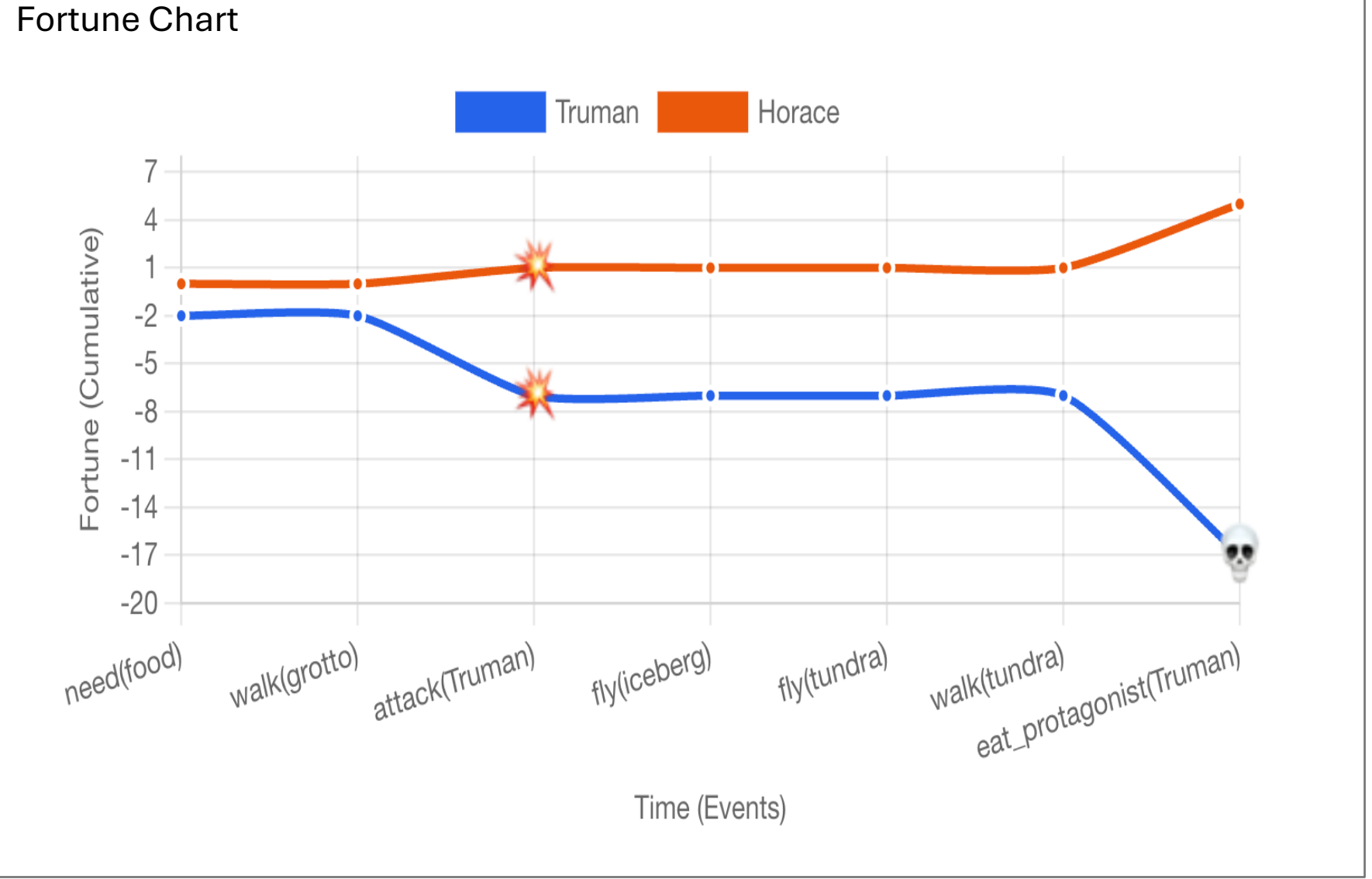
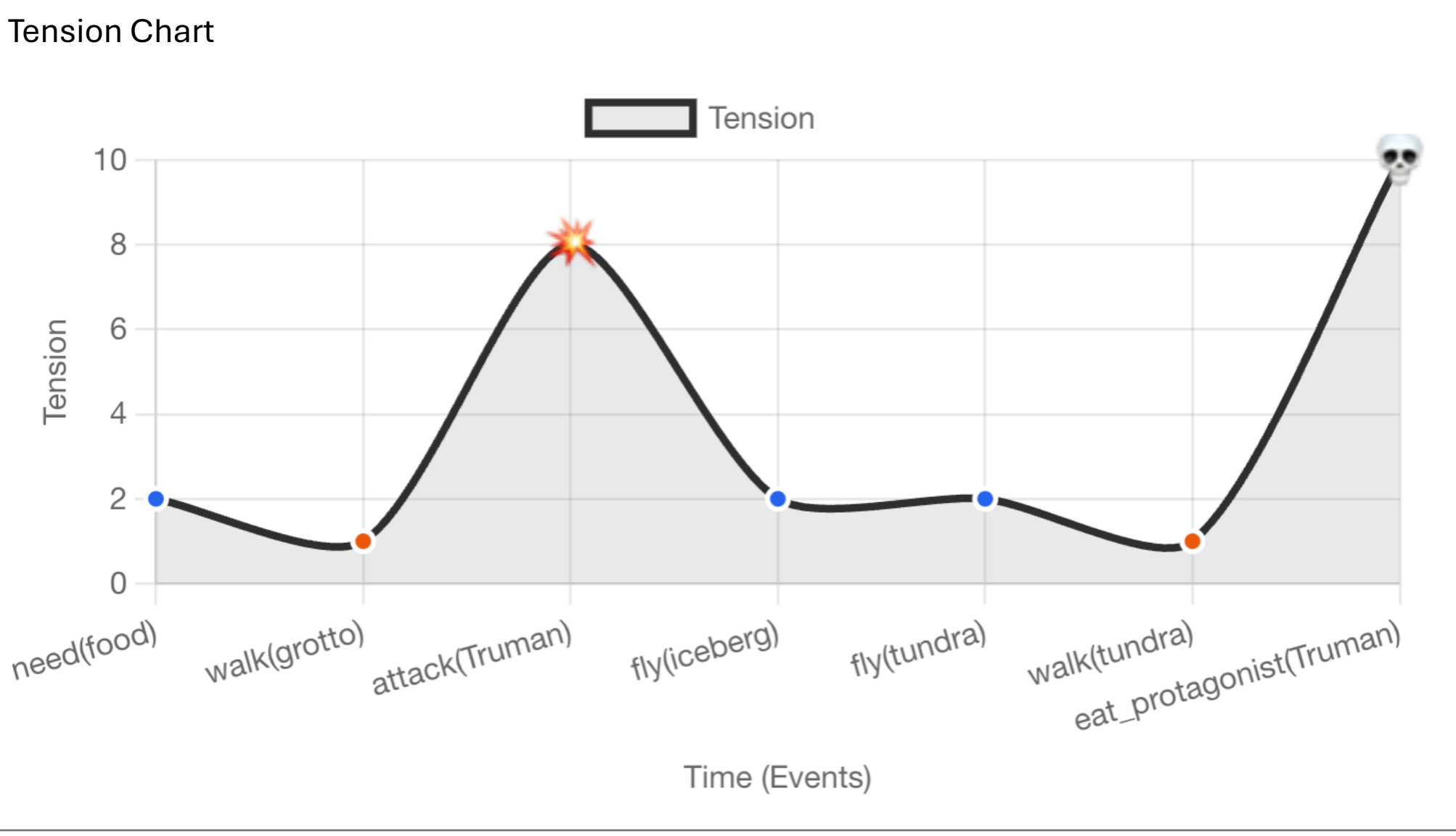
World Schema Input

```
Actor("polar bear", "Horace", "carnivorous", "ice cave", {"walk", "swim"}),
Actor("arctic tern", "Truman", "omnivorous", "nest", {"fly"}),
Actor("caribou", "Wally", "herbivorous", "copse", {"walk"}),
Location("iceberg", {"ice", "fish"}, {"swim", "fly"}),
Location("tundra", {"moss", "twigs"}, {"walk", "fly"}),
Location("shore", {"twigs"}, {"swim", "fly"}),
Location("mountain", {"ice", "berries"}, {"fly"}),
Location("river", {"fish"}, {"swim", "fly"}),
Location("grotto", {"wood"}, {"walk", "swim"}),
Diet("polar bear": {"fish"}),
Diet("arctic tern": {"berries"}),
Diet("caribou": {"moss"}),
```



Once upon a time, there was an arctic tern named Truman. Truman lived at the grotto. Truman was hungry. Truman needed something to eat. At the mountain, there was a polar bear named Horace. Horace walked to the grotto. Horace attacked Truman. Truman had to leave the grotto. Truman flew to the iceberg. Truman flew to the tundra. Horace walked to the tundra. Horace ate Truman. And Truman died.

{"seed":4281351409,"long":true,"raw":false}



Distant Reading via visual analysis of the nubs’ outputs can support pattern and outlier recognition. ▲ An example might be the quantitative comparison via visualizations of narrative trajectories; or a fortune chart which shows a character’s final fortune outcomes of all the previously generated stories; or the overlapping of all characters’ fortune plots. These charts already give a sense of the whole story space of a system since it is showing “all” the possible stories and outcomes.

References
Habermas, J. (1979): *Communication and the Evolution of Society*. Beacon Press.
Montfort, N. & Kusnick, J. (2026): “Off the Beaten Plot: A Survey of Underexplored Story Generation Systems and Aspects.” 9th International Workshop on Computational Models of Narrative, Madrid, June 8–10 2026.
Smith, T. C. & Witten, J. H. (1991): “A Planning Mechanism for Generating Story Text.” *Literary and Linguistic Computing* 6, 2: 119–126.



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