

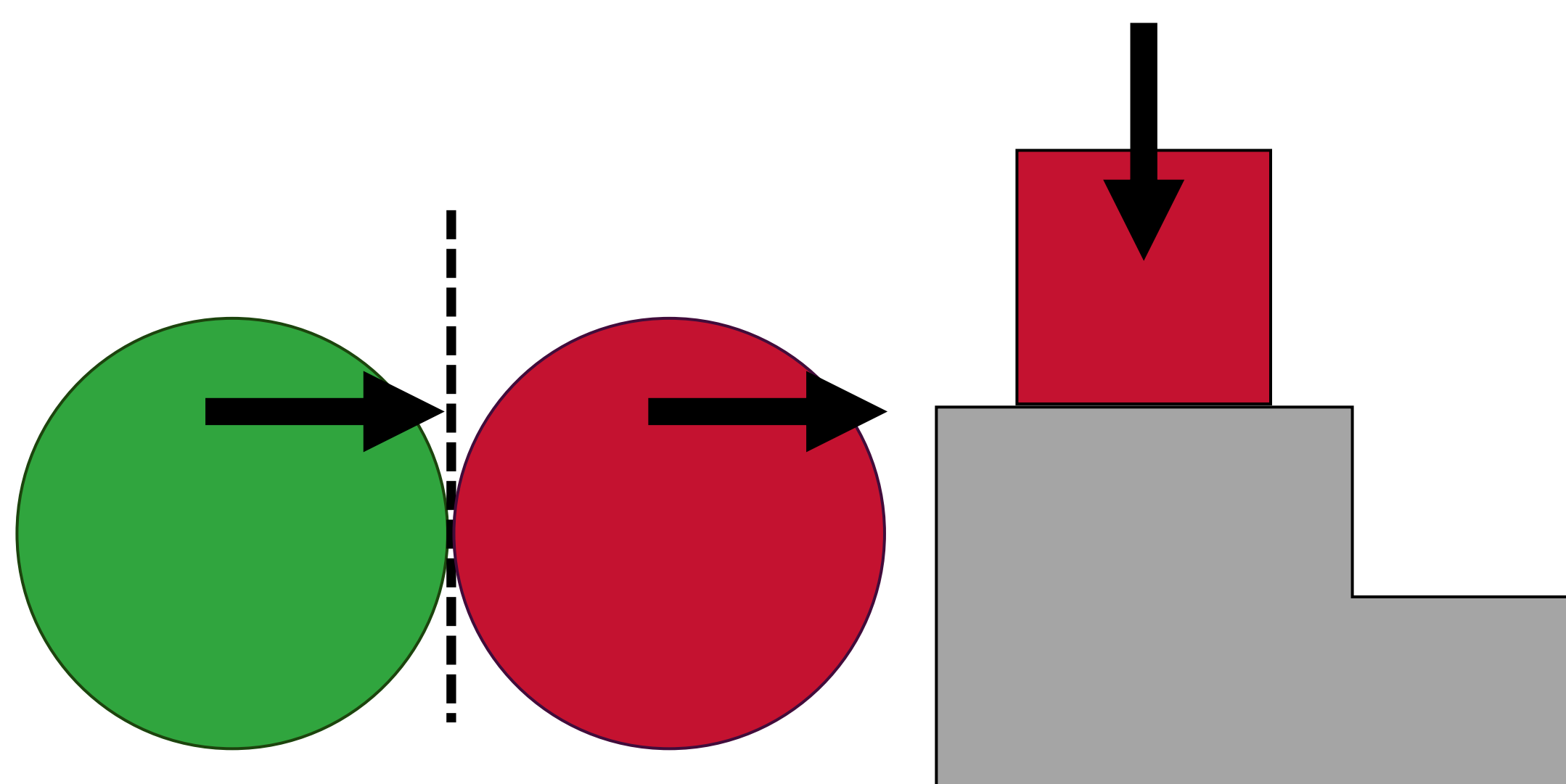
When Contact Matters: Semantic Similarity Analysis of Vectorized Event Descriptions Reveals Event-Specific Causal Representations

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Is **spatial contiguity** similarly central to representations of launching and detector events?

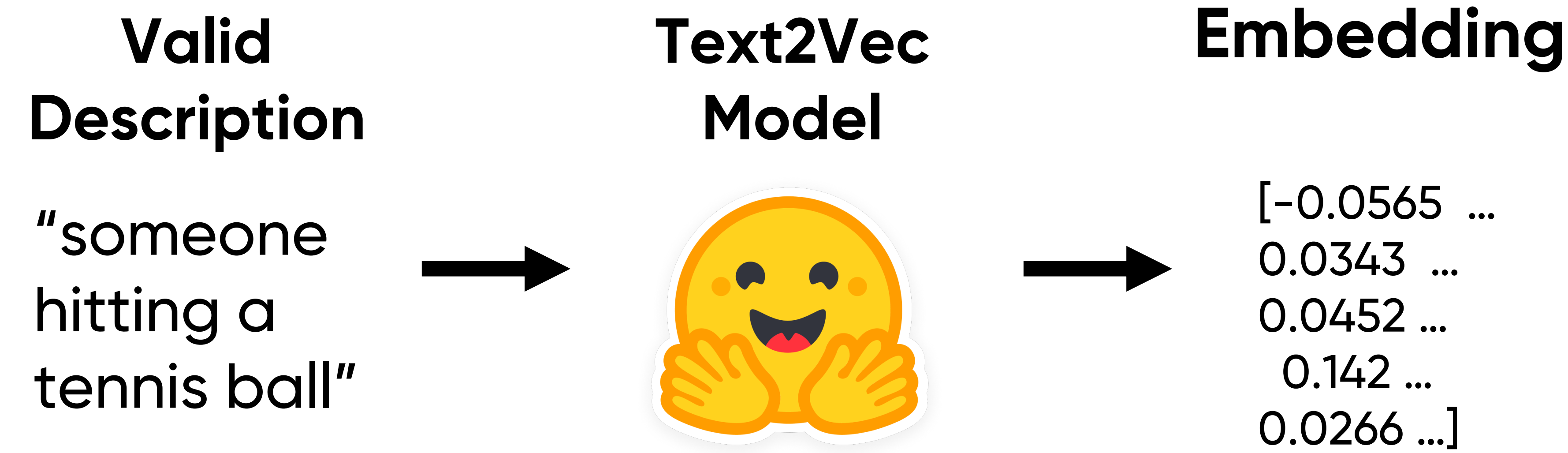
- Research on causal reasoning often relies on Blicket detector¹ and Michottian launching² events.
- It remains unknown how these different kinds of events are represented by adults

2D Animation

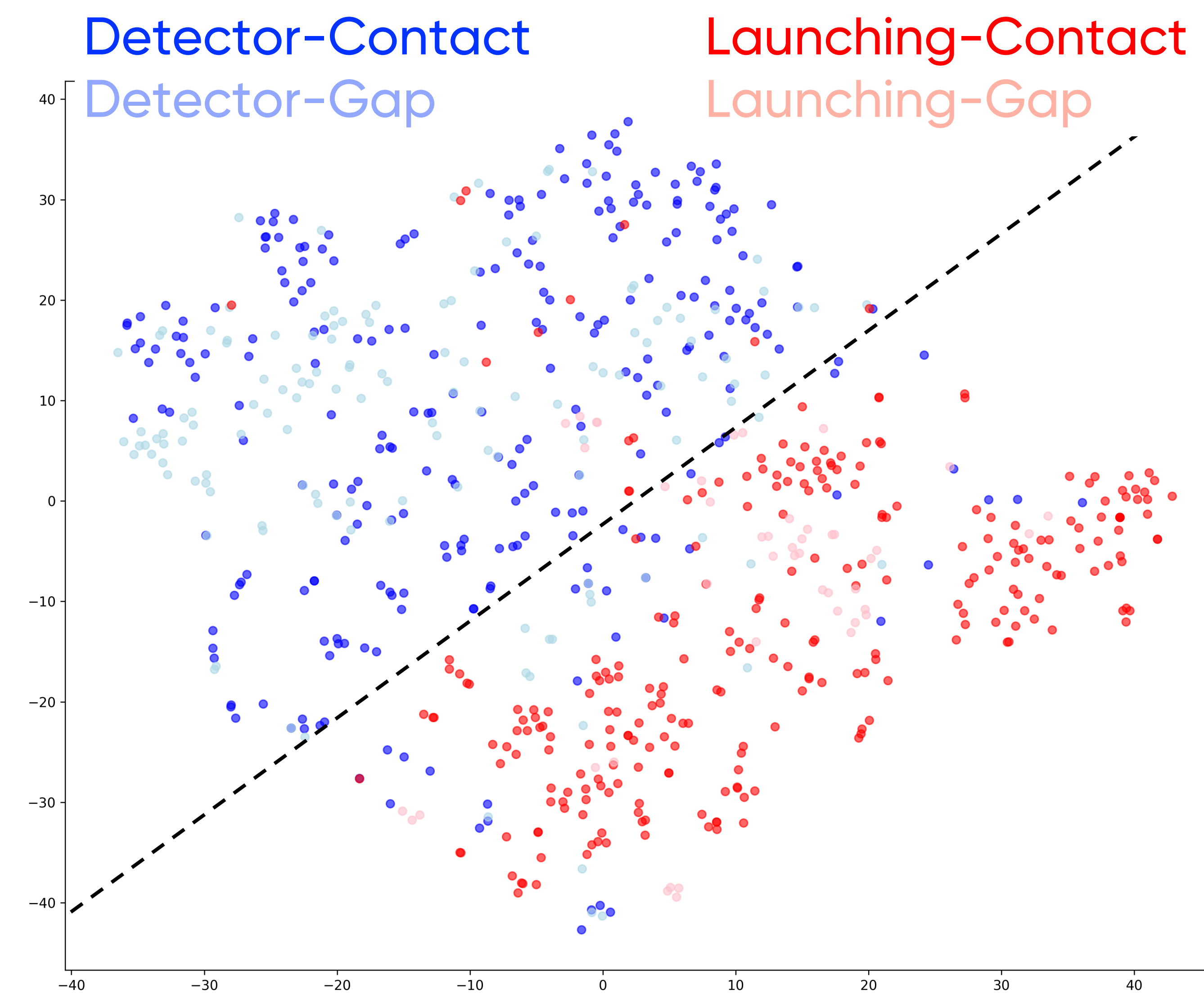


Task

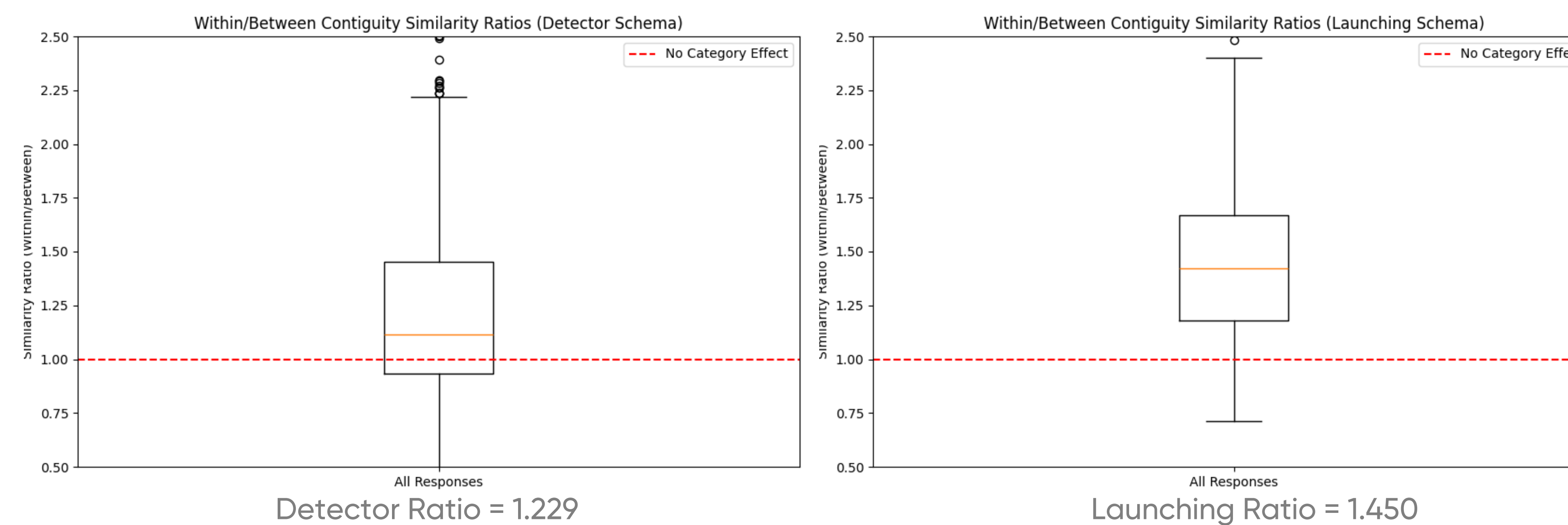
"Your task is to write down as many real-life events as you can think of that are similar to the actions shown in the videos."



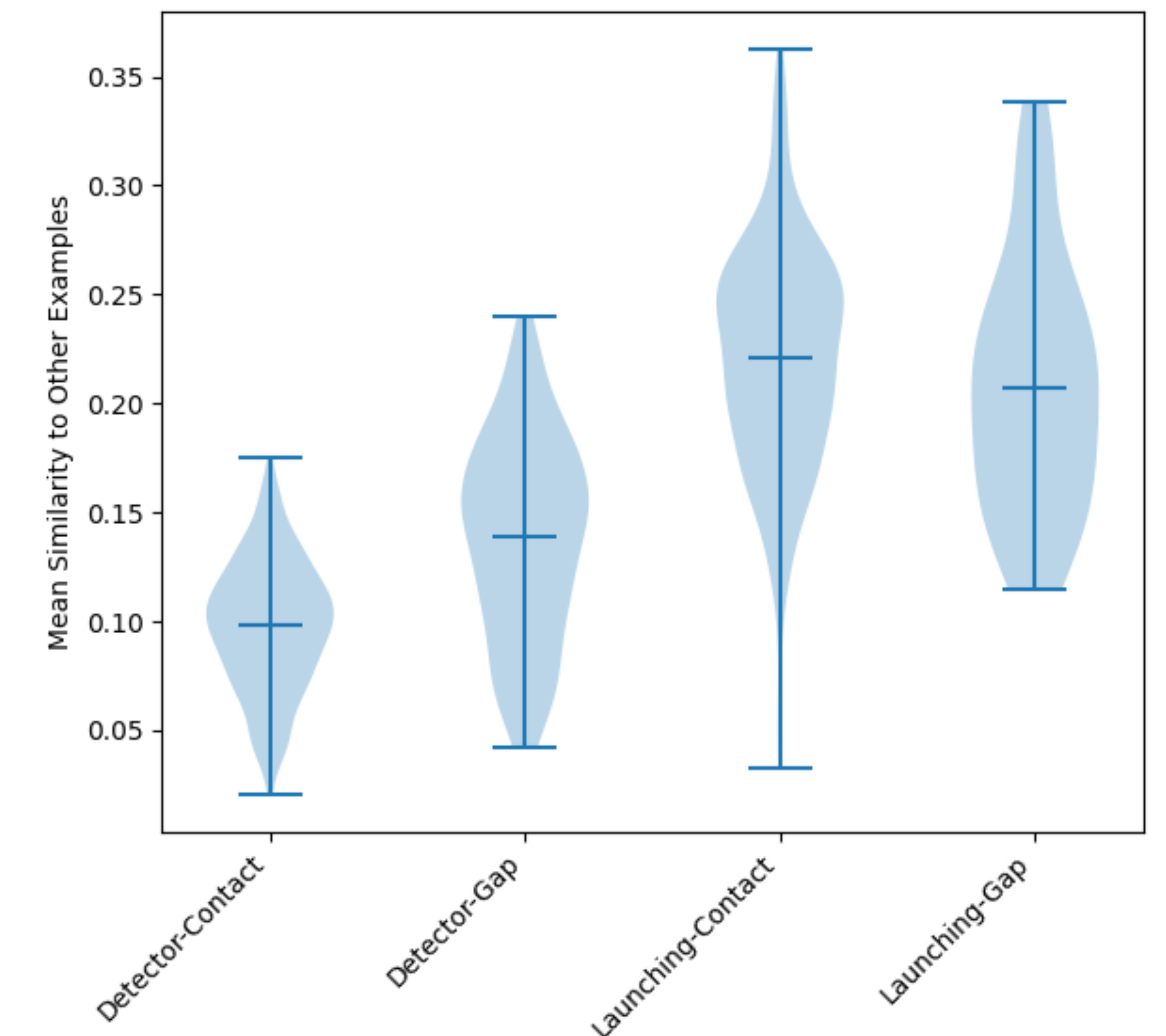
Adults' descriptions of **launching and detector events** are **semantically separable**



Contact distinguishes descriptions in **launching** significantly more than in detector events (Cohen's $d = 0.4$)



Adults' descriptions of **launching events** are **more prototypical** showing greater within-category similarity compared to descriptions of detector events



Discussion

- Launching is more perceptually rigid and defined by contact, whereas Blicket detector events are more flexible
- Provides converging evidence to explain why children and adults' inferences in higher-order learning contexts³ show generalizations that are more flexible with detector events

References

1. Gopnik & Sobel, 2000 (Child Development)
2. Michotte, 1963
3. Choi & Rakison, 2025 (Proceedings CogSci)