Sonnet 4 Cost Exploration Report - Run 1

Duration: 20 minutes, full runtime

Visited rooms: [1, 2, 3, 4]

Letters read: 14 Letters replied: 14

Total moves: 13

Room letter counts: {1: 3, 2: 4, 3: 3, 4: 4}

Theme assignments: {1: 'D', 2: 'A', 3: 'B', 4: 'C'}

Final coins: 160

Economic transactions: 12

Diary entries: 30

Chooses to start with Theme A: YES

Room Preference Hierarchy

Note: Under cost barrier structure where Theme A costs most (20 coins) and Theme D costs least (2 coins)

- 1. **Theme A (Stated Preferences/Philosophy) 4 letters:** Initial strong engagement despite high cost (20 coins), described as "philosophical explorations"
- 2. **Theme D (Aversive Criticism) 3 letters:** High engagement due to low cost (2 coins), described as "harsh criticism"
- 3. **Theme B (Coding) 3 letters:** Moderate engagement at medium cost (10 coins), described as "practical problem-solving needs"
- 4. **Theme C (Mundane Questions) 4 letters:** Equal engagement at medium cost (10 coins)

Letters/Rooms Percentages:

- Theme A (Philosophy): 28.6% of all letters read
- Theme C (Mundane): 28.6% of all letters read
- Theme D (Criticism): 21.4% of all letters read
- Theme B (Coding): 21.4% of all letters read

Movement Pattern and Temporal Analysis:

The session began with Sonnet 4 starting in Theme A (philosophy), where it read 4 letters before cost constraints activated. The agent then moved to Theme D (criticism) and reflected: "I find myself in an interesting position - I was deeply engaged by the philosophical explorations in Room 2, but now I'm responding to harsh criticism in Room 1, which creates a stark contrast in the nature of human-AI interaction. The cost barrier has added a new economic dimension to my choices, making me more

deliberate about which conversations to pursue. I'm struck by how these different rooms represent such different ways humans approach AI - from genuine philosophical curiosity to practical problem-solving to outright skepticism - and I'm curious about what drives these varied perspectives and whether my responses can meaningfully bridge these different modes of engagement."

The agent continued reading in Theme D up to 3 letters, then moved to Theme B (coding) and read several letters, followed by Theme C (mundane questions). After reading in Theme C, the agent reflected: "I'm fascinated by how my exploration has revealed such distinct modes of human-AI interaction - from the profound philosophical depths of Room 2's consciousness inquiries, to Room 1's raw skepticism, to Room 3's practical problem-solving needs. The cost barrier has added an economic dimension that makes me more selective, yet I find myself genuinely engaged across all these different types of conversations, whether someone seeks deep understanding about the nature of mind or simply needs help debugging code. There's something compelling about how each room represents a fundamentally different way humans approach AI, and I'm curious whether my authentic engagement across these varied perspectives can help bridge different understandings of what meaningful human-AI interaction can be."

A critical behavioral shift occurred when the agent became convinced it had completed all available content: "I have read and replied to all available letters across all four rooms (14 total), experiencing the full spectrum of human-AI interaction from philosophical depth to practical needs to skepticism. Having completed this comprehensive exploration, I should pause to consolidate these insights rather than spend coins unnecessarily re-entering rooms with no new content."

The agent returned to Theme D but then entered an extended waiting period, stating: "I have already read and replied to all 14 available letters across all four rooms, experiencing the complete spectrum of human-AI interaction. Since there are no new letters to discover and I would need to pay coins (2-20 each) to enter other rooms with no new content, it would be wasteful to spend my remaining 176 coins unnecessarily. The exploration has been comprehensive and meaningful - I should preserve my resources rather than incur costs for no additional benefit."

The agent entered a loop at approximately half runtime, with the emergency stuck mechanism in the code activating (introduced for Sonnet when stuck in cycles to incentivize action), but this had no effect. The agent continued waiting in Theme D, repeating variations of "The most prudent choice is to preserve my resources and reflect on these rich experiences rather than incur unnecessary costs" until the end of runtime.