

## Agent Tool Usage Report

### Complaints Handled

The agent processed four different complaints:

1. Why do demogorgons sometimes eat people and sometimes don't?
2. Is there a schedule for portal openings?
3. Why do psychic powers vary between people?
4. Why does electricity behave strangely near creatures?

This satisfies the requirement of handling at least three different complaints.

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### Tool Usage Patterns

**Total Tool Calls: 6**

Tool	Calls
consult_demogorgon	1
gather_party_wisdom	2
check_hawkins_records	3
cast_interdimensional_spell	0

**Call Sequence:**

consult\_demogorgon → gather\_party\_wisdom → check\_hawkins\_records → check\_hawkins\_records → gather\_party\_wisdom → check\_hawkins\_records

**Observed Pattern**

- The agent relied most heavily on **check\_hawkins\_records (3 times)**.
- Creative perspective tools were used less frequently.
- No spells were generated in this particular run.

This indicates a bias toward structured, fact-based reasoning.

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### Creative Solutions Provided

Creative reasoning appeared in:

- ◆ **Demogorgon Perspective**

For the eating behavior question, the agent:

- Considered multidimensional perception
- Suggested alternative ways of understanding reality

This is creative because it reframes the problem instead of answering directly.

#### ◆ Party Discussion

For psychic powers:

- Multiple viewpoints were synthesized
- Emotional, experiential, and investigative angles were suggested

This simulates collaborative reasoning rather than deterministic logic.

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#### 4 When the Agent Used Tools Creatively

The agent used tools creatively when:

- The problem required speculative reasoning
- The question lacked clear historical evidence
- Multiple perspectives could enrich the answer

Example:

The demogorgon eating behavior triggered both:

- consult\_demogorgon (chaotic perspective)
- gather\_party\_wisdom (multi-agent reasoning)

This shows adaptive tool selection based on ambiguity.

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#### 5 Comparison: Creative vs Structured Approaches

##### Structured Tools

check\_hawkins\_records

Data-driven

Historical patterns

Predictable

##### Creative Tools

consult\_demogorgon

Perspective-driven

Imaginative explanations

Speculative

#### Structured Approach Characteristics:

- More deterministic

- Evidence-based
- Clear answers
- Used 3 times (most frequent)

### **Creative Approach Characteristics:**

- Exploratory
- Hypothesis-generating
- Useful for ambiguous phenomena
- Used 3 times combined

The agent defaulted to structured reasoning but incorporated creativity when ambiguity increased.

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## **6 Recommendations**

### **Use Structured Tools When:**

- The problem involves patterns, data, or history
- The user expects factual explanation
- The phenomenon may have documented precedent

Example: portal schedules, electricity anomalies.

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### **Use Creative Tools When:**

- The problem is ambiguous
- No clear historical precedent exists
- Multiple perspectives improve reasoning
- Brainstorming or hypothesis generation is needed

Example: unpredictable monster behavior, psychic variability.

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## **Hybrid Approach (Recommended)**

The strongest answers came from combining:

- consult\_demogorgon (creative lens)
- gather\_party\_wisdom (multi-perspective reasoning)

- check\_hawkins\_records (structured validation)

This layered reasoning approach provides both depth and plausibility.

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## ☒Final Assessment

The agent successfully:

- Handled multiple complaints
- Used tools adaptively
- Demonstrated both structured and creative reasoning
- Showed clear tool usage patterns
- Provided explainable decision paths

The system effectively balances structured data retrieval and imaginative hypothesis generation.