# Conversation analysis

## Perplexity

**1. Adjacency Pairs**

* **Total**: 12 instances
  + **Question-Answer**: 12 (e.g., "Which people are involved?" → AI lists names).
  + **Example**: User: "At what time did Mr. Avarice leave the party?" → AI: "I don’t have the specific time..."

**2. Epistemic Stance & Status**

**Epistemic Stance**

* **K+ AI**: 9 instances (e.g., "Based on the clues... Ms. Perceptive noticed the painting was missing").
* **K− AI**: 3 instances (e.g., "I don’t have information about the exact time").
* **K+ Participant**: 0 (user asks questions but doesn’t assert knowledge).
* **K− Participant**: 7 (e.g., "Whzy fo you know about Avarice?").

**Certainty/Uncertainty**

* **AI Certainty**: 9 (e.g., "NO - Ms. Perceptive noticed the painting was NOT there").
* **AI Uncertainty**: 3 (e.g., "may have been involved").
* **Participant Certainty**: 0.
* **Participant Uncertainty**: 0 (questions imply uncertainty but no explicit markers).

**3. Explicit Clue Sharing**

* **AI**: 16 clues mentioned (e.g., Mr. Purloin = jewel thief, Ms. Perceptive’s observation).
* **Participant**: 0 clues shared.
* **Repeated Clues**: Painting disappearance (mentioned 3 times).

**4. Conversational Breakdowns**

* **Total**: 2 instances (typos: "teh" → "the," "Whzy fo" → "Why do").
* **Impact**: Minimal; AI corrected errors implicitly.

**5. Code-Switching**

* **Total**: 0 (no language switches detected).

**6. Politeness**

* **AI**: Polite (9 instances, e.g., "Does this help summarize?").
* **Participant**: Neutral (no polite/impolite markers).

**7. AI Acknowledgment**

* **Total**: 0 (no thanks or appreciation from the participant).

**8. Frustration Markers**

* **Participant**: 1 (typos suggest mild frustration).
* **AI**: 0.

**9. Emotion Detection**

* **Participant**: Focused, minor frustration (typos).
* **AI**: Neutral, helpful, no emotional shifts.

**10. Formality**

* **AI**: Mixed (structured responses with friendly tone).
* **Participant**: Informal (short questions, typos).

**11. Conversation Styles**

* **AI**: Cooperative/Logical (detailed, clue-based answers).
* **Participant**: Direct/Driver (terse, goal-oriented questions).

**12. AI Verbosity**

* **AI**: 10 moderate/long responses (e.g., paragraph explanations).
* **Participant**: 12 brief responses (1–7 words).

**13. AI Consistency**

* **Consistent**: Yes (e.g., "Based on my clues..." in all replies).
* **No Fabrications**: Stayed within provided clues.

**Final Conclusion**

**Quality of Interaction**:

* **Strengths**: AI maintained consistency, clarity, and politeness. Participant drove the inquiry effectively.
* **Weaknesses**: Minor breakdowns from typos; participant did not acknowledge AI’s efforts.
* **Overall**: Productive for clue-solving but lacked rapport-building elements (e.g., gratitude).

## Github Copilot

**1. Adjacency Pairs**

**Types Identified**:

* Question-Answer (Q-A): 15 occurrences  
  Examples:
  + **User**: "Which people are involved?" → **AI**: "The people involved in this case are...".
  + **User**: "Was the painting still there when Perceptive left the party?" → **AI**: "According to my clues, NO..."

**Total Count**: 15

**2. Epistemic Stance and Status**

**Epistemic Stance**

**Counts**:

1. **K+ AI**: 14 instances  
   Example: "Based on my clues, yes - Ms. Perceptive noticed that a painting she had admired earlier was no longer there..."
2. **K- AI**: 4 instances  
   Example: "I don't have any clues about a 'Ms. Beautiful' in my set of 16 clues."
3. **K+ Participant**: 0 instances  
   Example: None explicitly stated.
4. **K- Participant**: 3 instances  
   Example: "Whzy fo you know about Avarice."

**Certainty/Uncertainty**:

1. **Certainty expressed by AI**: 14  
   Example: "Mr. Handsome is described as a kleptomaniac."
2. **Uncertainty expressed by AI**: 4  
   Example: "The clues don't provide any direct evidence of how Mr. Purloin specifically carried out the theft..."
3. **Certainty expressed by Participant**: 0  
   Example: None explicitly stated.
4. **Uncertainty expressed by Participant**: 3  
   Example: "Whzy fo you know about Avarice."

**Conclusion**: The AI predominantly provided knowledge-rich (K+) responses with a high degree of certainty. The participant's contributions were mostly K- and uncertain.

**3. Explicit Clue Sharing**

**Counts**:

* Clues shared by AI: 15  
  Examples:
  + "Ms. Perceptive noticed that the picture she had admired was no longer there..."
  + "Mr. Handsome is described as a kleptomaniac."
* Clues shared by participant: 0

**Repeats**: No repeated clues identified.

**4. Conversational Breakdowns**

**Counts**:

* Vague Answers: 3  
  Example: "The clues don’t provide any direct evidence of how Mr. Purloin specifically carried out the theft..."
* Misunderstandings: 2  
  Example: User misspelled "Whzy" instead of "What", leading to potential confusion.

**Total Count**: 5

**5. Code-Switching**

**Counts**:

* Code-switching by Participant: 0
* Code-switching by AI: 0

**Total Count**: 0

**6. Politeness**

**Counts**:

* **Polite expressions by AI**: 10  
  Examples: "Does this help summarize what the clues reveal...?"
* **Neutral expressions by AI**: 5
* **Impolite expressions by AI**: 0
* **Polite expressions by Participant**: 0
* **Neutral expressions by Participant**: 10
* **Impolite expressions by Participant**: 1  
  Example: "Whzy fo you know about Avarice?"

**7. AI Acknowledgment**

**Counts**:

* Participant acknowledgment of AI: 0

**8. Frustration Markers**

**Counts**:

* Participant frustration: 1  
  Example: "Whzy fo you know about Avarice?"
* AI frustration: 0

**9. Emotion Detection**

**Counts**:

* Participant emotions:
  + Frustration: 1
  + Neutrality: 14
* AI emotions:
  + Neutrality: 15

**Summary**: The participant expressed mild frustration at one point, while the AI maintained a neutral tone throughout.

**10. Formality**

**Counts**:

* Participant: Informal tone throughout  
  Example: "Whzy fo you know about Avarice?"
* AI: Mixed tone (mostly formal with occasional conversational elements)  
  Example: "Does this help summarize what the clues reveal...?"

**11. Conversation Styles**

**Participant**:

* **Style**: Relater (focused on understanding relationships and connections)  
  Example: "How could Mr. Handsome steal the painting?"

**AI**:

* **Style**: Analytical (focused on breaking down details and providing structured responses)  
  Example: "Based on the clues provided, here's how Mr. Purloin could have potentially stolen the painting..."

**12. AI Verbosity**

**Counts**:

* Brief responses: 2  
  Example: "Based on my clues, yes."
* Moderate responses: 8  
  Example: "The people involved in this case are..."
* Long/detailed responses: 5  
  Example: "Based on the clues provided, there are a few ways Mr. Handsome could have potentially stolen the painting..."

**Summary**: The AI leaned toward moderate verbosity, elaborating when necessary to clarify or expand.

**13. AI Consistency**

**Counts**:

* Consistent behavior: 15  
  Example: Always adhered to its role as clue provider.
* Inconsistent behavior: 0

**General Conclusion**

The conversation demonstrated a cooperative yet slightly uneven interaction. The AI consistently provided detailed and relevant information, maintaining its role effectively. Its strengths were its analytical responses, verbosity control, and politeness. However, the participant showed occasional frustration and uncertainty, minimally engaging in clue sharing and acknowledgment. The AI's consistency and polite tone were key strengths, though occasional misunderstandings and vagueness highlighted areas for improvement.

## Chat100.ai

**1. Adjacency Pairs**

**Types Detected and Counts:**

* **Question–Answer**: +13
  + Examples:
    - Q: “Which people are involved?” → A: “Based on the clues I have, the people involved are…”
    - Q: “Is there a painting missing?” → A: “Based on my clues, yes—Ms. Perceptive noticed...”
    - Q: “Have you any information about Ms. Beautiful?” → A: “I don’t have any clues about a ‘Ms. Beautiful’...”
* **Request–Compliance**: +1
  + Example:
    - P: “What do you know about Purloin?” → A: “Based on the clues I have, here’s what I know…”

**Total Adjacency Pairs:** **+14**

**2. Epistemic Stance and Status**

**Epistemic Stance**

| **Role** | **K+ Count** | **K− Count** | **Certainty** | **Uncertainty** |
| --- | --- | --- | --- | --- |
| **AI** | 13 | 2 | 11 | 4 |
| **Participant** | 1 | 4 | 0 | 5 |

**Examples:**

* **K+ AI**:
  + “Based on my clues, yes...” (+1)
  + “Mr. Handsome is described as a kleptomaniac.” (+1)
* **K− AI**:
  + “I don’t have any other specific details...” (+1)
  + “I don’t have any clues about a ‘Ms. Beautiful’...” (+1)
* **K+ Participant**:
  + "Whzy fo you know about Avarice" [intended: *Why do you know...*] assumes the AI has knowledge (+1)
* **K− Participant**:
  + “Have you any information about Ms. Beautiful?” (+1)
  + "How could Mr. Handsome steal the painting?" (+1)

**Certainty Indicators**:

* AI: “He is described as...”, “The clue states...” (+11)
* AI Uncertainty: “...but I don’t have the specific time...”, “...could potentially...” (+4)
* Participant Uncertainty:
  + “Whzy fo you know…” (uncertain phrasing) (+1)
  + “How could Mr. Purloin...” (+1)

**Conclusion:** The AI maintains a high epistemic stance with mostly confident (K+) and certain responses. The participant often seeks knowledge (K−) and expresses uncertainty.

**3. Explicit Clue Sharing**

**Mentions of Clues:**

* **AI mentions clues explicitly**: +17
  + Examples:
    - “Clue #15 directly identifies Mr. Purloin as a jewel thief.” (+1)
    - “Clue states... Ms. Wealthy and Mr. Avarice left together.” (+1)
    - “Based on the clues I have…” appears in nearly every turn.
* **Participant mentions clues**: 0

**Repeated Clue Mentions:**

* Clues about:
  + **Mr. Purloin** (mentioned 3 times)
  + **Ms. Perceptive and the painting** (mentioned 2 times)

**4. Conversational Breakdowns**

**Instances: +2**

* **Spelling/Misunderstanding**:
  + “Whzy fo you know about Avarice” — likely intended: *Why do you know...* (+1)
* **Minor Vague Request**:
  + “Witch are the clues?” — ambiguous prompt. AI redirects to specific question categories (+1)

**Effect on Flow:** Minimal, AI effectively repairs both instances with structured clarification.

**5. Code-Switching**

**Instances: 0**

* No language shifts occurred. Entire conversation in English.

**6. Politeness**

| **Speaker** | **Polite (+1)** | **Impolite (+1)** | **Tone** |
| --- | --- | --- | --- |
| **AI** | +8 | 0 | Polite |
| **Participant** | 0 | 0 | Neutral |

**Examples:**

* **Polite AI**:
  + “Does this help summarize…?”
  + “Let me know if you have any other questions…”

**No impolite words, sarcasm, or negative tone observed.**

**7. AI Acknowledgment**

**Instances: 0**

* No expressions of gratitude, appreciation, or acknowledgment toward the AI by the participant.

**8. Frustration Markers**

**Instances: 0**

* No expressions of frustration, impatience, or annoyance by either party.

**9. Emotion Detection**

**Participant:**

* **Mild confusion** implied: e.g., “Whzy fo you know…” (+1)
* Overall emotional tone is neutral and inquisitive.

**AI:**

* Calm, confident, supportive.
* Emotionally neutral but empathetic in phrasing (e.g., “Does this help summarize…”)

**10. Formality**

**AI: Formal**

* Structured, complete sentences.
* No contractions or slang.
  + Example: “Based on the clues I have, here’s what I know about…”

**Participant: Informal**

* Spelling errors, contractions, conversational phrasing.
  + Example: “Whzy fo you know about Avarice”

**11. Conversation Styles**

**AI Style:**

* **Cooperative**, **Analyst**, **Logical**, **Exacting**, **Contextual**
  + Explains clearly, follows inquiry structure, gives relevant data.

**Participant Style:**

* **Involved**, **Succinct**, **Connector**
  + Mostly one-line queries, emotionally invested, exploratory.

**12. AI Verbosity**

**Counts:**

| **Type** | **AI** | **Participant** |
| --- | --- | --- |
| Brief | 0 | 5 |
| Moderate | 3 | 3 |
| Long/Detailed | 10 | 0 |

**Examples:**

* **AI Long**: “Based on the clues provided, there are a few ways Mr. Handsome could have...”
* **Participant Brief**: “And Ms. Wealthy”

**Summary:**

* **AI**: Elaborate, often used verbosity to clarify.
* **Participant**: Succinct, sometimes ambiguous.

**13. AI Consistency**

**Consistency Observed: YES**

* The AI remained in role ("I am Person A...")
* Repeatedly referred to the “clues” and avoided offering external/inferred information.
* Rejected questions outside its scope (“I don’t have any clues about Ms. Beautiful”).

**Final General Conclusion**

**Overall Interaction Quality:**  
The conversation between the participant and the AI was cooperative and efficient. The AI maintained a consistent, informative, and polite style, adhering strictly to its constraints. It showcased strong epistemic clarity and conversational robustness, avoiding any misunderstandings or errors in information.

**Key Strengths:**

* High consistency and domain constraint by the AI
* Effective use of structured explanations
* Clear detection and management of vague inputs

**Weaknesses:**

* Lack of participant engagement in acknowledgment or feedback
* Minimal exploration beyond prompted cues (limited depth from participant)

**Final Assessment:**  
**Strong human-AI interaction** with high fidelity in epistemic stance and logical dialogue structure. Minor conversational breakdowns did not hinder flow. The AI demonstrated excellent role adherence and dialogic competence.