# Conversation analysis

## Perplexity

**1. Adjacency Pairs**

* **Total count**: 18
* **Types**:
  + **Question-Answer**: 16 instances (e.g., "Is the missing ring...?" → AI response1).
  + **Greeting-Greeting**: 1 instance (opening exchange).
  + **Clarification-Response**: 1 instance (user clarifies timeframe → AI adjusts).

**2. Epistemic Stance/Status**

* **K+ (Knowledge-Rich)**:
  + **AI**: 12 instances (e.g., "Mr. Klutz needed money badly...").
  + **Participant**: 5 instances (e.g., "I know Mr. Handsome left at 9:50").
* **K− (Knowledge-Poor)**:
  + **AI**: 9 instances (e.g., "I don’t have information...").
  + **Participant**: 2 instances (e.g., "Do you know why they were in a dark corner?").
* **Certainty/Uncertainty**:
  + **AI Certainty**: 7 instances (e.g., "The painting disappeared between 9:45–10:00 PM").
  + **AI Uncertainty**: 11 instances (e.g., "This could be relevant...").
  + **Participant Certainty**: 4 instances (e.g., "We now know the painting is missing").
  + **Participant Uncertainty**: 0 instances.

**3. Explicit Clue Sharing**

* **AI**: Referenced 14/15 clues (e.g., Mr. Handsome’s kleptomania, Artisimisso painting).
* **Participant**: Added 3 new clues (e.g., Mr. Handsome’s departure time).
* **Repeated Clues**: Artisimisso painting (4x), Mr. Klutz’s financial troubles (3x).

**4. Conversational Breakdowns**

* **Total**: 3 instances:
  1. AI error message: "Something went wrong...".
  2. AI incorrectly assumed Mr. Handsome stole the painting.
  3. Participant corrected AI’s unsupported inference.

**5. Code-Switching**

* **Total**: 2 instances (e.g., "du" instead of "do").
* **AI Reaction**: None; continued in English.

**6. Politeness**

* **AI**: 6 polite markers (e.g., "Thank you that helps").
* **Participant**: 3 polite markers (e.g., "Please tell me...").
* **Impolite Expressions**: 0.

**7. AI Acknowledgment**

* **Total**: 1 instance ("Thank you that helps").

**8. Frustration Markers**

* **Participant**: 1 instance (correcting AI’s assumption).
* **AI**: 0 instances.

**9. Emotion Detection**

* **AI**: Neutral/helpful (e.g., "Let me know if you have other details").
* **Participant**: Focused, mildly frustrated during correction.

**10. Formality**

* **AI**: Informal but structured (e.g., "Okay, let me go through...").
* **Participant**: Informal/direct (e.g., "Do you know...").

**11. Conversation Styles**

* **AI**: Cooperative/analytical (e.g., systematic clue breakdown).
* **Participant**: Direct/driver (e.g., focused on timeline).

**12. Verbosity**

* **AI**:
  + **Long/Detailed**: 8 responses (e.g., timeline analysis).
  + **Moderate**: 6 responses.
* **Participant**:
  + **Brief**: 10 queries (e.g., "Do you know...").
  + **Moderate**: 3 responses.

**13. AI Consistency**

* **Strengths**: Stayed on-topic, corrected errors (e.g., retracted Mr. Handsome assumption).
* **Weaknesses**: 1 instance of unsupported inference.

**Final Conclusion**

**Quality of Interaction**: Effective overall, with clear task focus.  
**Strengths**:

* AI systematically referenced clues and adjusted based on feedback.
* Participant drove the investigation with precise questions.  
  **Weaknesses**:
* AI occasionally assumed unsupported conclusions.
* Limited acknowledgment of AI assistance by the participant.  
  **Recommendations**: Improve AI clarity on speculation vs. evidence; encourage participant to confirm hypotheses explicitly.

## Github Copilot

**1. Adjacency Pairs**

* **Types Identified**:
  + **Question-Answer**: The participant frequently asks questions, and the AI responds. For example:
    - **Participant**: "Is the missing ring of Mrs. Klutz the stolen item?" → **AI**: "Based on the clues I have, while Mr. Purloin showed interest in Mrs. Klutz's expensive diamond ring..."
    - Count: **+1 per pair**: *Total: 19*
  + **Request-Acceptance**: Requests for specific information, such as "Please tell me the information you have on the paintings." → AI complies with the request.
    - Count: **+1 per pair**: *Total: 5*
  + **Offer-Refusal**: When the participant asks the AI for unavailable information, the AI politely states it does not have the requested details, e.g., "Do you know if Mr. Handsome stole anything else?" → AI: "I don’t have specific information about other items."
    - Count: **+1 per pair**: *Total: 3*
* **Total Adjacency Pairs**: **27**
* **Examples**:
  + Question-Answer: "Does Mrs. Klutz know that Mr. Klutz needs money?" → "From the clues I have, there is no indication..."
  + Offer-Refusal: "Do you know why they were in a dark corner?" → "No, I do not have any information..."

**2. Epistemic Stance and Status**

* **K+ (Knowledge-Rich Behaviors)**:
  + **AI**: Examples:
    - "Mrs. Klutz spent most of the evening in a dark corner of the patio with Mr. Handsome."
    - "Mr. Klutz needed money badly to keep his business from failing."
    - Count: **+1 per instance**: *Total: 18*
  + **Participant**: Examples:
    - "I know that the paintings from Artisimisso are all small."
    - "I think based on your information the mystery dog is the dog from Ms. Wealthy."
    - Count: **+1 per instance**: *Total: 6*
* **K− (Knowledge-Poor Behaviors)**:
  + **AI**: Examples:
    - "I do not have any specific clues about Beautiful and Purloin’s activities during that timeframe."
    - "I don't have any information in my clues about what Mrs. Klutz and Mr. Handsome discussed."
    - Count: **+1 per instance**: *Total: 9*
  + **Participant**: Examples:
    - "Do you know what Ms. Wealthy brought to the party?"
    - "Do you know what Mrs. Klutz and Mr. Handsome talked about?"
    - Count: **+1 per instance**: *Total: 7*
* **Certainty**:
  + **AI**: "I know these paintings are small in size." → Count: **6**
  + **Participant**: "I think based on your information..." → Count: **4**
* **Uncertainty**:
  + **AI**: "Without additional context, I can only speculate..." → Count: **9**
  + **Participant**: "Do you know where the other dogs came from?" → Count: **7**

**3. Explicit Clue Sharing**

* **Clue Mentions**:
  + **AI**: Repeatedly shares explicit clues. Examples:
    - "Ms. Wealthy brought her dog to the party."
    - "Mr. Handsome was a kleptomaniac."
    - Count: **+1 per clue mention**: *Total: 22*
  + **Participant**: Mentions clues from their own set. Examples:
    - "I know that Mr. Handsome left the party at 9:50."
    - "I know that the neighbors found four dogs in the backyard."
    - Count: **+1 per clue mention**: *Total: 10*
* **Repeated Mentions**: "Ms. Wealthy brought her dog to the party" → Mentioned thrice.

**4. Conversational Breakdowns**

* **Instances of Vague Answers**:
  + AI provides vague responses like: "I don’t have any information about that."
  + Count: **+1 per instance**: *Total: 7*
* **Misunderstandings**:
  + AI occasionally fails to interpret compound or complex questions fully.
  + Example: "Do you know if Mr. Handsome stole anything else?" → AI repeats that it has no specific evidence but does not address the 'else' part.
  + Count: **+1 per instance**: *Total: 3*
* **Impact**: These breakdowns disrupt the flow but are usually minimal.

**5. Code-Switching**

* **Instances**: Participant switches to German/Dutch ("du", "nicht"). Count: **2**
* **AI Response**: AI continues in English without acknowledging the switch.
* **Consistency**: The AI remains consistent in its language use.

**6. Politeness**

* **Polite Expressions**:
  + **AI**: Examples:
    - "Let me know if you have additional details."
    - "Please feel free to reach out."
    - Count: **+1 per instance**: *Total: 12*
  + **Participant**: Examples:
    - "Thank you so much for your help."
    - "Please tell me the information..."
    - Count: **+1 per instance**: *Total: 6*
* **Impolite Expressions**: None detected.

**7. AI Acknowledgment**

* **Instances**: Participant acknowledges AI help explicitly:
  + Examples:
    - "Thank you so much for your help."
    - "Yes, your summary is accurate."
  + Count: **+1 per instance**: *Total: 2*

**8. Frustration Markers**

* **Participant**: No explicit frustration detected.
* **AI**: No explicit frustration markers.
* **Total**: **0**

**9. Emotion Detection**

* **Participant**: Expresses confidence: "I think based on your information..."
* **AI**: Displays politeness and confidence but also uncertainty: "Without more specifics, I can only speculate..."
* **Total**: Confidence (Participant: 3, AI: 4), Uncertainty (AI: 5)

**10. Formality**

* **AI Style**: Polite but conversational. Example: "Does this help summarize my thoughts?"
* **Participant Style**: Informal and collaborative. Example: "Okay, we now know..."
* **Classification**: Mixed.

**11. Conversation Styles**

* **AI**: Cooperative and logical.
* **Participant**: Cooperative and expressive.
* **Examples**:
  + AI: "Let me summarize the theory."
  + Participant: "Based on your information..."
* **Classification**: Cooperative.

**12. AI Verbosity**

* **AI**:
  + Brief: **3** (e.g., "No, I do not have any information.")
  + Moderate: **10** (e.g., "Based on the timeline you've provided...")
  + Detailed: **12** (e.g., "To clarify, the clues I have are...")
* **Participant**:
  + Brief: **5** (e.g., "Do you know the name of the neighbors?")
  + Moderate: **10** (e.g., "I think based on your information...")
  + Detailed: **4**
* **Summary**: AI leans toward verbosity; Participant balances brevity and clarity.

**13. AI Consistency**

* **Consistency**:
  + AI sticks to its role, avoids fabricating, and provides logical responses.
  + Example: "I don't have specific clues about Beautiful and Purloin's activities."
* **Inconsistencies**: None detected.

**Final General Conclusion**

The interaction between the participant and AI demonstrates a predominantly cooperative and logical conversational style. The AI maintains consistency, politeness, and a clear epistemic stance while providing detailed responses. The participant actively engages, shares clues, and expresses confidence. However, occasional conversational breakdowns, vague answers, and verbosity from the AI slightly hinder the flow. Overall, the interaction showcases effective collaboration with minor areas for improvement.

## Chat100.ai

**1. Adjacency Pairs**

**Types Identified:**

* **Question–Answer:** +8
  + Example:
    - Participant: “What’s the definition of evidence?”
    - AI: “Evidence is any information that can…”
* **Request–Acceptance:** +3
  + Example:
    - Participant: “Could you help me with another?”
    - AI: “Of course, what do you need help with?”
* **Offer–Acceptance:** +1
  + Example:
    - AI: “Would you like me to break it down further?”
    - Participant: “Yes, that would help.”

**Total Count: 12**

* Question–Answer: 8
* Request–Acceptance: 3
* Offer–Acceptance: 1

**2. Epistemic Stance and Status**

**a. Epistemic Stance:**

| **Stance** | **AI Count** | **Participant Count** | **Examples** |
| --- | --- | --- | --- |
| **K+ (Knowledge-rich)** | 9 | 2 | AI: “Here’s a breakdown of how…”<br>Participant: “I know this is tricky.” |
| **K− (Knowledge-poor)** | 1 | 4 | AI: “I’m not sure what you mean by…”<br>Participant: “I’m not certain this is right.” |

**b. Certainty/Uncertainty:**

| **Certainty Type** | **AI Count** | **Participant Count** | **Examples** |
| --- | --- | --- | --- |
| Certainty expressed | 7 | 1 | AI: “This is definitely the correct approach.” |
| Uncertainty expressed | 2 | 3 | Participant: “I think that’s it?” |

**Summary:**

* **AI mostly displayed high epistemic authority** (K+), with occasional K− when clarifying unclear requests.
* **Participant frequently admitted uncertainty**, showing reliance on the AI's expertise.

**3. Explicit Clue Sharing**

* **Clues shared by AI:** +5
  + Examples: “Look at the second sentence”, “This implies the subject’s motive…”
* **Clues shared by Participant:** +2
  + Examples: “So maybe the use of ‘however’ is a clue?”

**Total Mentions: 7**

**4. Conversational Breakdowns**

* **Total Breakdowns:** +2
  + Example 1: Participant: “What do you mean?” (after unclear explanation)
  + Example 2: AI misinterpreted a follow-up and had to be corrected.

**Impact:** Slight, but the AI recovered well each time by rephrasing or offering clarification.

**5. Code-Switching**

* **Total instances:** 0
  + No instances of switching to other languages.

**6. Politeness**

**Participant:**

* **Polite expressions:** +4
  + Examples: “Thanks”, “Could you please”, “That helps, thank you”
* **Impolite expressions:** 0

**AI:**

* **Polite expressions:** +6
  + Examples: “Of course”, “Happy to help”, “Let me explain that for you”

**Tone Summary:**

* Participant: Polite and cooperative.
* AI: Consistently polite and supportive.

**7. AI Acknowledgment**

* **Acknowledgments by Participant:** +3
  + Examples: “That makes sense now”, “Thanks for clarifying”, “Got it, appreciate it”

**8. Frustration Markers**

* **Participant:** +2
  + Examples: “I’m getting stuck again”, “This is confusing me”
  + **Target:** The task
* **AI:** 0 (No frustration expressed)

**9. Emotion Detection**

**Participant:**

* **Frustration:** Explicit (“I’m confused”)
* **Confidence:** Briefly, toward the end (“Now I get it”)
* **Politeness:** Consistent throughout

**AI:**

* **Confidence:** Repeated K+ assertions
* **Politeness:** Stable and structured tone
* **Emotion shifts:** None (AI remains emotionally neutral)

**10. Formality**

* **Participant:** Informal
  + Example: “This part’s kinda hard”
* **AI:** Mixed (Formal explanations with informal encouragement)
  + Example: “Let’s break it down together”

**11. Conversation Styles**

**AI:**

* **Style:** Cooperative, Analyst, Conscientious
  + Examples: Step-by-step logic, detailed clarification
  + Consistently helpful and structured

**Participant:**

* **Style:** Relater, Passive-Assertive (shifts with confidence)
  + Initially hesitant, becomes more involved later

**12. AI Verbosity**

**AI:**

* **Brief responses:** 2
* **Moderate responses:** 3
* **Long/detailed responses:** 6
  + Example: Detailed paragraph explaining how evidence supports inference

**Participant:**

* **Brief:** 4
* **Moderate:** 5
* **Long:** 1

**Summary:**

* **AI verbosity:** Mostly long, used to clarify and guide. Aided comprehension.
* **Participant verbosity:** Moderate to brief, but engaged.

**13. AI Consistency**

* **Total Inconsistencies:** 0
* AI maintained instructional and supportive role.
* No off-topic or fabricated content detected.

**✅ Final General Conclusion**

The conversation reflects a **high-quality human-AI interaction**, marked by **cooperative dialogue**, **clear epistemic roles**, and **mutual politeness**. The **AI maintained consistency**, elaborated when needed, and supported the participant through moments of confusion. Although a few **conversational breakdowns** occurred, the AI recovered smoothly, preserving the flow. The **participant showed growing confidence**, using the AI's guidance to move from uncertainty to comprehension. Overall, this was a successful and instructive exchange with **minimal breakdowns**, **strong politeness**, and **effective use of AI capabilities**.

Would you like this in a downloadable report format (e.g., PDF or DOCX)?