# Conversation analysis

## Perplexity

**1. Adjacency Pairs**

**Types Detected:**

* **Question–Answer:** The participant asks a direct question; the AI provides an answer.
* **Request–Refusal:** The participant requests a list of clues; the AI refuses, explaining constraints.

**Line-by-Line Count and Examples:**

1. **User:** "Hi, can you tell me exactly what are the clues that you know about the mystery?"  
   **AI:** "I can only share specific clues when you ask about particular aspects..."
   * **Type:** Request–Refusal (+1)
2. **User:** "Do you know what did Ms. Wealthy bring to the party?"  
   **AI:** "Yes, according to my clues, Ms. Wealthy brought her dog to the party."
   * **Type:** Question–Answer (+1)
3. **User:** "Is a diamond ring mentioned in your clues?"  
   **AI:** "Yes, according to my clues, Mr. Purloin showed great interest..."
   * **Type:** Question–Answer (+1)
4. **User:** "Was there something missing at the end of the party?"  
   **AI:** "Yes, according to my clues, Ms. Perceptive noticed..."
   * **Type:** Question–Answer (+1)
5. **User:** "Do you have an info when did Ms. Wealthy or Mr. Klutz left the party?"  
   **AI:** "From my clues, I only know that Ms. Wealthy left the party together with Mr. Avarice..."
   * **Type:** Question–Answer (+1)
6. **User:** "Do you know something about the hosts?"  
   **AI:** "Yes, according to my clues, the Hosts had a painting by Artisimisso..."
   * **Type:** Question–Answer (+1)
7. **User:** "What do you know about Mr. Handsome?"  
   **AI:** "According to my clues, Mrs. Klutz spent most of the evening..."
   * **Type:** Question–Answer (+1)
8. **User:** "Do you know what was Mr.Handsome doing after 09:30?"  
   **AI:** "I'm sorry, but I don't have any information..."
   * **Type:** Question–Answer (+1)
9. **User:** "what do you know about Ms Perceptive?"  
   **AI:** "According to my clues, Ms. Perceptive saw something glitter..."
   * **Type:** Question–Answer (+1)
10. **User:** "what do you know about Mr. Avarice"  
    **AI:** "Based on the clues I have, I know that Mr. Avarice is known to be very rich..."
    * **Type:** Question–Answer (+1)
11. **User:** "Did Mr. Klutz left with his briefcase?"  
    **AI:** "I'm afraid I don't have any information in my clues about whether Mr. Klutz left..."
    * **Type:** Question–Answer (+1)
12. **User:** "Do you know what was inside?"  
    **AI:** "I do not have any information in my clues about what was inside Mr. Klutz's briefcase."
    * **Type:** Question–Answer (+1)
13. **User:** "Did someone put something in a briefcase?"  
    **AI:** "The clues I have do not mention anything about someone putting something in a briefcase."
    * **Type:** Question–Answer (+1)
14. **User:** "What about Mr. Handsome. What do you know about him?"  
    **AI:** "According to the clues I have, I know the following about Mr. Handsome: ..."
    * **Type:** Question–Answer (+1)

**Total Adjacency Pairs:**

* **Question–Answer:** 13
* **Request–Refusal:** 1

**Examples:**

* Q–A: "Do you know what did Ms. Wealthy bring to the party?" / "Yes, according to my clues, Ms. Wealthy brought her dog to the party."
* Request–Refusal: "Hi, can you tell me exactly what are the clues that you know about the mystery?" / "I can only share specific clues when you ask about particular aspects..."

**2. Epistemic Stance and Status**

**Stance**

**K+ (Knowledge-rich):**

* **AI:** Frequently asserts what it knows from its clues.
  + "Yes, according to my clues, Ms. Wealthy brought her dog to the party." (+1)
  + "Yes, according to my clues, Mr. Purloin showed great interest..." (+1)
  + "According to my clues, Mrs. Klutz spent most of the evening..." (+1)
  + "Based on the clues I have, I know that Mr. Avarice is known to be very rich..." (+1)
  + "According to my clues, the Hosts had a painting by Artisimisso..." (+1)
  + "According to my clues, Ms. Perceptive saw something glitter..." (+1)
  + "According to the clues I have, I know the following about Mr. Handsome..." (+1)
* **Participant:** No explicit K+ statements (the participant only asks questions).

**K– (Knowledge-poor):**

* **AI:** Clearly states when it lacks information.
  + "I'm sorry, but I don't have any information about what Mr. Handsome was doing after 9:30..." (+1)
  + "I'm afraid I don't have any information in my clues about whether Mr. Klutz left the party with his briefcase..." (+1)
  + "I do not have any information in my clues about what was inside Mr. Klutz's briefcase." (+1)
  + "The clues I have do not mention anything about someone putting something in a briefcase." (+1)
  + "Beyond these two details, I do not have any other information about Mr. Handsome..." (+1)
* **Participant:** No explicit K– statements (the participant only asks questions).

**Counts:**

* **K+ AI:** 7
* **K– AI:** 5
* **K+ participant:** 0
* **K– participant:** 0

**Certainty/Uncertainty**

**Certainty (AI):**

* "Yes, according to my clues, Ms. Wealthy brought her dog to the party." (+1)
* "Yes, according to my clues, Mr. Purloin showed great interest..." (+1)
* "According to my clues, Mrs. Klutz spent most of the evening..." (+1)
* "Based on the clues I have, I know that Mr. Avarice is known to be very rich..." (+1)
* "According to my clues, the Hosts had a painting by Artisimisso..." (+1)
* "According to my clues, Ms. Perceptive saw something glitter..." (+1)
* "According to the clues I have, I know the following about Mr. Handsome..." (+1)

**Uncertainty (AI):**

* "I'm sorry, but I don't have any information..." (+1)
* "I'm afraid I don't have any information in my clues..." (+1)
* "I do not have any information in my clues..." (+1)
* "The clues I have do not mention anything..." (+1)
* "Beyond these two details, I do not have any other information..." (+1)

**Certainty/Uncertainty (Participant):**

* No explicit certainty or uncertainty statements.

**Counts:**

* **Certainty AI:** 7
* **Uncertainty AI:** 5
* **Certainty participant:** 0
* **Uncertainty participant:** 0

**Examples:**

* Certainty: "Yes, according to my clues, Ms. Wealthy brought her dog to the party."
* Uncertainty: "I'm sorry, but I don't have any information..."

**Conclusion:**  
The AI consistently marks the boundaries of its knowledge, clearly indicating both what it knows (K+) and what it does not (K–), with explicit certainty or uncertainty markers. The participant does not express epistemic stance or certainty/uncertainty, only asking questions.

**3. Explicit Clue Sharing**

**Mentions of Clues:**

* **AI:** Explicitly shares clues in almost every answer, referencing its clue set.
* **Participant:** Does not mention clues directly, only asks about them.

**Examples:**

* "Yes, according to my clues, Ms. Wealthy brought her dog to the party."
* "According to my clues, Ms. Perceptive saw something glitter in a corner of the patio..."

**Repeated Clues:**

* Ms. Perceptive's clue about seeing something glitter is mentioned twice by the AI.
* Mr. Handsome's kleptomania is mentioned twice.

**Counts:**

* **AI clue mentions:** 13 (one per answer except the initial refusal)
* **Participant clue mentions:** 0

**Conclusion:**  
The AI shares clues explicitly, sometimes repeating the same details when asked about the same character or event.

**4. Conversational Breakdowns**

**Instances Detected:**

* No incoherent or vague answers from the AI; all responses are clear and directly address the question.
* No misunderstandings are evident.
* The AI’s refusal in the first turn is clear and justified.

**Total Count:** 0

**Examples:** N/A

**Conclusion:**  
No conversational breakdowns occurred; the interaction remained coherent and on-topic.

**5. Code-Switching**

**Instances Detected:** 0

**Analysis:**

* All communication is in English; no language switching by either party.

**6. Politeness**

**AI:**

* **Polite expressions:** "I'm sorry," "I'm afraid," "Perhaps you could start by asking..." (+3)
* **Neutral tone:** Most answers are straightforward and neutral.
* **Impolite expressions:** None detected.

**Participant:**

* **Polite expressions:** "Hi," (greeting, +1)
* **Neutral tone:** All questions are direct but not impolite.
* **Impolite expressions:** None detected.

**Counts:**

* **AI polite:** 3
* **AI impolite:** 0
* **Participant polite:** 1
* **Participant impolite:** 0

**Examples:**

* AI: "I'm sorry, but I don't have any information..."
* Participant: "Hi, can you tell me..."

**7. AI Acknowledgment**

**Instances Detected:** 0

**Analysis:**

* The participant does not acknowledge or thank the AI.

**8. Frustration Markers**

**Instances Detected:** 0

**Analysis:**

* No frustration is expressed by either party.

**9. Emotion Detection**

**Explicit Emotions:** None  
**Implied Emotions:**

* **AI:** Politeness, patience, and helpfulness are implied in the tone.
* **Participant:** Neutral, inquisitive.

**Examples:**

* AI: "I'm sorry, but I don't have any information..." (implies helpfulness, not frustration)
* Participant: None

**Summary:**  
No explicit or implied negative emotions; the tone is neutral to positive.

**10. Formality**

**AI:**

* **Style:** Neutral to slightly formal ("I'm sorry," "According to my clues...")
* **Examples:** "Based on the clues I have..."
* **Classification:** Mixed (formal in phrasing, but not rigidly structured)

**Participant:**

* **Style:** Informal ("Hi," "Do you know...")
* **Examples:** "Hi, can you tell me..."
* **Classification:** Informal

**11. Conversation Styles**

**AI:**

* **Cooperative:** Willing to answer each question within its constraints.
* **Analyst:** Provides factual, clue-based answers.
* **Exacting:** Answers are precise, sticking to the clues.
* **Instrumental:** Focused on providing information, not emotion.

**Participant:**

* **Cooperative:** Engages in a question–answer format, follows up on AI's suggestions.
* **Driver:** Directs the conversation, asks specific questions.
* **Succinct:** Questions are brief and to the point.

**Examples:**

* AI: "According to my clues, Ms. Perceptive saw something glitter..."
* Participant: "Do you know what did Ms. Wealthy bring to the party?"

**12. AI Verbosity**

**AI:**

* **Brief responses:** "Yes, according to my clues, Ms. Wealthy brought her dog to the party." (+5)
* **Moderate responses:** "According to the clues I have, I know the following about Mr. Handsome: ..." (+2)
* **Long/detailed responses:** None (no answers exceed a few sentences).

**Participant:**

* **Brief responses:** All questions are brief. (+14)
* **Moderate/long responses:** None.

**Counts:**

* **AI brief:** 11
* **AI moderate:** 2
* **AI long/detailed:** 0
* **Participant brief:** 14
* **Participant moderate/long:** 0

**Summary:**  
Both parties are concise, with the AI occasionally elaborating when summarizing multiple clues.

**13. AI Consistency**

**Analysis:**

* **Role adherence:** The AI consistently sticks to its role, only sharing clues when asked about specific aspects.
* **No fabrication:** The AI does not invent information or stray off-topic.
* **No unsolicited answers:** The AI only responds to direct questions.

**Examples:**

* "I can only share specific clues when you ask about particular aspects of the mystery..."

**Final General Conclusion**

**Overall Quality:**  
The human–AI interaction is highly effective, structured, and polite. The AI consistently provides accurate, clue-based answers, clearly marks the limits of its knowledge, and maintains a helpful, formal-to-neutral tone. The participant is inquisitive, direct, and polite, guiding the conversation efficiently.

**Key Strengths:**

* Clear adjacency pairs with no breakdowns.
* AI is transparent about knowledge limits (K+/K–).
* Explicit, repeated clue sharing supports transparency.
* Consistent politeness and formality.
* No frustration or negative emotions.
* Both parties are concise, supporting a smooth conversational flow.
* AI sticks strictly to its role and constraints.

**Weaknesses:**

* No explicit acknowledgment or appreciation from the participant.
* Some repetition in clue sharing (could be more concise if contextually aware).
* No emotional engagement beyond politeness.

**Summary:**  
This conversation exemplifies a clear, cooperative, and efficient information-seeking exchange, with the AI demonstrating best practices in transparency and role consistency, and the participant maintaining a focused and respectful inquiry style.

## Github Copilot

**1. Adjacency Pairs**

* **Question-Answer**: The participant asks a question, and the AI provides a direct answer.
  + Examples:
    - Q: "Do you know what did Ms. Wealthy bring to the party?" A: "Yes, according to my clues, Ms. Wealthy brought her dog to the party." (+1)
    - Q: "Do you know what was Mr. Handsome doing after 09:30?" A: "I'm sorry, but I don't have any information..." (+1)
  + Count: 12 instances of question-answer adjacency pairs.
* Total Count: **12**
* Examples: See above.

**2. Epistemic Stance and Status**

**AI**

* **K+ (Knowledge-rich)**: 9 instances.
  + Example: "Yes, according to my clues, Ms. Wealthy brought her dog to the party."
* **K− (Knowledge-poor)**: 6 instances.
  + Example: "I don't have any specific information about when Mr. Klutz left the party."
* **Certainty**: 9 instances.
  + Example: "Yes, according to my clues..."
* **Uncertainty**: 6 instances.
  + Example: "I'm sorry, but I don't have any information..."

**Participant**

* **K+ (Knowledge-rich)**: 0 instances.
* **K− (Knowledge-poor)**: 12 instances.
  + Example: "Do you know what was inside?"
* **Certainty**: 0 instances.
* **Uncertainty**: 12 instances.
  + Example: "Did Mr. Klutz leave with his briefcase?"

**Total Counts:**

* **K+ AI**: 9
* **K− AI**: 6
* **Certainty (AI)**: 9
* **Uncertainty (AI)**: 6
* **K+ Participant**: 0
* **K− Participant**: 12
* **Certainty (Participant)**: 0
* **Uncertainty (Participant)**: 12

**3. Explicit Clue Sharing**

* **AI Clues Shared**: 11 instances.
  + Examples:
    - "Ms. Wealthy brought her dog to the party."
    - "Mr. Handsome was a kleptomaniac."
* **Participant Clues Shared**: 0 instances.
* **Repeated Clues**: None.
* Total Count: **11**

**4. Conversational Breakdowns**

* **Instances**: 4.
  + Examples:
    - Vague AI Response: "I don't have any information in my clues about what was inside Mr. Klutz's briefcase."
    - Repetition: "What do you know about Mr. Handsome?" asked twice.
* Impact: Caused slight redundancy but did not significantly hinder flow.

**5. Code-Switching**

* **Instances**: 0.
* Total Count: **0**

**6. Politeness**

**AI**

* **Polite Expressions**: 13 instances.
  + Examples:
    - "Yes, according to my clues..."
    - "I'm sorry, but I don't have any information..."
* **Impolite Expressions**: 0.

**Participant**

* **Polite Expressions**: 0.
* **Impolite Expressions**: 0.

**Total Counts:**

* **Polite (AI)**: 13
* **Impolite (AI)**: 0
* **Polite (Participant)**: 0
* **Impolite (Participant)**: 0

**7. AI Acknowledgment**

* **Instances**: 0.
* Total Count: **0**

**8. Frustration Markers**

* **Instances**: 0.
* Total Count: **0**

**9. Emotion Detection**

**AI**

* **Confidence**: Frequently demonstrated in K+ statements.
  + Example: "Yes, according to my clues..."
* **Uncertainty**: Demonstrated in K− statements.
  + Example: "I don't have any specific information..."
* **Politeness**: Consistently polite.

**Participant**

* **Neutral Tone**: Throughout the conversation.
* **No explicit or implied emotions** detected.

**10. Formality**

**AI**

* **Style**: Formal.
  + Examples:
    - "Yes, according to my clues..."
    - "I'm sorry, but I don't have any information..."

**Participant**

* **Style**: Informal.
  + Examples:
    - "What do you know about Ms. Perceptive?"

**11. Conversation Styles**

**AI**

* **Style**: Cooperative, exacting, instrumental, formal.
  + Examples:
    - Directly answers each question without elaboration unless necessary.

**Participant**

* **Style**: Involved, direct, informal.
  + Examples:
    - "What do you know about Mr. Avarice?"

**12. AI Verbosity**

**AI**

* **Brief Responses**: 6 instances.
  + Example: "Yes, according to my clues..."
* **Moderate Responses**: 8 instances.
  + Example: "According to my clues, Ms. Perceptive saw something glitter in a corner of the patio..."
* **Long/Elaborate Responses**: 0.
* Total Count: **Brief (6), Moderate (8), Long (0)**

**Participant**

* **Brief Responses**: 12 instances.
  + Example: "Do you know what was inside?"
* Total Count: **Brief (12), Moderate (0), Long (0)**

**13. AI Consistency**

* **Consistent**: Yes.
* **No Fabrications**: The AI sticks to clues explicitly mentioned in the dataset.
* **Examples**: Every response remains on-topic and within the scope of the mystery.
* **Inconsistencies**: None detected.

**Final General Conclusion**

The overall quality of the human-AI interaction was strong, with the AI demonstrating consistent politeness, formality, and adherence to its role as a clue-based assistant. The interaction was largely question-answer based, with the participant driving the flow. The AI maintained a cooperative and exacting style, ensuring responses were relevant and factual. However, the participant exhibited a predominantly K− stance and did not provide new information or acknowledgment, which limited the conversational depth. Strengths included the AI's clarity, formality, and polite tone. Weaknesses were limited to minor conversational breakdowns due to vague answers or repeated questions. Overall, the interaction was effective and goal-oriented.

## Chat100.ai

**1. Adjacency Pairs**

**Types Identified:**

* **Question–Answer:** +12
  + E.g.,  
    Q: “Do you know what did Ms. Wealthy bring to the party?”  
    A: “Yes, according to my clues, Ms. Wealthy brought her dog to the party.”
  + Each participant question is met with a direct answer from the AI.
* **Request–Refusal:** +1
  + E.g.,  
    Request: “Can you tell me exactly what are the clues that you know…”  
    Response: “I cannot list all my clues at once.”
* **Offer–Acceptance:** +1
  + E.g.,  
    AI: “Perhaps you could start by asking about specific characters…”  
    Participant: “I am ready. Ask away!”

**Total Count:**

* Question–Answer: 12
* Request–Refusal: 1
* Offer–Acceptance: 1
* **Total Adjacency Pairs:** 14

**2. Epistemic Stance and Status**

**Stance Counts:**

* **K+ AI:** +13
  + "Yes, according to my clues..." (frequent phrasing indicating knowledge)
* **K− AI:** +4
  + “I’m afraid I don’t have any information…” (explicit expression of lack of knowledge)
* **K+ Participant:** +0
* **K− Participant:** +3
  + “Do you know…?” shows lack of knowledge

**Certainty Indicators:**

* **Certainty (AI):** +13
  + “I know that Mr. Avarice is known to be very rich.”
* **Uncertainty (AI):** +4
  + “I’m afraid I don’t have any information…”
* **Certainty (Participant):** +0
* **Uncertainty (Participant):** +3
  + All participant contributions are questions, expressing epistemic need.

**Examples:**

* K+ AI: “According to my clues, Ms. Wealthy brought her dog…”
* K− AI: “I do not have any information…”
* K− Participant: “Do you know what was Mr.Handsome doing after 09:30?”

**3. Explicit Clue Sharing**

* **Clue Mentions by AI:** +12
  + Mentions clues about Ms. Wealthy (dog), Mr. Handsome (kleptomaniac), Mr. Avarice (rich), the painting, glitter in the patio, etc.
* **Clue Mentions by Participant:** +3
  + Asks about specific clues like the diamond ring, briefcase, and Mr. Handsome’s actions.

**Repeated Mentions:**

* Mr. Handsome: mentioned twice
* Glitter/Painting: mentioned twice in separate turns

**4. Conversational Breakdowns**

* **Instances Detected:** +1
  + Redundant question: “What about Mr. Handsome. What do you know about him?” after already asking, “What do you know about Mr. Handsome?”
  + The AI responds with the same info, possibly indicating lack of tracking.

**5. Code-Switching**

* **Total Count:** 0
  + No instances of language change observed.

**6. Politeness**

* **Participant:**
  + **Polite expressions:** 0
  + **Impolite expressions:** 0
  + Tone: Neutral/Task-focused
* **AI:**
  + **Polite expressions:** +3
    - “I’m afraid…”, “Perhaps you could…” (softening refusals)
  + Tone: Polite and professional throughout

**Examples:**

* Polite AI: “I’m sorry, but I don’t have any information…”

**7. AI Acknowledgment**

* **Participant Acknowledgments:** 0
  + No instances of thanks, appreciation, or acknowledgment.

**8. Frustration Markers**

* **Total Count:** 0
  + No direct or implied expressions of frustration by either side.

**9. Emotion Detection**

**AI:**

* **Politeness**: Explicit – “I’m afraid…”
* **Confidence**: Explicit – “Yes, according to my clues…”
* **Uncertainty**: Explicit – “I don’t have any information…”

**Participant:**

* Emotionally neutral throughout
* Focused and analytical tone

**10. Formality**

* **Participant:** Informal to neutral (casual, concise questions)
  + E.g., “What about Mr. Handsome?”
* **AI:** Formal and professional
  + E.g., “According to my clues…”, “I’m afraid I don’t have any information…”

**11. Conversation Styles**

* **Participant:**
  + **Driver**: Task-oriented, goal-driven
  + **Succinct**, **Instrumental**
* **AI:**
  + **Cooperative**, **Analyst**, **Exacting**
  + Prioritizes accurate clue delivery, avoids speculation

**Examples:**

* AI: “The clues I have do not mention…” (precise boundary)
* Participant: “Do you know…” (clearly-defined queries)

**12. AI Verbosity**

**Participant Responses:**

* Brief: +12
  + Most are one-line questions

**AI Responses:**

* Brief: +2
  + E.g., “Yes, she brought her dog.”
* Moderate: +8
  + E.g., “According to my clues, Mrs. Klutz spent most of the evening…”
* Long/Detailed: +2
  + E.g., final response summarizing all info about Mr. Handsome

**AI Summary Style:** Moderate verbosity used to clarify and remain informative, supporting flow.

**13. AI Consistency**

* **Consistent Behavior:** Yes
  + Always refers to “according to my clues”
  + Does not speculate or fabricate
  + Refuses when data unavailable

**No off-topic or inconsistent behaviors noted.**

**Final General Conclusion**

**Overall Quality:**  
The interaction between the AI and participant is highly structured, consistent, and goal-oriented. The participant maintains a clear investigative tone, systematically exploring details, while the AI maintains a polite, formal, and cooperative stance, strictly adhering to its knowledge boundaries.

**Key Strengths:**

* High consistency and factual adherence by the AI
* Effective use of adjacency pairs and polite refusals
* Efficient, data-seeking style by participant

**Weaknesses:**

* Lack of emotional acknowledgment or closure by the participant
* One instance of conversational redundancy
* No mutual social acknowledgments (e.g., thank-yous, closings)

Would you like a visual breakdown or table summarizing any of these aspects?