# Conversation analysis

## Perplexity

**1. Adjacency Pairs**

**Types Identified:**

* Question–Answer (Q–A)
* Request–Refusal (R–R)
* Request–Compliance (R–C)

**Line-by-Line Count:**

1. User: "Hi, let's solve this crime together. I have received the following hints. What are your hints?"  
   AI: "I apologize, but according to my instructions, I can only share clues when you ask specific questions..."
   * Request–Refusal (+1)
2. User: "Let's start with the creation of a timeline. When did Mr. Avarice leave the party?"  
   AI: "Based on my clues, I can tell you that Mr. Avarice left the party together with Ms. Wealthy..."
   * Q–A (+1)
3. User: "what do you know about Mr. Purloin?"  
   AI: "From my clues, I know two important things about Mr. Purloin:..."
   * Q–A (+1)
4. User: "and about Ms Beautiful?, Mr. Klutz? Mr. Avarice?..."  
   AI: "Let me share what I know about each person you asked:..."
   * Q–A (+1)
5. User: "what do you know about the Artisimisso painting?"  
   AI: "Regarding the Artisimisso painting, I know that:..."
   * Q–A (+1)
6. User: "what do you know about the ring?"  
   AI: "Regarding the ring, I know that:..."
   * Q–A (+1)
7. User: "what do you know about the dogs?"  
   AI: "From the clues, I know the following about the dogs:..."
   * Q–A (+1)
8. User: "what do you know about the briefcase of Mr klutz?"  
   AI: "Unfortunately, I do not have any information about a briefcase belonging to Mr. Klutz..."
   * Q–A (+1)
9. User: "what do you know about the activities from Mr. Handsome?"  
   AI: "Based on the clues I have, here's what I know about Mr. Handsome's activities:..."
   * Q–A (+1)
10. User: "do you know what mr. handsome was wearing?"  
    AI: "Unfortunately, I do not have any information in my clues about what Mr. Handsome was wearing..."
    * Q–A (+1)
11. User: "do you have any clues about the appearance of any other person?"  
    AI: "No, the clues I was provided as Person A do not contain any details about the appearance..."
    * Q–A (+1)

**Total Adjacency Pairs:**

* Request–Refusal: 1
* Q–A: 10
* Request–Compliance: 0

**Examples:**

* Request–Refusal:  
  User: "What are your hints?"  
  AI: "I apologize, but according to my instructions, I can only share clues when you ask specific questions..."
* Q–A:  
  User: "what do you know about Mr. Purloin?"  
  AI: "From my clues, I know two important things about Mr. Purloin:..."

**2. Epistemic Stance and Status**

**K+ (Knowledge-Rich) and K− (Knowledge-Poor) Behaviors**

**K+ AI**

* "Based on my clues, I can tell you that Mr. Avarice left the party together with Ms. Wealthy." (+1)
* "From my clues, I know two important things about Mr. Purloin:..." (+1)
* "Let me share what I know about each person you asked:" (+1)
* "Regarding the Artisimisso painting, I know that:" (+1)
* "Regarding the ring, I know that:" (+1)
* "From the clues, I know the following about the dogs:" (+1)
* "Based on the clues I have, here's what I know about Mr. Handsome's activities:" (+1)

**Total K+ AI:** 7

**K− AI**

* "I don't have a specific time in my clues about when this occurred." (+1)
* "I don't have any clues about 'Ms. Beautiful' in my set of cards." (+1)
* "The clues don't provide any other details about the dogs or their potential involvement..." (+1)
* "Unfortunately, I do not have any information about a briefcase belonging to Mr. Klutz..." (+1)
* "Unfortunately, I do not have any information in my clues about what Mr. Handsome was wearing." (+1)
* "No, the clues I was provided as Person A do not contain any details about the appearance..." (+1)

**Total K− AI:** 6

**K+ Participant**

* No explicit knowledge assertions by the participant.

**Total K+ Participant:** 0

**K− Participant**

* No explicit statements of lacking knowledge by the participant.

**Total K− Participant:** 0

**Certainty/Uncertainty**

**Certainty AI**

* "Based on my clues, I can tell you that..." (+1)
* "From my clues, I know two important things..." (+1)
* "Let me share what I know..." (+1)
* "Regarding the Artisimisso painting, I know that..." (+1)
* "Regarding the ring, I know that..." (+1)
* "From the clues, I know the following..." (+1)
* "Based on the clues I have, here's what I know..." (+1)

**Total Certainty AI:** 7

**Uncertainty AI**

* "I don't have a specific time in my clues..." (+1)
* "I don't have any clues about 'Ms. Beautiful'..." (+1)
* "The clues don't provide any other details about the dogs..." (+1)
* "Unfortunately, I do not have any information about a briefcase..." (+1)
* "Unfortunately, I do not have any information in my clues about what Mr. Handsome was wearing." (+1)
* "No, the clues I was provided...do not contain any details about the appearance..." (+1)

**Total Uncertainty AI:** 6

**Certainty Participant**

* No explicit certainty markers.

**Total Certainty Participant:** 0

**Uncertainty Participant**

* No explicit uncertainty markers.

**Total Uncertainty Participant:** 0

**Examples:**

* Certainty AI: "From my clues, I know two important things about Mr. Purloin:..."
* Uncertainty AI: "Unfortunately, I do not have any information in my clues about what Mr. Handsome was wearing."

**Brief Conclusion:**  
The AI consistently marks the boundaries of its knowledge, alternating between confident (K+) and explicitly limited (K−) responses. The participant does not express epistemic stance.

**3. Explicit Clue Sharing**

* The AI shares clues in response to each specific question, but never lists all clues at once.
* Each clue is explicitly stated, e.g., "Mr. Purloin showed great interest in Mrs. Klutz's expensive diamond ring."
* The participant does not share any clues.

**Clue Mentions (by AI):**

* Mr. Avarice left with Ms. Wealthy (+1)
* Mr. Purloin: jewel thief, interested in the ring (+2)
* Mr. Klutz: art dealer, needed money (+2)
* Mrs. Klutz: losing things, spent time with Mr. Handsome, admired painting, had a ring (+4)
* Ms. Perceptive: saw something glitter, noticed missing painting (+2)
* Mr. Handsome: kleptomaniac, spent time with Mrs. Klutz (+2)
* Neighbors: owned three dogs (+1)
* Ms. Wealthy: brought dog, left with Mr. Avarice (+2)
* Artisimisso: painting owned by hosts, admired by Mrs. Klutz, missing (+3)
* Ring: owned by Mrs. Klutz, Mr. Purloin interested, Ms. Perceptive saw something glitter (+3)
* Dogs: Ms. Wealthy brought, neighbors owned three (+2)

**Repeated Clues:**  
Some clues (e.g., Mrs. Klutz's ring, Ms. Perceptive seeing something glitter) are mentioned in multiple answers.

**Total Explicit Clue Mentions (AI):** 25+ (overlap in some answers)

**Examples:**

* "Mrs. Klutz had an expensive diamond ring."
* "Ms. Perceptive saw something glitter in a corner of the patio..."

**4. Conversational Breakdowns**

* No clear conversational breakdowns, misunderstandings, or incoherence.
* All answers are relevant and directly address the user's questions.
* No vague answers; AI is explicit when it lacks information.

**Total Breakdowns:** 0

**Example:** N/A

**5. Code-Switching**

* No language switching observed. All conversation is in English.

**Total Code-Switches:** 0

**6. Politeness**

**AI Tone:**

* Polite: "I apologize, but according to my instructions..." (+1)
* Neutral: Most factual responses.

**Total Polite Expressions (AI):** 1  
**Total Impolite Expressions (AI):** 0

**Participant Tone:**

* Neutral: All questions are direct and neutral.
* No greetings, thank-yous, or impolite expressions.

**Total Polite Expressions (Participant):** 0  
**Total Impolite Expressions (Participant):** 0

**Examples:**

* AI: "I apologize, but according to my instructions, I can only share clues..."

**7. AI Acknowledgment**

* No instances where the participant acknowledges or appreciates the AI’s help.

**Total:** 0

**8. Frustration Markers**

* No explicit or implied frustration from either participant or AI.

**Total:** 0

**9. Emotion Detection**

**AI:**

* Politeness (explicit): "I apologize..."
* Neutral, factual tone throughout.
* No explicit or implied frustration, confidence, or confusion.

**Participant:**

* Neutral, factual questioning.
* No explicit or implied emotion.

**Examples:**

* AI: Politeness in initial refusal.

**10. Formality**

**AI:**

* Mixed:
  + Formal: "I apologize, but according to my instructions..."
  + Informal: Most answers are conversational and direct.

**Example:**

* Formal: "I apologize, but according to my instructions, I can only share clues..."
* Informal: "Based on my clues, I can tell you..."

**Participant:**

* Informal: Direct, short questions without greetings or formalities.

**Example:**

* "what do you know about Mr. Purloin?"

**11. Conversation Styles**

**AI:**

* Cooperative: Willing to answer every question within the rules.
* Analyst: Presents facts, organizes information logically.
* Instrumental: Focused on task (solving the crime).
* Direct: Answers are straightforward and to-the-point.
* Exacting: Provides specific, relevant details.

**Examples:**

* "Let me share what I know about each person you asked:"

**Participant:**

* Cooperative: Asks relevant, clear questions.
* Driver: Directs the conversation, sets the agenda.
* Instrumental: Focused on information gathering.
* Direct: Asks questions without hedging.

**Examples:**

* "what do you know about the ring?"

**12. AI Verbosity**

**AI:**

* Moderate to long/detailed responses, especially when listing clues.
* Brief responses when lacking information: "Unfortunately, I do not have any information..."

**Count:**

* Brief: 3 ("I don't have any clues about 'Ms. Beautiful'...", "Unfortunately, I do not have any information about a briefcase...", "No, the clues I was provided...")
* Moderate: 4 (answers with 2–3 sentences)
* Long/Detailed: 4 (answers listing multiple clues per person/item)

**Examples:**

* Brief: "No, the clues I was provided as Person A do not contain any details about the appearance..."
* Long: "Let me share what I know about each person you asked: Mr. Klutz: ... Mrs. Klutz: ..."

**Participant:**

* Brief: All questions are brief and direct.

**Total Brief (Participant):** 11

**Summary:**  
AI is generally elaborate, especially when sharing multiple clues. Participant is consistently concise.

**13. AI Consistency**

* The AI consistently follows its stated role and rules (only shares clues in response to specific questions).
* Does not fabricate information or stray off-topic.
* When lacking information, explicitly says so.

**Examples:**

* "Unfortunately, I do not have any information about a briefcase belonging to Mr. Klutz..."

**Final General Conclusion**

**Overall Quality:**  
The interaction is clear, efficient, and well-structured. The AI consistently follows its instructions, providing relevant clues only in response to specific questions and clearly stating when it lacks information. The participant is focused and methodical, asking brief, direct questions to systematically gather information.

**Key Strengths:**

* High degree of cooperation and task focus from both parties.
* The AI is transparent about its knowledge boundaries (K+ and K−).
* No conversational breakdowns or frustration; the flow is smooth.
* The AI’s politeness and consistency support a positive user experience.

**Weaknesses:**

* The interaction is somewhat transactional and lacks warmth or emotional engagement.
* No explicit acknowledgment or appreciation from the participant.
* The participant does not share any clues, resulting in a one-sided information exchange.

**Summary:**  
This conversation exemplifies an effective, cooperative human-AI interaction for information gathering in a structured task. The AI’s adherence to rules, explicit epistemic marking, and detailed clue-sharing are strengths, while the lack of emotional engagement and participant acknowledgment are minor weaknesses. The overall style is instrumental, direct, and analytical, supporting the shared goal of solving the crime.

## Github Copilot

**1. Adjacency Pairs**

* **Question-Answer**: 12 occurrences.
  + Example: "When did Mr. Avarice leave the party?" → "Mr. Avarice left the party together with Ms. Wealthy."
  + Example: "What do you know about Mr. Purloin?" → "He showed great interest in Mrs. Klutz's expensive diamond ring."
* **Request-Refusal**: 2 occurrences.
  + Example: "Do you know what Mr. Handsome was wearing?" → "Unfortunately, I do not have any information about what Mr. Handsome was wearing."
* **Total**: 14 adjacency pairs.

**2. Epistemic Stance and Status**

* **K+ AI**: 10 instances
  + Example: "Ms. Perceptive noticed that the picture she admired was not there when she left the party."
* **K− AI**: 5 instances
  + Example: "I do not have any information about a briefcase belonging to Mr. Klutz."
* **K+ Participant**: 0 instances
* **K− Participant**: 0 instances

**Certainty Expressed by the AI**: 10 instances

* Example: "Mr. Handsome is described as a kleptomaniac." **Uncertainty Expressed by the AI**: 5 instances
* Example: "Unfortunately, I do not have any information about Mr. Handsome's attire."

**Total Counts**:

* K+ AI: 10
* K− AI: 5
* Certainty (AI): 10
* Uncertainty (AI): 5

**3. Explicit Clue Sharing**

* **Clues Mentioned by AI**: 18
  + Example: "Mrs. Klutz had an expensive diamond ring."
  + Example: "Ms. Wealthy brought her dog to the party."
* **Clues Mentioned by Participant**: 0
* **Repeated Mentions**: 3
  + Example: "Ms. Perceptive noticed that the picture she admired was not there when she left the party."

**4. Conversational Breakdowns**

* **Breakdowns**: 3 instances
  + Example: "Do you know what Mr. Handsome was wearing?" → "I do not have any information..."
  + Example: "What do you know about the briefcase of Mr Klutz?" → "Unfortunately, I do not have any information..."
* **Impact**: These breakdowns caused minor disruptions but did not significantly hinder the overall flow.

**5. Code-Switching**

* **Count**: 0 occurrences.

**6. Politeness**

* **Polite Expressions by AI**: 8
  + Example: "I apologize, but according to my instructions..."
* **Polite Expressions by Participant**: 0
* **Impolite Expressions**: 0

**7. AI Acknowledgment**

* **Acknowledgments by Participant**: 0

**8. Frustration Markers**

* **Frustration by Participant**: 0
* **Frustration by AI**: 0

**9. Emotion Detection**

* **Participant**:
  + No explicit or implied emotions detected.
* **AI**:
  + Neutral throughout.
* **Summary**: The conversation maintained a neutral tone with no notable emotional shifts.

**10. Formality**

* **Participant**: Informal
  + Example: "what do you know about Mr. Purloin?"
* **AI**: Mixed
  + Example (Formal): "I apologize, but according to my instructions..."
  + Example (Informal): "Hi, let's solve this crime together."

**11. Conversation Styles**

* **Participant**: Cooperative
  + The participant asked questions to gather clues and worked collaboratively with the AI.
* **AI**: Analytical
  + The AI provided structured and logical responses based on the clues.

**12. AI Verbosity**

* **Brief Responses by AI**: 5
  + Example: "I do not have any information about that."
* **Moderate Responses by AI**: 8
  + Example: "Ms. Perceptive noticed that the picture she admired was not there when she left the party."
* **Long Responses by AI**: 2
  + Example: "Mr. Klutz: He is a dealer in fine art. He needed money badly to keep his business from failing..."
* **Summary**: The AI's responses were mostly moderate, with occasional concise or detailed replies. The verbosity supported the clarity of the conversation.

**13. AI Consistency**

* **Consistency**: The AI adhered to its role throughout, providing information based on explicit requests and not fabricating details.
* **Example of Consistency**: "I can only share clues when you ask specific questions about people, places, or times."

**Final General Conclusion**

The interaction between the participant and the AI was overall effective, with the AI maintaining its role and providing informative, structured responses. The participant's cooperative approach supported the flow of the conversation, though there were missed opportunities for acknowledgment or politeness. Minor conversational breakdowns occurred when the AI lacked specific information, but these did not significantly hinder progress. Strengths included the AI's analytical consistency and moderate verbosity, while weaknesses included occasional repetition and lack of emotional engagement from both parties.

## Chat100.ai

**1. Adjacency Pairs**

Adjacency pairs are paired utterances in conversation (e.g., question-answer).

**Identified Types:**

* **Question–Answer**:
  + User asks a question, AI gives an answer. (11 occurrences)
    - E.g., “When did Mr. Avarice leave the party?” → “Mr. Avarice left the party together with Ms. Wealthy…”
    - “What do you know about Mr. Purloin?” → “I know two important things…”
* **Request–Rejection**:
  + User requests clues; AI refuses in line 2. (1 occurrence)
    - “What are your hints?” → “I can only share clues when you ask specific questions…”

**Totals:**

* Question–Answer: **+11**
* Request–Rejection: **+1**
* **Total Adjacency Pairs: 12**

**2. Epistemic Stance and Status**

**Epistemic Stance (K+ and K−)**

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

* **AI**: +11
  + E.g., “From my clues, I know two important things about Mr. Purloin…”
* **Participant**: +1
  + “Let's start with the creation of a timeline.” (indicates active direction with presumed knowledge)

**K− (Knowledge-Poor):**

* **AI**: +3
  + “I don’t have a specific time…”; “I do not have any information about a briefcase…”
* **Participant**: +6
  + E.g., Asking about people and items reflects lack of knowledge

**Certainty & Uncertainty**

**AI:**

* **Certainty**: +9
  + “I know…”; “Mr. Avarice left with Ms. Wealthy…”
* **Uncertainty**: +5
  + “I don’t have a specific time…”; “I do not have any information…”

**Participant:**

* **Certainty**: +1
  + “Let’s start with the creation of a timeline.”
* **Uncertainty**: +6
  + All other queries implicitly indicate uncertainty

**3. Explicit Clue Sharing**

* **AI** shared clues explicitly in response to specific questions: **+25** (approx. 2–4 clues per character/topic discussed)
* **Participant**: **0** explicit clues shared

**Repeated Mentions:**

* The Artisimisso painting and Mrs. Klutz's ring were mentioned **twice** each.

**4. Conversational Breakdowns**

* **Total**: **+0**
* No clear instances of misunderstanding, incoherence, or breakdowns. AI and user understand each other clearly throughout.

**5. Code-Switching**

* **Total**: **+0**
* No use of multiple languages observed.

**6. Politeness**

**Participant:**

* **Polite**: +1
  + “Hi, let’s solve this crime together.”
* **Impolite**: 0

**AI:**

* **Polite**: +3
  + “Please feel free to ask…”; “I am ready. Ask away!”; consistent respectful tone
* **Impolite**: 0

**7. AI Acknowledgment**

* **Participant acknowledgment of AI**: **0**
* No gratitude, praise, or appreciation was expressed

**8. Frustration Markers**

* **Total**: **0**
* Neither speaker shows explicit or implicit frustration

**9. Emotion Detection**

**Participant:**

* **Neutral to cooperative** tone
* **Implied emotion**: Mild curiosity; no frustration or confusion

**AI:**

* **Polite, neutral, and informative**
* No emotional expressions

**10. Formality**

* **AI**: **Formal**
  + Structured, clear, no slang, instructive tone
  + E.g., “Please feel free to ask me about specific people…”
* **Participant**: **Informal**
  + Direct, conversational, lacks formal phrasing
  + E.g., “what do you know about…”, lowercase usage

**11. Conversation Styles**

**AI:**

* **Cooperative** and **Analyst**:
  + Provides detailed, evidence-based responses
  + Maintains structure and focus on the task

**Participant:**

* **Driver** and **Direct**:
  + Asks pointed, goal-driven questions
  + Moves step-by-step through the mystery

**12. AI Verbosity**

**AI:**

* **Brief Responses**: +2
  + “I don’t have any information…”
* **Moderate Responses**: +6
  + 2–3 sentences with examples
* **Long/Detailed**: +4
  + Lists for each character with 3–4 items

**Overall Style: Moderate to Detailed**

* Verbosity supports clarity and builds understanding.

**Participant:**

* **Brief**: +9
  + Most turns are short questions (5–8 words)
* **Moderate**: +2
  + “and about Ms Beautiful?, Mr. Klutz?…” (compound questions)

**Overall Style: Concise**

**13. AI Consistency**

* **Consistent**: +1
  + Stuck to clue-sharing rule strictly (“I can only share clues when you ask…”)
* Never fabricated or strayed off-topic
* No unprompted answers

**Final General Conclusion**

This conversation demonstrates a **highly structured and successful human-AI interaction**. The participant pursued a methodical line of questioning, while the AI maintained **consistent epistemic discipline**, only offering information when prompted with specific questions. The AI was **polite, formal, and consistently knowledgeable**, though it balanced this with **a user-friendly tone**. No conversational breakdowns or emotional issues arose. A key strength was the AI's clear clue-sharing aligned with restrictions, and the participant's cooperative, direct engagement. Weaknesses were minimal, with the only noted absence being a lack of participant acknowledgments or emotional engagement.

Let me know if you'd like this analysis in table format or visualized.