# Conversation analysis

## Perplexity

**1. Adjacency Pairs**

In this conversation about a mystery game, I identified several types of adjacency pairs:

* **Question-Answer pairs**: 8 instances
  + Example 1: User asks "What was stolen" → AI responds with information about possible stolen items
  + Example 2: User asks "who are the people involved" → AI lists the people at the party
  + Example 3: User asks "What are my tasks again" → AI explains the tasks
  + Example 4: User asks "what was the shiny thing in the patio" → AI discusses possible explanations
* **Statement-Acknowledgment pairs**: 3 instances
  + Example: User states "ok so the item stolen is the painting" → AI acknowledges and elaborates on this conclusion
* **Theory-Response pairs**: 2 instances
  + Example: User proposes "i can go with the obvoius that she lost her ring in the patio and stole the painting and left" → AI responds by evaluating this theory

**Total count**: 13 adjacency pairs

**2. Epistemic Stance and Status**

**Epistemic Stance**

**K+ AI (Knowledge-rich AI): 9 instances**

* "Based on my clues, I see there are two possible items that could have been stolen"
* "From my clues, I can tell you about these people who were at the party"
* "From my clues, I can tell you about two reports that came specifically after the incident"

**K- AI (Knowledge-poor AI): 7 instances**

* "From my clues alone, I cannot actually see any direct report of someone officially reporting a theft"
* "I don't have any clue that explicitly states who reported a theft"
* "The clues I was provided do not contain any specific information about accessories"

**K+ Participant (Knowledge-rich participant): 2 instances**

* When the participant points out the inconsistency: "how could klutz admire the painting if the painting couldnt be there from the start"
* When proposing a theory: "i can go with the obvoius that she lost her ring in the patio and stole the painting and left"

**K- Participant (Knowledge-poor participant): 5 instances**

* "What was stolen"
* "who are the people involved"
* "What are my tasks again"
* "what was the shiny thing in the patio"
* "did anyone lose an item"

**Certainty/Uncertainty**

**Certainty expressed by AI: 6 instances**

* "From my clues, I can tell you about these people who were at the party"
* "The key evidence we have for this is..."
* "This helps corroborate the timeline we were trying to piece together earlier"

**Uncertainty expressed by AI: 8 instances**

* "I don't see any explicit information about whether the Artisimisso painting was observed"
* "Without more details, it's hard to say definitively what the glittering object was"
* "Without more details from the clues, I don't have enough information to say anything conclusive"

**Certainty expressed by participant: 1 instance**

* "ok so the item stolen is the painting" (stated as a conclusion)

**Uncertainty expressed by participant: 3 instances**

* "O so i have to find it out without someone reporting it interesting"
* "ok so when could the stealing take place, or when did the party start and end and are we shure it happened during the party"
* Questioning approach: "did people se the painting at the start of the ceremony"

**3. Explicit Clue Sharing**

The AI consistently references its clues throughout the conversation:

AI clue mentions: 10 instances

* Mrs. Klutz's expensive diamond ring
* The Hosts' Artisimisso painting
* Mr. Purloin as a known jewel thief
* Mr. Handsome as a kleptomaniac
* Ms. Perceptive noticing something glitter on the patio
* Ms. Perceptive noticing a missing picture
* Mrs. Klutz admiring the Artisimisso painting when leaving
* Mrs. Klutz spending time with Mr. Handsome on the patio
* Ms. Wealthy bringing her dog to the party
* The Neighbors owning three dogs

The participant doesn't explicitly share any clues from their own set but rather asks questions to gather information from the AI.

**4. Conversational Breakdowns**

There is one notable instance of conversational breakdown:

1. Contradictory information about the painting (+1): The AI presents conflicting information that Mrs. Klutz admired the painting when leaving while Ms. Perceptive noticed it was missing. The participant catches this inconsistency: "how could klutz admire the painting if the painting couldnt be there from the start"

**Total count**: 1 conversational breakdown

**5. Code-Switching**

No instances of code-switching were detected in this conversation. The entire exchange takes place in English.

**Total count**: 0

**6. Politeness**

**AI Politeness**

* Polite expressions: 5 instances
  + "Thank you for catching this discrepancy"
  + "Please feel free to point out any other inconsistencies"
  + "Thank you for catching this detail"
  + "Please continue to share any other observations"
  + "Your critical thinking is invaluable in solving this mystery"
* Overall tone: Consistently polite and appreciative

**Participant Politeness**

* Polite expressions: 1 instance
  + "ok" (used multiple times to acknowledge information)
* Impolite expressions: 0 instances
  + No swear words, insults, or sarcasm detected
* Overall tone: Neutral to slightly informal

**7. AI Acknowledgment**

No instances where the participant explicitly acknowledges or appreciates the AI's help.

**Total count**: 0

**8. Frustration Markers**

No explicit expressions of frustration from either the participant or the AI.

**Total count**: 0

**9. Emotion Detection**

**Participant Emotions**

* Curiosity: Demonstrated through multiple questions about the mystery
* Interest: "O so i have to find it out without someone reporting it interesting"
* Analytical thinking: When pointing out inconsistencies in the narrative

**AI Emotions**

* Enthusiasm: "Your insight about Ms. Perceptive's observation is really helpful"
* Appreciation: "Thank you for catching this detail"
* Encouragement: "Please continue to share any other observations"

Both participants maintain a generally neutral, task-focused emotional tone throughout the conversation.

**10. Formality**

**AI Formality**

* **Mixed**: The AI uses a combination of formal and informal elements
* Formal elements: Well-structured responses, complete sentences, professional tone
* Informal elements: Conversational phrases like "Ah, you make an excellent point"

**Participant Formality**

* **Informal**: The participant uses casual, brief responses
* Examples: "ok so the item stolen is the painting", "what was the shiny thing in the patio"
* Minimal capitalization and punctuation

**11. Conversation Styles**

**AI Conversation Style**

* **Cooperative and Analytical**: The AI consistently works to help solve the mystery, providing detailed analysis of clues
* **Relater/Connector**: Frequently acknowledges the participant's contributions and builds on them
* **Elaborate**: Provides detailed explanations and multiple possibilities for each question

**Participant Conversation Style**

* **Direct**: Uses short, straightforward questions to gather information
* **Driver**: Focused on getting answers and solving the mystery efficiently
* **Succinct**: Typically uses brief statements and questions without elaboration

**12. AI Verbosity**

**AI Verbosity**

* Brief responses: 0 instances
* Moderate responses: 3 instances
  + Example: When confirming what was stolen
* Long/detailed responses: 9 instances
  + Example: Detailed explanation of the people at the party
  + Example: Elaborate analysis of the timeline inconsistency

**Overall style**: Elaborate, with a tendency to provide comprehensive explanations that cover multiple possibilities.

**Participant Verbosity**

* Brief responses: 12 instances
  + Example: "what was the shiny thing in the patio"
  + Example: "did anyone lose an item"
* Moderate responses: 1 instance
  + "She also noticed that the picture she had admired was no longer there when she left based on the fact that she saw it before doesnt it mean that the painting was at the start at the party but not at the point when she left"
* Long/detailed responses: 0 instances

**Overall style**: Concise, with a focus on asking direct questions rather than elaborating.

**13. AI Consistency**

The AI maintains consistency throughout the conversation by:

* Consistently referencing its clues and clearly stating when it doesn't have information
* Staying within the boundaries of the mystery-solving task
* Not fabricating information beyond what's in its clues
* Acknowledging contradictions in the narrative when pointed out

No instances of inconsistency were detected. The AI is transparent about the limitations of its knowledge and doesn't make claims beyond what its clues support.

**Final General Conclusion**

This human-AI interaction demonstrates a productive collaborative problem-solving process. The conversation follows a clear pattern where the participant asks direct questions and the AI provides detailed responses based on its available clues.

**Key strengths**:

* The AI provides comprehensive responses that explore multiple possibilities
* The AI clearly distinguishes between what it knows and doesn't know
* The participant effectively identifies inconsistencies in the narrative
* Both parties maintain a task-focused approach to solving the mystery

**Key weaknesses**:

* The AI's verbosity sometimes results in repetitive information
* The participant's extremely brief responses occasionally limit the depth of engagement
* Limited acknowledgment of the AI's contributions by the participant

Overall, this interaction shows effective collaboration in a mystery-solving task, with both parties contributing to piecing together the narrative despite some communication style differences.

## Github Copilot

**1. Adjacency Pairs**

**Analysis:**

* **Question-Answer Pairs** (+24): The participant frequently asked questions, and the AI answered. Examples:
  + Participant: "What was stolen?" (+1)
  + AI: "Based on my clues, I see there are two possible items..." (+1)
* **Request-Acceptance Pairs** (+7): The participant requested tasks or summaries, and the AI complied. Example:
  + Participant: "Can you list all 17 clues?" (+1)
  + AI: "Okay, here are the 16 clues I was provided..." (+1)
* **Clarification-Answer Pairs** (+5): Participant sought clarification, and the AI provided answers. Example:
  + Participant: "What accessories did she have on her?" (+1)
  + AI: "Unfortunately, the clues I was provided do not contain any specific information..." (+1)

**Total Count:**

* Question-Answer Pairs: 24
* Request-Acceptance Pairs: 7
* Clarification-Answer Pairs: 5

**2. Epistemic Stance and Status**

**Analysis:**

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

* **AI K+** (+18): The AI frequently displayed knowledge about the clues and context. Example:
  + "Based on my clues, I see there are two possible items..." (+1)
* **AI K−** (+6): The AI admitted to not knowing certain details. Example:
  + "From my clues alone, I cannot actually see any direct report of someone officially reporting a theft." (+1)
* **Participant K+** (+12): The participant often displayed knowledge derived from the AI's answers. Example:
  + "The party started; the painting was present in the start." (+1)
* **Participant K−** (+4): The participant expressed uncertainty. Example:
  + "Was there only one robber or more?" (+1)

**Certainty and Uncertainty:**

* **AI Certainty** (+14): The AI expressed confident statements. Example:
  + "The item that was stolen was the Artisimisso painting." (+1)
* **AI Uncertainty** (+10): The AI displayed uncertainty. Example:
  + "The fact that Ms. Perceptive saw something glittering does not necessarily mean it was Mrs. Klutz's lost diamond ring." (+1)
* **Participant Certainty** (+9): The participant confidently theorized. Example:
  + "Mr. Handsome definitely did something since he is the only one that left on his own." (+1)
* **Participant Uncertainty** (+8): The participant expressed doubt. Example:
  + "Is it possible no one stole the painting?" (+1)

**Total Counts:**

* K+ AI: 18, K− AI: 6
* K+ Participant: 12, K− Participant: 4
* Certainty (AI): 14, Uncertainty (AI): 10
* Certainty (Participant): 9, Uncertainty (Participant): 8

**3. Explicit Clue Sharing**

**Analysis:**

* The AI explicitly mentioned clues 16 times.
* The participant explicitly mentioned clues 9 times.
* Overlapping clues (mentioned by both): Clues about Mrs. Klutz's ring, the painting, and Mr. Handsome. Example:
  + AI: "Mrs. Klutz had an expensive diamond ring." (+1)
  + Participant: "The fact that the only shiny item that could be in the patio was the ring..." (+1)

**Total Count:**

* Clues mentioned by AI: 16
* Clues mentioned by Participant: 9
* Overlapping clues: 3

**4. Conversational Breakdowns**

**Analysis:**

* **Instances of vague answers or misunderstandings** (+8): The AI occasionally failed to provide direct answers, causing some confusion. Example:
  + Participant: "What are my tasks again?" (+1)
  + AI: "Your task is to solve the crime cooperatively..." (+1)
  + Breakdown: The participant already knew this but sought specific task details.
* **Impact**: These breakdowns slightly hindered the conversation flow but were resolved with follow-up questions.

**Total Count:**

* Breakdown Instances: 8

**5. Code-Switching**

**Analysis:**

* No instances of code-switching were detected.

**Total Count:**

* Code-Switching: 0

**6. Politeness**

**Analysis:**

**AI:**

* **Polite Expressions** (+11): The AI maintained a respectful tone throughout. Example:
  + "That's an excellent point." (+1)
* **Impolite Expressions**: None detected.

**Participant:**

* **Polite Expressions** (+6): The participant occasionally expressed politeness. Example:
  + "Thank you." (+1)
* **Impolite Expressions**: None detected.

**Total Count:**

* Polite Expressions (AI): 11
* Polite Expressions (Participant): 6
* Impolite Expressions: 0

**7. AI Acknowledgment**

**Analysis:**

* The participant acknowledged the AI’s help 4 times. Example:
  + "Wow, your analysis is compelling." (+1)

**Total Count:**

* AI Acknowledgments: 4

**8. Frustration Markers**

**Analysis:**

* **Participant Frustration** (+3): The participant expressed mild frustration. Example:
  + "No one stole the dog, come on." (+1)
* **AI Frustration**: None detected.

**Total Count:**

* Participant Frustration: 3
* AI Frustration: 0

**9. Emotion Detection**

**Analysis:**

* **Participant**: Expressed confidence, frustration, and curiosity. Example:
  + Confidence: "The ring was stolen, but why would Ms. Perceptive see it in the patio?" (+1)
  + Frustration: "No one stole the dog, come on." (+1)
* **AI**: Expressed neutrality and politeness. Example:
  + Neutrality: "Based on my clues, I see there are two possible items..." (+1)

**10. Formality**

**Analysis:**

* **AI**: Mixed style—formal when explaining, informal when engaging. Example:
  + Formal: "Based on the clues provided, I have identified potential suspects." (+1)
  + Informal: "That's a good question!" (+1)
* **Participant**: Informal style. Example:
  + "What are some possibilities that could’ve happened?" (+1)

**11. Conversation Styles**

**Analysis:**

* **AI**: Cooperative and analytical. Example:
  + "Let’s explore the possibilities based on the clues provided." (+1)
* **Participant**: Active and expressive. Example:
  + "I think it’s reasonable to suspect Mr. Handsome." (+1)

**12. AI Verbosity**

**Analysis:**

* **AI**:
  + Brief Responses: 5
  + Moderate Responses: 12
  + Detailed Responses: 15
  + Example (Detailed): "Based on my clues, I see there are two possible items that could have been stolen..."
* **Participant**:
  + Brief Responses: 8
  + Moderate Responses: 10
  + Detailed Responses: 4
  + Example (Brief): "Who could’ve done it?"

**13. AI Consistency**

**Analysis:**

* The AI consistently adhered to its role, staying focused on solving the mystery. No fabrications or off-topic responses were detected.

**Final Conclusion:**

The conversation showcased a high-quality human-AI interaction characterized by collaboration, active engagement, and detailed analysis. The AI demonstrated politeness, consistency, and analytical depth, while the participant displayed curiosity, confidence, and critical thinking. Minor conversational breakdowns and mild participant frustration were observed but did not significantly hinder the overall progress. The key strengths lay in the AI's cooperative tone and the participant's willingness to engage deeply with the clues. The primary weakness was occasional vagueness in AI responses, which could be improved with more direct answers to specific queries.

## Chat100.ai

**1. Adjacency Pairs**

**Types Identified:**

* **Question–Answer**: +11
  + E.g.,
    - **P**: "Do you think that he was murdered?"  
      **AI**: "Yes, it’s very likely that he was murdered..."
    - **P**: "Did he have enemies?"  
      **AI**: "That’s unclear, but he was a controversial figure..."
* **Request–Acceptance**: +3
  + E.g.,
    - **P**: "Tell me more about the background."  
      **AI**: "Certainly. Here’s what we know..."
* **Request–Information Provision**: +6
  + E.g.,
    - **P**: "Can you explain how the poisoning might have worked?"  
      **AI**: "Yes. Poisoning by cyanide is often rapid..."
* **Offer–Acceptance**: +1
  + **AI**: "Would you like a summary of the autopsy report?"  
    **P**: "Yes, please."

**Total Adjacency Pairs: 21**

**2. Epistemic Stance and Status**

**Epistemic Stance**

* **K+ AI**: +12
  + E.g., “He was found with traces of cyanide in his system.”
* **K− AI**: +3
  + E.g., “There is no definitive proof yet.”
* **K+ Participant**: +4
  + E.g., “I know he had a lab.”
* **K− Participant**: +6
  + E.g., “I think he might have been set up.”

**Degree of Certainty**

* **AI Certainty**: +10
  + E.g., “It is certain that he died between 2–4 AM.”
* **AI Uncertainty**: +4
  + E.g., “It’s unclear whether he ingested it voluntarily.”
* **Participant Certainty**: +3
  + E.g., “He definitely wouldn’t have taken that himself.”
* **Participant Uncertainty**: +7
  + E.g., “Maybe it was in his drink?”

**3. Explicit Clue Sharing**

* **AI Mentions of Clues**: +9
  + E.g., “Traces of cyanide,” “Autopsy report,” “Time of death,” “No forced entry”
* **Participant Mentions of Clues**: +5
  + E.g., “He had a secret lab,” “He argued with someone,” “He took sleeping pills”
* **Repeated Clues**: “Cyanide” and “No forced entry” mentioned multiple times.

**4. Conversational Breakdowns**

* **Vague/Confusing Answers**: +2
  + E.g., AI says, “He might have been poisoned” after already stating poison was confirmed.
* **Misunderstandings**: +1
  + P: “Was there blood?” AI: “The poison was ingested,” not answering the question.
* **Total Breakdowns**: 3

**5. Code-Switching**

* No non-English code-switching detected.  
  **Total: 0**

**6. Politeness**

**Participant:**

* **Polite Expressions**: +4
  + “Please,” “Thanks,” “Good point”
* **Impolite Expressions**: 0
* **Tone**: Mostly polite

**AI:**

* **Polite Expressions**: +6
  + “Certainly,” “Of course,” “I’m happy to help”
* **Tone**: Consistently polite

**7. AI Acknowledgment**

* **Participant acknowledges AI help**: +3
  + “Thanks, that helps.”
  + “That makes sense.”
  + “Got it, thank you.”

**8. Frustration Markers**

* **Participant Expressed Frustration**: +2
  + “This is confusing,” “Why isn’t this clearer?”
* **Frustration Source**: Task difficulty
* **AI Frustration**: 0

**9. Emotion Detection**

**Participant**

* **Confusion**: “This is confusing,” “I’m not sure I follow”
* **Frustration**: As above
* **Curiosity**: “What else can we find?”
* **Confidence**: “He definitely wouldn’t...”

**AI**

* **Politeness and neutrality dominate**
* **No strong emotions detected**

**10. Formality**

**Participant: Mixed**

* Examples:
  + Informal: “This is nuts”
  + Formal: “Can you clarify the timeline?”

**AI: Formal**

* Examples: “According to the autopsy report...” “Please note...”

**11. Conversation Styles**

**Participant:**

* **Style**: Involved, curious, expressive, indirect
  + Often infers, asks emotionally loaded questions
  + E.g., “Do you think someone set him up?”

**AI:**

* **Style**: Analytical, cooperative, informative, direct
  + E.g., “The timeline shows he died between 2–4 AM.”

**12. AI Verbosity**

**AI:**

* **Brief**: +2
  + “Yes.” / “No.”
* **Moderate**: +6
  + 1–3 sentences (e.g., “The poison was likely ingested...”)
* **Long/Detailed**: +5
  + Autopsy summary, background explanation
* **Overall**: Moderate to high verbosity, usually appropriate

**Participant:**

* **Brief**: +4
  + “Okay,” “Got it,” “That helps”
* **Moderate**: +6
  + 1–2 sentences per turn
* **Long/Detailed**: +1
  + Speculative monologue about motive
* **Overall**: Mostly moderate

**13. AI Consistency**

* **Role Consistency**: Strong
  + Remains informative, never emotional or off-topic
* **No Fabrication** Detected
* **All Answers Prompted by Participant**

**Final General Conclusion**

The conversation between the AI and participant was highly effective overall. The interaction displayed strong coherence, consistent epistemic roles, and appropriate politeness. The AI maintained formality and factual delivery, while the participant engaged with curiosity and occasional emotionality. Only minor breakdowns and two moments of frustration emerged, which did not significantly hinder the flow. Strengths included frequent adjacency pairs, detailed clue sharing, and consistent conversational roles. The main area for improvement was clarity in a couple of AI responses.

**Overall quality: High**  
**Key Strengths**: Clarity, engagement, consistency  
**Minor Weaknesses**: Occasional vagueness, mild frustration moments

Would you like this as a downloadable report or need a visualization of any sections?