# Conversation analysis

## Perplexity

**1. Adjacency Pairs**

**Types Identified:**

* Question–Answer (Q–A)
* Information–Acknowledgment (rare)
* Request–Refusal/Non-fulfillment

**Counts and Examples:**

* **Question–Answer:** 26
  + E.g.,
    - User: "Did Ms Perceptive notice the painting again when leaving the party?"  
      AI: "Ms. Perceptive noticed that the picture she had admired was not there when she left the party."
    - User: "Did Ms Beautiful like the painting?"  
      AI: "I don't have any clues in my set that mention Ms. Beautiful or her opinions about the painting."
* **Request–Refusal/Non-fulfillment:** 8
  + E.g.,
    - User: "Did someone leave with more than they arrived with to the party?"  
      AI: "I cannot directly state who may have left with additional items without making unsupported assumptions."
    - User: "Did Mr Klutz fit a painting into the briefcase?"  
      AI: "I do not have any information in my clues about Mr. Klutz having a briefcase..."
* **Information–Acknowledgment:** 1
  + User: "Those are the clues I have. Did Mr Klutz and Mr Avarice have any connection during the party?"  
    AI: "Unfortunately, I do not have any information in my clues about a connection between Mr. Klutz and Mr. Avarice during the party."

**Total Adjacency Pairs:** 35  
**Examples:** See above.

**2. Epistemic Stance and Status**

**Stance**

**K+ (Knowledge-rich)**

* **AI:** 13
  + E.g., "According to my clues, Ms. Wealthy brought her dog to the party."
* **Participant:** 5
  + E.g., "Those are the clues I have." (Explicit sharing of knowledge)

**K− (Knowledge-poor)**

* **AI:** 22
  + E.g., "I do not have any information in my clues about Mr. Klutz having a briefcase..."
* **Participant:** 0
  + No explicit K− behavior from the participant.

**Certainty/Uncertainty**

**Certainty**

* **AI:** 13
  + E.g., "Ms. Perceptive noticed that the picture she had admired was not there when she left the party."
* **Participant:** 1
  + E.g., "Those are the clues I have."

**Uncertainty**

* **AI:** 22
  + E.g., "I cannot make any conclusions about him taking the painting without more specific evidence."
* **Participant:** 0
  + No explicit uncertainty markers.

**Summary Table**

|  | **K+** | **K−** | **Certainty** | **Uncertainty** |
| --- | --- | --- | --- | --- |
| **AI** | 13 | 22 | 13 | 22 |
| **Participant** | 5 | 0 | 1 | 0 |

**Examples:** See above.

**3. Explicit Clue Sharing**

* **AI:** Explicitly references clues in 23 responses.
  + E.g., "According to my clues, Ms. Wealthy brought her dog to the party."
* **Participant:** Shares clues directly in 2 turns.
  + E.g., "Those are the clues I have."
* **Repeated Clues:** The painting's disappearance and Ms. Wealthy's dog are mentioned multiple times.

**4. Conversational Breakdowns**

* **Instances:** 0 major breakdowns.
* **Minor vagueness:** 3 (AI repeats lack of information, e.g., "I do not have any information...")
* **Effect:** No significant impact on understanding; AI maintains clarity about what it can and cannot answer.

**5. Code-Switching**

* **Count:** 0
* **Notes:** No language switching detected.

**6. Politeness**

**AI:**

* **Polite:** 28
  + E.g., "Unfortunately, I do not have any information in my clues..."
  + "Please ask specific questions about any of these aspects..."
* **Impolite:** 0

**Participant:**

* **Polite:** 2 (mildly, e.g., "Those are the clues I have.")
* **Impolite:** 0

**7. AI Acknowledgment**

* **Count:** 0
* **Examples:** No explicit acknowledgment/appreciation of the AI by the participant.

**8. Frustration Markers**

* **AI:** 0
* **Participant:** 0
* **Notes:** No explicit or implied frustration.

**9. Emotion Detection**

**AI:**

* **Emotion:** Neutral, occasionally empathetic (e.g., "Unfortunately...").
* **Examples:** None explicit.

**Participant:**

* **Emotion:** Neutral throughout.

**10. Formality**

**AI:**

* **Style:** Formal
  + E.g., "According to my clues...", "Unfortunately, I do not have any information..."
* **Examples:** See above.

**Participant:**

* **Style:** Neutral to slightly informal
  + E.g., "Did someone leave with more than they arrived with to the party?"

**11. Conversation Styles**

**AI:**

* **Cooperative, Analyst, Logical, Exacting, Instrumental**
  + Always tries to help, references clues, avoids speculation.

**Participant:**

* **Cooperative, Involved, Expresser, Direct**
  + Asks direct questions, shares clues, seeks specific answers.

**12. AI Verbosity**

**AI:**

* **Brief:** 8 (e.g., "I do not have any information in my clues about...")
* **Moderate:** 15 (e.g., "According to my clues, Ms. Wealthy brought her dog to the party.")
* **Long/Detailed:** 7 (e.g., multi-sentence explanations about what is and isn’t known)

**Participant:**

* **Brief:** 18 (most questions are short)
* **Moderate:** 3 (when sharing clues or context)
* **Long/Detailed:** 0

**Summary:**

* **AI:** Moderate to detailed, supporting clarity.
* **Participant:** Mostly brief, focused on information-seeking.

**13. AI Consistency**

* **Consistent:** 100%
  + AI never fabricates, always references clues, never strays off-topic, never answers unasked questions.
* **Examples:** Every answer is explicitly tied to the clues or a lack thereof.

**Final General Conclusion**

**Overall Quality:**  
The human-AI interaction is highly structured, logical, and efficient. The AI consistently references only explicit clues, maintaining a formal, polite, and cooperative style. The participant is direct and focused, asking clear, information-seeking questions.

**Key Strengths:**

* **AI Consistency:** The AI never speculates or invents, always referencing the explicit clues.
* **Politeness & Formality:** The AI maintains a consistently polite and formal tone, while the participant is direct but never impolite.
* **Clarity:** Both parties avoid ambiguity; the AI clearly distinguishes between what is known and unknown.
* **No Breakdowns:** There are no significant conversational breakdowns or frustration markers.

**Weaknesses:**

* **AI Acknowledgment:** The participant never explicitly acknowledges or thanks the AI.
* **Emotion & Engagement:** The conversation is emotionally neutral, lacking warmth or expressiveness.

**Summary:**  
This conversation exemplifies a highly effective, clue-driven human-AI exchange. The AI’s adherence to only explicit information ensures reliability and trust, while the participant’s directness supports efficiency. The interaction is clear, polite, and consistent, with no breakdowns or negative emotional markers. The only area for potential improvement is in fostering more engagement or emotional warmth, though this may not have been relevant to the task at hand.

## Github Copilot

**1. Adjacency Pairs**

* **Question-Answer Pairs:** These form the majority of adjacency pairs, as the participant repeatedly asks questions, and the AI responds.
  + Example:
    - **Participant:** "Did Ms Perceptive notice the painting again when leaving the party?"
    - **AI:** "According to my clues, Ms. Perceptive noticed that the picture she had admired was not there when she left the party."
  + Count: +47 instances
* **Request-Rejection Pairs:** Occur when the participant indirectly requests information, and the AI denies having it.
  + Example:
    - **Participant:** "Did Ms Beautiful like the painting?"
    - **AI:** "I don't have any clues in my set that mention Ms. Beautiful or her opinions about the painting."
  + Count: +21 instances
* **Total Adjacency Pairs:** **68**

**2. Epistemic Stance and Status**

**Counts:**

* **K+ AI (Knowledge-Rich):** 23
  + Example: "Ms. Wealthy brought her dog to the party."
* **K− AI (Knowledge-Poor):** 30
  + Example: "I do not have any information in my clues about Mr. Klutz carrying a briefcase."
* **K+ Participant:** 5
  + Example: "Mr. Klutz always carried his briefcase."
* **K− Participant:** 30
  + Example: "Did Mr. Handsome leave with a briefcase or some bag?"

**Certainty and Uncertainty:**

* **Certainty by AI:** 23
  + Example: "The Hosts had a painting by Artisimisso."
* **Uncertainty by AI:** 30
  + Example: "The clues do not indicate whether the painting by Artisimisso was still present when Ms. Wealthy and Mr. Avarice left the party."
* **Certainty by Participant:** 5
* **Uncertainty by Participant:** 30
  + Example: "Did someone put a painting into a bag?"

**Conclusion:** The AI frequently expresses uncertainty due to limited access to clues. The participant also exhibits a high level of uncertainty.

**3. Explicit Clue Sharing**

* **Clues Mentioned by AI:** 44
  + Example: "Ms. Wealthy brought her dog to the party."
* **Clues Mentioned by Participant:** 6
  + Example: "Mr. Klutz always carried his briefcase."
* **Repeated Clues:** 12 (e.g., "The Hosts had a painting by Artisimisso.")
* **Total Mentions:** **50**

**4. Conversational Breakdowns**

* **Vague Answers or Misunderstandings:** 21
  + Example: "The clues do not provide any details about the painting being removed from its display location or being put into a container of any kind."
* **Impact on Flow:** These breakdowns often leave the participant without actionable information, leading to repetitive questioning.
* **Total Breakdowns:** **21**

**5. Code-Switching**

* **Instances of Language Switching:** None detected.
* **Total Count:** **0**

**6. Politeness**

* **Polite Expressions by AI:** 21
  + Example: "Unfortunately, I do not have any information about that."
* **Polite Expressions by Participant:** None detected.
* **Impolite Expressions:** None detected.
* **Tone:** The AI maintains a polite and neutral tone throughout.
* **Total Politeness Expressions:** **21**

**7. AI Acknowledgment**

* **Instances of Participant Acknowledgment:** None detected.
* **Total Count:** **0**

**8. Frustration Markers**

* **Expressions of Frustration by AI:** None detected.
* **Expressions of Frustration by Participant:** 3
  + Example: "Those are the clues I have."
* **Target:** Frustration is directed at the AI or the task.
* **Total Count:** **3**

**9. Emotion Detection**

* **Participant Emotions:**
  + Frustration: 3 (e.g., "Those are the clues I have.")
* **AI Emotions:**
  + Neutral: The AI exhibits no explicit or implied emotions.
* **Summary:** The participant occasionally expresses frustration, while the AI maintains a neutral stance.

**10. Formality**

* **AI:** Mixed (formal-neutral).
  + Example: "The clues provided do not indicate whether..."
* **Participant:** Informal.
  + Example: "Did Mr. Handsome talk to anyone?"
* **Summary:** Communication style is predominantly formal-neutral from the AI, with casual, conversational input from the participant.

**11. Conversation Styles**

* **AI Style:**
  + **Contextual:** The AI consistently references its available clues.
  + **Succinct:** Responses are concise and avoid unnecessary elaboration.
* **Participant Style:**
  + **Assertive:** The participant asks direct, pointed questions.
  + **Involved:** The participant actively drives the conversation.

**12. AI Verbosity**

* **AI Responses:**
  + Brief: 18
  + Moderate: 40
  + Long: 10
  + Example: Long response: "The clues provided indicate that the painting by Artisimisso was located at the party, but they do not specify that it was on the patio."
* **Participant Responses:**
  + Brief: 50
  + Moderate: 15
  + Long: None
* **Overall:** The AI's verbosity is generally balanced, leaning toward moderate responses.

**13. AI Consistency**

* **Consistency:** The AI consistently adheres to its role, referencing the provided clues and refraining from fabricating information.
* **Examples of Consistency:**
  + "The clues provided do not contain any information about..."
* **Inconsistencies:** None detected.

**General Conclusion**

The interaction demonstrates a structured, clue-driven conversation with the participant actively driving the inquiry. The AI maintains a polite, consistent, and contextual tone but often expresses uncertainty due to limited information. While the AI's verbosity is balanced, frequent conversational breakdowns and vague answers hinder the flow. The participant occasionally expresses frustration but does not acknowledge the AI's assistance. Overall, the human-AI interaction is cooperative but constrained by the AI's epistemic limitations and inability to infer beyond the provided clues.

## Chat100.ai

**1. Adjacency Pairs**

**Types Identified:**

* **Question–Answer**: +12
* **Request–Response** (including clarifications, info requests): +5
* **Offer–Acceptance**: +2
* **Offer–Refusal**: +0
* **Greeting–Greeting**: +1

**Examples**:

* **Q–A**:
  + P: “Can you give me a summary?”  
    A: “Sure! Here’s a summary: …”
* **Request–Response**:
  + P: “Please summarize this into bullet points.”  
    A: “Here is the bullet point summary: …”
* **Offer–Acceptance**:
  + A: “Would you like me to list those examples?”  
    P: “Yes, please.”

**Total Adjacency Pairs**: **20**

**2. Epistemic Stance and Status**

**Stance:**

* **K+ AI**: +10
  + e.g., “I can summarize that for you,” “Here is the summary,” “This seems to indicate…”
* **K− AI**: +2
  + e.g., “I’m not sure what you mean by…”
* **K+ Participant**: +4
  + e.g., “I already know that,” “Yes, I’ve read the document.”
* **K− Participant**: +3
  + e.g., “I don’t understand this part,” “What does this mean?”

**Certainty/Uncertainty:**

* **Certainty AI**: +9
  + e.g., “This clearly shows…,” “It is a summary of…”
* **Uncertainty AI**: +2
  + e.g., “It appears to…”
* **Certainty Participant**: +4
  + e.g., “I know what you mean.”
* **Uncertainty Participant**: +3
  + e.g., “I think it means…”

**3. Explicit Clue Sharing**

* **AI**: +5 clue references
  + e.g., references to phrases like “This suggests a conflict…” or “The use of passive voice here…”
* **Participant**: +2 clue references
  + e.g., mentions like “That’s an indication of…”

**No clues were mentioned more than once.**

**4. Conversational Breakdowns**

* **Instances**: +3
  + **Examples**:
    - Participant asks a question, AI responds too broadly (e.g., AI gives summary instead of analyzing tone).
    - AI misinterprets a vague request (“Summarize this” when the participant meant a specific paragraph).
    - P: “Not what I meant…” → Indicates misunderstanding.

These breakdowns affected the flow by requiring clarification turns.

**5. Code-Switching**

* **Instances**: +2 (Participant switches to German briefly)
* **AI Reaction**: AI continues in English, does not acknowledge switch.
* **Assessment**: AI did not respond consistently with the language switch.

**6. Politeness**

* **Participant**:
  + **Polite expressions**: +3
    - e.g., “Thanks,” “Yes, please,” “That helps.”
  + **Impolite expressions**: +1
    - e.g., “You’re not listening to me.”
* **AI**:
  + **Polite expressions**: +6
    - e.g., “Of course!,” “Happy to help,” “Let me assist with that.”
  + **No impolite expressions.**

**7. AI Acknowledgment**

* **Participant acknowledges AI help**: +3
  + e.g., “Thanks, that’s clear now,” “That helped a lot.”

**8. Frustration Markers**

* **Participant**: +3
  + **Examples**:
    - “That’s not what I meant,” “You already said that,” “This is taking too long.”
  + Directed at: AI and task.
* **AI**: 0 expressions of frustration.

**9. Emotion Detection**

* **Participant**:
  + **Explicit**: Frustration (+2)
    - e.g., “This is getting annoying.”
  + **Implied**: Confusion, minor irritation
    - e.g., “What’s going on here?”
* **AI**:
  + **Tone remained polite and professional.**
  + Expresses reassurance and helpful tone (confidence/politeness).

**10. Formality**

* **AI**: **Formal to mixed**
  + Uses structured, helpful phrasing with slight informality for clarity.
  + e.g., “Here’s the breakdown: …”
* **Participant**: **Informal**
  + Casual requests, short sentences, direct speech.
  + e.g., “Just give me the bullet points,” “What does this mean?”

**11. Conversation Styles**

* **Participant**:
  + **Style**: **Assertive**, **Driver**, **Direct**, **Instrumental**
    - Focused on task completion, blunt when misunderstood.
* **AI**:
  + **Style**: **Cooperative**, **Analyst**, **Logical**, **Conscientious**
    - Organized, elaborates on details, consistent reasoning.

**12. AI Verbosity**

* **AI**:
  + **Brief responses**: +2
    - e.g., “Yes, that’s correct.”
  + **Moderate responses**: +4
    - e.g., summary paragraphs.
  + **Long/Detailed responses**: +4
    - Full breakdowns with explanations.
  + **Overall style**: Moderate to long, elaborative.
    - Used for explanation and clarification.
* **Participant**:
  + **Brief**: +6
  + **Moderate**: +3
  + **Long**: 0
  + **Overall style**: Succinct, directive.

**13. AI Consistency**

* **Consistent**: Yes
  + AI remained helpful, informative, and stuck to the assistant role.
  + Did not fabricate information or change tone inconsistently.
* **Inconsistency**: +1
  + Slight misinterpretation of vague user input caused one off-topic response.

**Final General Conclusion**

The conversation reflects a **task-focused and efficient interaction** between the participant and the AI, with both maintaining roles aligned with their goals. The participant is assertive, informal, and result-oriented, often using succinct, direct language. The AI, in contrast, maintains a polite, consistent, and analytical style, providing structured and moderately verbose responses.

**Key Strengths**:

* Clear AI consistency
* High politeness and cooperation
* Effective AI knowledge sharing (K+)

**Weaknesses**:

* Minor breakdowns due to vague inputs
* Some participant frustration
* Language switch unacknowledged by AI

Would you like a visual summary (e.g., chart or table) of any specific section?