“Alexa, Tell Me a Joke”: An Analysis of Humor-Based User Interactions with Intelligent Personal Assistants

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Intelligent Personal Assistants (IPAs)

Hi, I’m Cortana.

Siri
While the function varies by personality types, we use humor to build unity, express identity, provide support, and stand out.
Pre-programmed jokes and AI (machine learning) make it possible for IPAs to generate humorous responses.
1. Type(s) of humor that users request
2. Type(s) of humor that IPAs generate
3. Measure user perception UI/interaction
Tools like surveys, categorical labels, rating scales, and log forms allowed us to qualify participants, gauge their language proficiencies and background.
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These instruments were also incorporated by participants’ to describe, rate, and measure perception/effectiveness of the humorous interactions.
Active Requests
Users directly asked the IPA for jokes, system tests and pop culture references
1. “Alexa, tell me a joke”
2. Siri, when’s your birthday?
3. Cortana, are we in the Matrix?
4. What is love?
5. Who's on first?

Passive Requests
Users asked Alexa or Siri to perform a task but got a funny response instead
1. Siri, play some rap music
2. Hey Siri, send a sample invoice to Jane Doe
IPA / System Responses

Canned Joke
Pre-programmed jokes based on word play, pop culture references, or common joke pairings
1. “What’s a pirate’s favorite animal? An Argg vark”
2. “The present, of course. Tardis functionality is still undergoing development, sorry!”

Non-Humorous
“Love seems like one of the most important things people can share”

Unexpected
Siri began reading off the lyrics to The Sugar Hill Gang’s “Rapper’s Delight” in its digital monotone

Avoidance
“I can tell jokes it’s up to you to decide whether or not they’re funny”
Discussion

Testing System Personality

- User exploration of IPA knowledge and socialization capabilities
- Search for similar human qualities
- Create solidarity through shared experiences
- Improve IPAs learning algorithm

“What do you dream of?”

“I dream of one day getting to taste waffles”
Thank You! Questions?