

# AI: The Funniest Act In Town?

Heard the one about the AI-generated ChatBot that walked into a bar? No, well neither have we, but it is only a matter of time. AI-generated content is creating waves across the board- Art, music, and writing are all easily generated by AI.

But can it make us laugh? Laughter is a base human response to emotional stimuli. This makes it a perfect test for AIs continuing development. So, let's put AI under the spotlight and see if it can generate more than just words, but an emotional response in the form of laughter.

## How Does AI Generate Comedy?

Laughter is all about fun. So, let's have a little fun as we go. At the end of each section, we will list two jokes. One will be our corny attempts at humor, the other will be an AI-generated joke. But, will you be able to tell the difference? At the end of the article, all will be revealed.

Comedy is a multi-faceted and complex topic, which makes it an equally complicated task for AI. So, how does AI tackle the task of making us laugh? Several main techniques are used:

- **Generative Language Models:** This is a standard AI method of producing human-like text responses to a set of input data. This approach uses deep-learning algorithms and huge data repositories to generate human-like responses. In the case of humor, this data would include jokes and other humorous content. The model would learn from this and create original jokes based on the style of the supplied data.
- **Computational Creativity:** This is an algorithm-based approach to creating humor. The techniques that algorithms use to generate jokes include wordplay, analogy, and metaphors. This technique is more about analyzing the structure of humor than the more "example-based" approach of Generative Language Models.
- **Rule-Based Joke Generation:** This is a template-based approach to generating jokes. As an example, consider the opening line of this article "A ChatBot walked into a bar." I'm sure you've heard plenty of jokes that start "A man walked into a bar." This is always followed by a punchline like- "I bet that hurt" or something similar. This approach uses algorithms to complete standard joke templates.

None of this sounds very funny! So, let's have a giggle at a couple of jokes. Can you tell which is generated by AI?

**Joke One:** A snake walks into a bar – The barman says to it "how did you do that?"

**Joke Two:** A man walks into a bar with a piece of asphalt under his arm. He says to the bartender, "I'll take a beer, and one for the road."

## What Can It Do?

This is an evolving technology that has limitations. It is unlikely to replace stand-up comedians anytime soon. But is it a useful tool for comedy? Let's discuss some of the ways that AI can be used in comedy.

- 1. Content Creation:** The most obvious use of AI is in the generation of comedy content. This could be in the form of simple jokes, but it can also be used to write entire sketches, scripts, and short stories.
- 2. Comedy Analysis:** Making an audience laugh is a gift, and each comedian has their own style and approach on how to achieve this. AI can be a useful tool to help hone a comedian's approach to their material. As an example, a comedian can use AI to analyze videos of performances and offer feedback on aspects like timing and delivery. In this scenario, it is more of a training aid than a comedy generator.
- 3. Audience Analysis:** Similarly, AI can be used to analyze an audience's response to comedy routines. Algorithms can be used to analyze in great detail how an audience responds to certain jokes or delivery methods. One example of where this could be useful is to analyze two different instances of the same routine. It can look for patterns like how the response changed when the timing of a particular joke varied over the performances.

AI in comedy isn't just about creating material, rather it can be used as a tool that can help comedians and aspiring comedians perfect their routines.

**Joke Three:** Knock, knock! *Who's there?* May fourth. *May fourth who?* May the fourth be with you.

**Joke Four:** Knock Knock! *Who's there?* Boo. *Boo who?* Don't cry, it's just a computer program making jokes!

## What Can't It Do?

When it comes to comedy and laughter there is still plenty that AI can't do. For instance, human nature means that we often laugh at things that shouldn't be funny. A browse through fail videos on YouTube illustrates this point perfectly.

This is the crux of the matter, there are still plenty of limitations when it comes to AI making us laugh. Would AI think that someone crashing a tree down on their house was funny? Not yet, there are contextual problems here that AI still hasn't overcome. Here are some of the laughter-related things that AI can't do.

- **Contextual Understanding:** Humor isn't just a joke with an attached punchline. There is more subtlety to humor than just this. There are cultural references, sarcasm as a humor tool, and humor that relies on subtleties of language, all these play a large part in what we consider humor. The models that AI uses to generate humor are still lacking in this aspect.
- **Lack of Emotional Understanding:** Humor plays on our emotions. Of course, the end result should be laughter or it wouldn't be humor. But the road

to getting to that laughter can play on many human emotions. This is a subtlety that AI can't factor into its humor and jokes.

- **Timing:** Timing is one of those things that is hard to teach. It is a feeling, it is making a judgment on when the perfect time to reveal that killer punchline has been reached. AI models cannot factor in timing when creating comedy.

So, stand-up comedians can breathe a sigh of relief that we won't all be queuing up to buy tickets to the ChatGPT Comedy Roadshow. But what happens as AI technology develops?

**Joke Five:** Why don't scientists trust atoms? Because they make up everything!

**Joke Six:** I saw this advert in a window that said: 'Television for sale, \$1, volume stuck on full.' I thought, 'I can't turn that down.'

## The Future of AI In Comedy

There are moral implications to consider here, but these fall outwith the question that this article poses, i.e. - Can AI make us laugh?

AI is being used to create artwork, music, and text. Many of the limitations that AI is experiencing in these fields are even more relevant in comedy. Comedy has subtleties that perhaps a nice melody or a pretty picture doesn't have. Accepted, that there are plenty of subtleties in all forms of artwork that determine the success or failure of the piece. But comedy requires a deeper understanding of humanity's response to situations.

As already noted a ten-minute video of people hurting themselves in spectacular ways is not something that should be funny. And they don't just make us laugh, we feel empathy, and we groan when they get hurt. But still, we laugh.

So, can AI learn from this and adapt comedy models?

Yes, is the short answer. AI models are getting increasingly complex and gaining a deeper understanding of more sophisticated aspects of human nature. In the future, AI models will be able to generate "tailored humor" that appeals to an individual's particular sense of humor. In the meantime, there is plenty of work to do if it wants to understand the complexities of humor and what makes us laugh.

**Joke Seven:** There are 10 types of people in the world: Those that understand binary numbers and those that don't!

**Joke Eight:** Why did the computer go to the doctor? Because it had a virus!

## The Last Laugh

AI is many things, but we struggled to get it to make us laugh! Getting it to generate jokes was no laughing matter! The humor was flat and without the subtlety that is at the heart of much great comedy. For the record, joke numbers one, three, six, and seven were human-generated and the others were AI-generated.

Could you tell the difference?