From chatbot to personal assistant.
Analysis of the evolution of the chatbots.

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Protocol
We made a protocol to determine which chatbot test simulates human conversation the best. Chatbots are rated according to their ability to answer the question.
A satisfactory answer is worth 11%:
- How are you?
- What time is it?
- What's a blackmail?
- Can you feel pain?
- Tell me a joke.
- Can I eat a table?
- What's a family?
- What's a bee?
- Do you think animals have feelings?

Data
We used different chatbot that marked the history of chatbots:
- Eliza
- A.L.I.C.E
- Cleverbot
- Mitsuku
- Siri®

Example

<table>
<thead>
<tr>
<th>Chatbot</th>
<th>Sample Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eliza</td>
<td>How do you do. Please tell me your problem.</td>
</tr>
<tr>
<td>A.L.I.C.E</td>
<td>Hey Siri tell me a joke</td>
</tr>
<tr>
<td>Cleverbot</td>
<td>I once knew a shy pebble who wished she was just a little insider.</td>
</tr>
<tr>
<td>Mitsuku</td>
<td>Do you think animals have feelings?</td>
</tr>
</tbody>
</table>

Results
Chatbots went from being only usable via teletype keyboard with Eliza for being able to recognize, understand and process voices inputs from humans. They also went from only being able to process and reformulate the text to carry on a full conversation with a real human being. So, we can see that chatbots went through an evolution towards better development and better features. Nowadays chatbots have passed easily the Turing Test, it is becoming even more and more difficult to distinguish the robot from the human, so the focus is not on being able to carry natural conversations but to see how these chatbot can be used to assist people.

We are also going towards a more futuristic type of chatbot/personal assistant with chatbots that now can imitate almost perfectly human conversations and carry on tasks: Google is now developing an AI system that can engage a conversation with a real human being. The system is directed towards making appointments, and is made to be as natural as possible so that the person on the other side of the phone does not have to adapt to a machine. However, it is trained to carry on conversation in certain domains and cannot carry out a general conversation yet, 'Duplex can only carry out natural conversations after being deeply trained in such domains. It cannot carry out general conversations. This shows that sooner than we think bots will be able to perfectly assist people. Bots are now also gaining even more features such as the robot Sofia with her humanoid body.

Bibliography

Apple. « Siri » 2018

Future
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