Bad Bots

How Conversational Agents Shake up the Communication Eco-System

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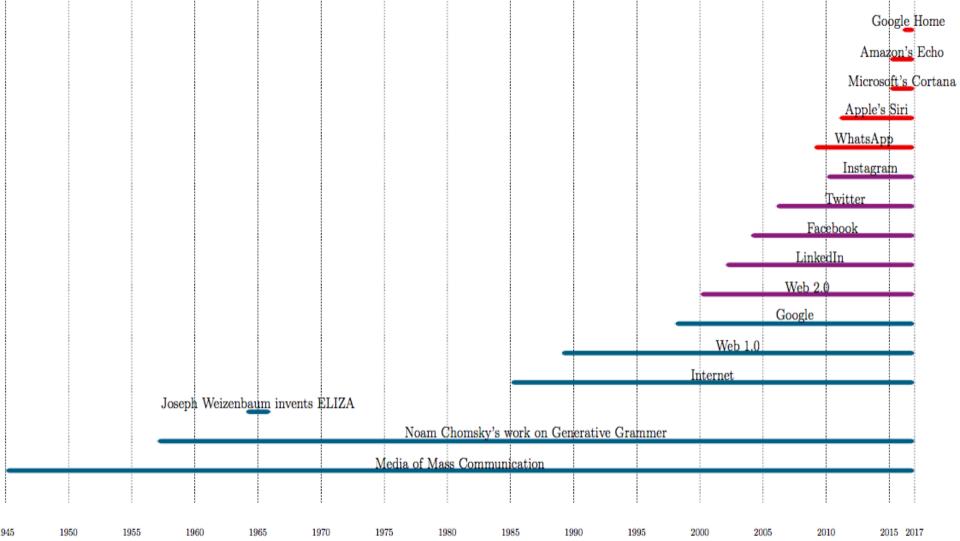
Terminology

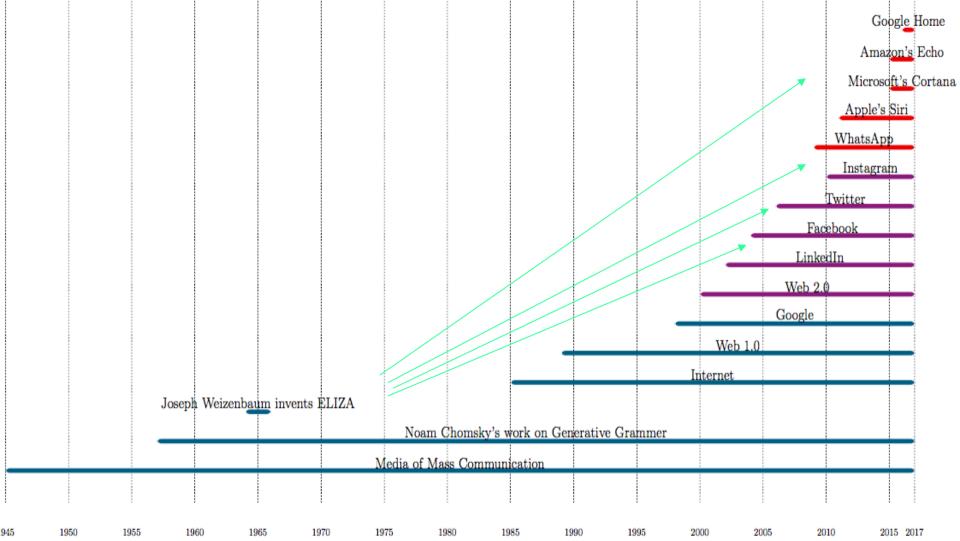
Chatbot → A computer system that engages into a dialogue with a human whilst being transparent about its identity

Social Bot \rightarrow A computer system operating on social media that sends out messages or (rarely) engages into a dialogue with a human whilst covering up its identity or source.

Virtual Assistant \rightarrow A software agent carrying out tasks or services for an individual. Popular Examples: Amazon's Alexa, Apple's Siri, Google Home, Microsoft's Cortana

The Return of the Chatbots







Bots – The next big Thing?

Since 2016 Bots are Back ...



According to the MIT Technology Review, conversational interfaces is one of the ten breakthrough technologies of 2016.



Uber's Chris Messina wrote an influential blog piece declaring 2016 the year of *conversational commerce*



March 2016, Microsoft CEO Satya Nadella announced that chatbots were the next big thing, on a par with the graphical user interface or the web browser



April 2016, Facebook's Mark Zuckerberg proclaimed that chatbots were the solution to the problem of app overload

What makes Bots so Appealing?



Back to a natural form of interaction



Enormous growth in messaging apps



Conversational technologies are not limited to traditional computers

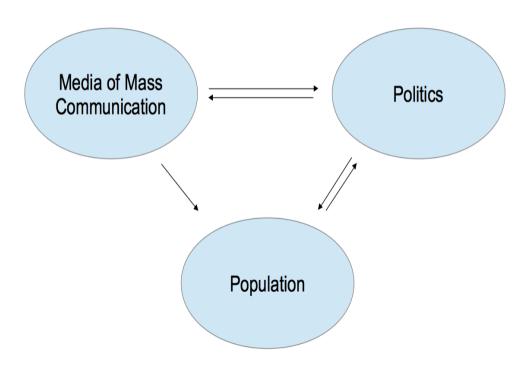


Conversational technologies are fueled by interaction data & conversational Al

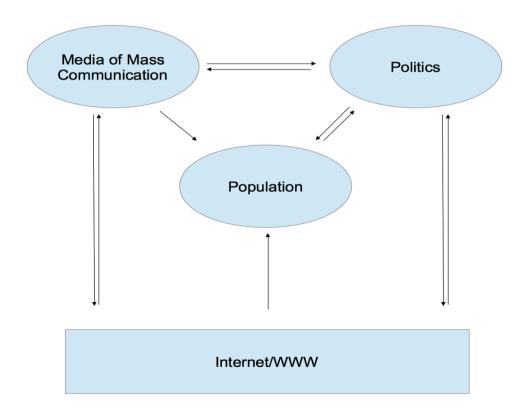


Bots A big thing only for Computers for the Communication Eco-System as a Whole?

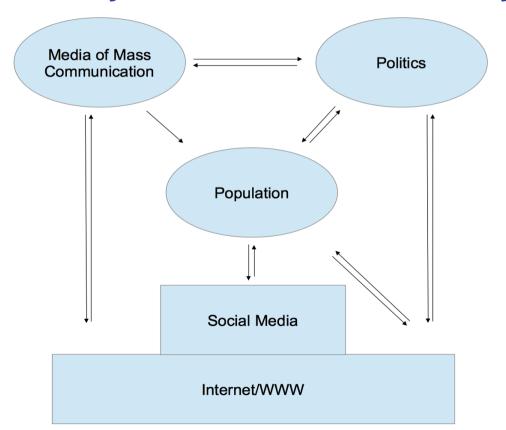
1945 to ~1985



~1985 to ~2000



~2000 to today -> communication eco system



Repercussions of Bad Bots in Politics

Between the first two presidential debates, a third of pro-Trump Tweets and nearly a fifth of pro-Clinton Tweets came from automated accounts.

Social bots in politics have prompted discussions across the communication eco system. They were actually designed to achieve just this.

Bot Technology is not only used to produce fake news but also to generate news. An example is the journobot *Heliograf* deployed by the Washington Post.

Social bots in politics have stimulated the development of so-called government bots to be used by citizens when dealing with authorities.

Repercussions of Bots in Business



According to Business Insider, by the year 2020 it is projected that 85% of customer interactions will happen without need of a human.



Uber uses apps and bots



Bots are increasing deployed in help-desk settings.



All major automotive companies have partnered with Google, Apple, Amazon or Microsoft to use their digital assistants in the car. E.g., Mercedes-Benz cars will be connected to Google Home and Amazon Alexa

Thank you!

URLs

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