**Friday Podcasts**

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**Episode Title:** “One: Wonderland” **Podcast:** *Rabbit Hole* **Date:** April 16, 2020

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| **Headings** (after)  Example of YouTube’s influence   * Reliance on YouTube * History of YouTube’s recommendation AI * Consequences of YouTube Recommendation AI * Attempt to fix filter bubbles. * Summary of YouTube Recommendation algorithm | **Notes** (during)  [For the first 15 min of the episode, you don’t need to take many notes.]  A guy says that he was radicalized through YouTube videos and spent years becoming progressively more extreme in his politics.  After a shooting in New Zealand, there was a lot of talk about online radicalization (the shooter had spent a lot of time in far-right internet communities).  A guy names Caleb says that though he didn’t feel like he fit in in high school, he felt at home in YouTube.   * YouTube influenced his political opinions and his perceptions on religion. * Caleb ended up withdrawing from the world a bit (spending a lot of time on YouTube).   Caleb ended up watching a lot of self-help videos.   * Becomes absorbed/jealous of Stefan Molyneux and Joe Rogan. * Stefan’s videos bring him a source of stability.   Caleb becomes absorbed into YouTube, spending most, if not all, of his free time there.  Caleb refers to his watching YouTube during this period of his life as a sensation of falling.  ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  Guillaume Chaslot: worked on the AI of YouTube which controlled the recommendations sidebar.  At first, YouTube’s algorithm prioritized clicks (the more clicks a video got, the more popular it was).  After realizing that this could led to clickbait videos, the algorithm was changed to prioritize total watch time.  YouTube’s executives wanted to maximize watch time at all cost to make YouTube grow as big as possible.  ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  This switch has radical consequences.   * Though initially the creators of YouTube’s AI weren’t concerned about the possible consequences of using watch time as a metric to gauge success, they eventually found that it creates filter bubbles. * Ex: if you watch one cat video, YouTube’s algorithm keeps giving you more and more cat videos. * The creators were afraid that it would waste human potential.   The algorithm would only show one side of a conflict, such as a riot, depending on which viewpoint you clicked on (it wouldn’t show the other viewpoint). You only had one perspective.  ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  To fix these filter bubbles, Guillaume created an algorithm with another engineer that did the exact opposite (it got out of filter bubbles).   * His manager told him to spend less time on these side projects (YouTube wanted to maximize views). * Guillaume got fired after he started working so much on his side projects that he spent less time on his main ones.   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  Though YouTube’s algorithm is good at finding videos you want to watch, it can influence you into a trap of having only one perspective of an issue.   * People start relying on YouTube for the “truth”, which leads them to get influenced by whatever videos the algorithm gives them (once they click one video, they keep getting more and more videos on the same topic until it seems that the topic must be true). | **Academic vocabulary…**  Radicalized  Progressively  Mainstream  Integrity  Scandalous  Subversive  Disillusionment  Stagnant  Fundamental  Sensation  Distinguishes  Ultimately  Consuming  Implemented  Prototype  Polarization  Captivated  Initiate |
| **Technical terminology…**  Algorithm  AI  Machine Learning  Filter bubbles  Recommendation Engine  YouTube  Internet  Google  Guillaume Chaslot |

Unanswered Questions / Research Questions

* Identify unanswered questions and/or generate research questions based on this podcast. 5-10 questions total.
* Why didn’t YouTube change their algorithm to where it shows both sides of an issue (can they keep their high watch times)?
* Does YouTube have a bigger influence on people’s opinions/perspectives than other media platforms. If so, why?
* Is there a way to avoid becoming “trapped” in YouTube’s algorithm?
* What are some potential solutions (other than the ones Guillaume and his partner created) to fix the issue of filter bubbles?
* Are there any other media platforms that have algorithms that have effects like YouTube’s algorithm?

Preliminary Research

* Since you didn’t have to take many notes on this podcast episode, you’re going to spend more time doing research on search and/or recommendation algorithms. To do this, choose a platform that interests you. You can choose YouTube, or any of the platforms listed below, or you can research a platform/app/website you use regularly and want to learn more about. Take the time to identify 3 quality sources. You’ll like locate and skim a lot of sources; choose 3 that are worth reading/skimming.
* Some platforms that use search and/or recommendation algorithms:
  1. YouTube
  2. Netflix
  3. Amazon Prime
  4. Spotify
  5. Disney+
  6. HBO Max (they have been experimenting with “human curated recommendations”)
  7. Hulu (turned to algorithms during their redesign in late 2020; uses algorithms for search and general recommendations but human curation for “trending areas”)
  8. Your choice.
* Below, you should…

1. identify your chosen platform
2. list your search terms
3. provide links to 3 quality sources that speak to this question
4. write a brief (3-5 sentences) summary of what you learned from ONE of those sources.

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| **Platform:** | Netflix |

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| **Search Terms:** | **Links to 3 Quality Sources:** | **Info learned from these sources. 250-350 words. Bullet points are fine.** |
| * Netflix * Recommendation Algorithm * AI * Content * Machine Learning | [Behind The Scenes of The Netflix Recommendation Algorithm (invisibly.com)](https://www.invisibly.com/learn-blog/netflix-recommendation-algorithm/) | Netflix has a recommending algorithm, called Netflix Recommendation Algorithm (or NRE for short), that analyzes user preferences to tailor the recommendations to their liking (with an 80% success rate). Netflix believes that their algorithm saves them from losing $1 billion or more each year due to subscribers quitting. Netflix’s algorithm uses a user’s preferences to suggest videos that are similar, with the recommendations changing often as a viewer’s taste changes. Netflix shows recommendation clusters based on the user’s preferences. Each cluster has a name (a category of sort), a number of titles, and a specific order in which the titles are displayed. For example, Netflix places the titles it believes that the user would like to watch the most at the front and pushes everything else to the end. To accomplish this, Netflix collects data from users, such as how long you watch a video and your viewing history, along with more specific metrics such as screen shots when a show is paused. Netflix also uses this data to make its own content (“Netflix Originals”) more tailored to its audiences, leading to them having a higher success rate than T.V. shows made for the air. The risk, however, is when Netflix becomes too aggressive in its personalization of content, shown in how Netflix may be using different thumbnails and trailers to try to get people of specific races to watch the show (even though Netflix denies doing this. Though most people do want personalization in finding something too watch, it can become frustrating when Netflix goes too far and tries to change content to make it look like it fits your preferences. |
| [Deep Dive into Netflix’s Recommender System | by David Chong | Towards Data Science](https://towardsdatascience.com/deep-dive-into-netflixs-recommender-system-341806ae3b48) |
| [Netflix Recommendations: How Netflix Uses AI, Data Science, And ML | Simplilearn](https://www.simplilearn.com/how-netflix-uses-ai-data-science-and-ml-article) |