ETHICAL DATA SCIENCE

MASTER ON FUNDAMENTALS OF DATA SCIENCE UNIVERSITAT DE BARCELONA

Assignment 1 Essay on Ethical problems with recommender systems

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1 Essay on "Ethical problems with recommender systems"

Link of the podcast in YouTube

It amazes me the amount of connections that can be inferred between theories and ideas of philosophers of the 18th century and today's ethical questions that a recommender system may imply.

Hume said that humans have two different perceptions: impressions and ideas. Impressions are our immediate sensations of the reality and ideas are "what we remember" from that impression. Therefore, he said that the perception of the self is in reality a long chain of impressions which have never been experienced simultaneously.

That totally relates with the paradigm discussed in the podcast of thinking that the self is a collection of versions of you over time (minute 22:11), and that every action that we took defined more or less our self of the future. In the sense of the recommenders, that would mean that our experience with platforms that use recommender features (Twitter, Netflix, YouTube, etc.) model our self and the way we think or act.

I do not 100% agree with this consequentialist approach similar to Kant philosophy. I rather take again the Hume vision on cause-effects phenomenons. This vision can be explained with an example: if a white billiard ball hits another black ball, what will happen? Probably, that the black ball will start rolling. Why? Because of the impact of the white one, right? Therefore, we will say the the impact of the white ball is the cause of the black ball rolling.

But Hume would also say that the only thing we experimented is the black ball rolling, not that the cause of why it starts rolling. We've seen that this phenomenon happens after another phenomenon, but not that the second one happens $because \ of$ the first one.

In consequence, my opinion is that yes, recommender systems can infer in our way of thinking or acting, but we cannot be sure that the cause of our beliefs or "way to be" are only the use of Netflix, YouTube, Twitter or Facebook.

This is related with "how do we rate the goodness of a recommendation" or how do we measure the impact of this cause-effect phenomenons on recommender systems. My choice here is the deontological approach discussed also in the podcast: I think a recommender system should be built looking in the quality of the recommendations and not on the consequence of making the recommendation.

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If we can be sure that the quality of the content in our platform is recommender-worthy, the effect of the recommendation should not be considered as "influential" or rather just "bad". I do not look measure how good was that recommendation I just prefer to assume that "if this recommendation is a good one, the effect of this one will be good".

The issue here is also how do we assure the quality of any recommendation that our system may suggest. We can discuss multiple approaches in multiple levels of abstraction, but, in my point of view, this issue depends heavily with the type of content and therefore the type of platform where the recommender is built.

It's not the same a recommender system for products in a supermarket website than a recommender algorithm for a video-streaming platform like TikTok. The quality of the recommendations of the first one is easier to control rather than the second one, where millions of users are free to upload large amounts of content of any type at any time.