

Appendix:

Table 1: Variations in recommendations: query comparison (avRBD: average Rank-Biased Distance and unique channels and videos for the top-10 most recommended videos and channels each day, calculated for each step). We accounted for lists of different length by using the minimum calculation of similarity (RBD_{min} from Webber et al., 2010). The table reflects the data included in our Rank Flows.

Keyword	Variable	Step 1	Step 2	Step 3
Coronavirus	Unique channels	79	82	88
	Unique videos	281	335	324
	avRBD channels	0.87	0.77	0.75
	avRBD videos	0.98	0.96	0.94
Feminism	Unique channels	126	217	195
	Unique videos	143	284	299
	avRBD channels	0.93	0.90	0.85
	avRBD videos	0.97	0.96	0.96
Beauty	Unique channels	70	225	213
	Unique videos	85	284	258
	avRBD channels	0.92	0.83	0.82
	avRBD videos	0.98	0.94	0.91

Notes: We collected the top 10 channels and videos recommended more than once on each day during the period of study (i.e. over 47 days). This means that for each query, we collected up to 470 channels and videos at each step. Table 1 indicates the number of *unique* channels and videos identified at each step, since the same channels and videos could feature in the ‘top 10’ recommendations across multiple days. For example, for ‘coronavirus’ at step 1, we collected the top 10 channels recommended more than once on each day (i.e., up to 470 channels overall), and of these, we identified 79 unique channels. To quantify change over time and down the recommendation chains we used Rank-Biased Distance (RBD) (Webber et al., 2010), a metric that reflects differences in the items present in two lists and any changes

in their rankings. We calculated the average RBD with the RankFlow Tool for each of the six flow diagrams we generated per query, which enabled comparisons across issues and steps in the recommendation chain. The average RBD helped us determine whether there were recurrent 'winners' (videos and channels) being recommended down the chain and over time (Rank flow morphologies with low variance) in relation to each issue, or whether the 'winners' at each step and over time were changing (Rank flow morphologies with high variance).