Appendix

This document is accompanying the submission *Linking User Opinion Dynamics and Online Discussions*. The information in this document complements the submission, and it is presented here for completeness reasons. It is not required for understanding the main paper, nor for reproducing the results.
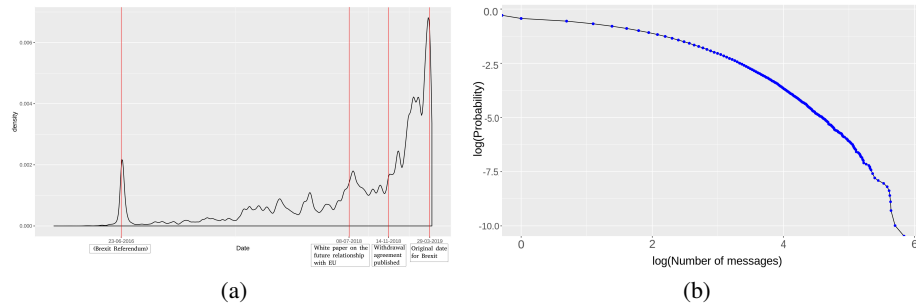
A Posting analysis and dataset profiling

Fig. 1: **(a)** Time distribution of the submissions collected from Reddit (subreddit brexit), between November, 2015 and April, 2019. **(b)** Complementary Cumulative Distribution Function of the number of messages sent by each user.

As far as the statistical structure of the submitted messages is concerned, the very vast majority of them are comments as opposed to initial thread starting messages, representing respectively 91 % and 9 % of the entries. Moreover, 20% of all the unique authors are **only** thread initiators. This means they only send a single message, starting a discussion thread, in which they never post again. On the other hand, 19% of the authors, are both thread starters and commenters, meaning that they start threads and take part actively in the discussions, posting answers in their own started thread or getting involved in other discussions. The majority of the unique users (61 %) are **only** commenters, meaning that they never start discussions, but usually engage in them.

Figure 1b presents the Complementary Cumulative Distribution Function of the number of messages per user (in log log scale). It shows that a very large number of users send only a few messages, whereas there are a few users sending many messages in the observed interval. These users can either be opinion formers or simply paid social bots. One of the tricky tasks of this work was to identify the bots and remove them, as they do not bring new information, but most of the time reshare news and posts.

Table 1: Events and time periods used for splitting the Reddit dataset.

Int.	Start date	Posts	Users	Important events in the Brexit chronology
T1	2015-11-16	3367	1268	**23 June 2016** The UK holds a referendum on whether to leave the European Union (EU). 51.9% of voters vote to leave. **24 June 2016** David Cameron announces his resignation as Prime Minister.
T2	2016-06-25	6265	1623	**13 July 2016** Theresa May accepts the Queen's invitation to form a government
T3	2016-07-14	3084	810	**27 July 2016** The European Commission nominates French politician Michel Barnier as European Chief Negotiator for the United Kingdom Exiting the European Union. **7 December 2016** The UK House of Commons votes 461 to 89 in favour of May's plan to trigger Article 50 by the end of March 2017
T4	2016-12-08	1466	320	**24 January 2017** UK Supreme Court rules that Parl. must pass legislation to authorize the trigger of Art. 50. **26 January 2017** The UK Gov. introduces a 137-word bill in Parl. to empower May to initiate Brexit by triggering Art 50.
T5	2017-01-27	2300	431	**16 March 2017** The bill receives Royal Assent. **29 March 2017** A letter from May is handed to President of the European Council Donald Tusk to invoke Article 50, starting a two year process with the UK due to leave the EU on 29 March 2019.
T6	2017-03-30	4102	557	**19 June 2017** Brexit negotiations commence.
T7	2017-06-20	54505	2339	**6 July 2018** A UK White paper on The future relationship between the United Kingdom and the European Union is finalized. **8 July 2018** Davis resigns as Secretary of State for Exiting the EU. Dominic Raab is appointed as his successor the following day.
T8	2018-07-09	23067	1479	**21 September 2018** EU rejects the UK white paper.
T9	2018-09-22	15385	1480	**14 November 2018** Brexit withdrawal agreement published. **15 November 2018** Raab resigns as Secretary of State for Exiting the EU. Stephen Barclay is appointed as his successor the following day.
T10	2018-11-16	3718	732	**25 November 2018** Other 27 EU Member States endorse the Withdrawal Agreement.
T11	2018-11-26	25468	2485	**15 January 2019** First meaningful vote held on the Withdrawal Agreement in the UK House of Commons. The UK Gov. is defeated by 432 votes to 202
T12	2019-01-16	54850	4489	**12 March 2019** Second meaningful vote on the Withdrawal Agreement with the UK Government defeated again by 391 votes to 242. **14 March 2019** UK Gov. motion passes 412 to 202 to extend the Article 50 period.
T13	2019-03-15	9119	1836	**20 March 2019** May requests the EU extend the Article 50 period until 30 June 2019. **21 March 2019** The European Council offers to extend the Article 50 period until 22 May 2019 if the Withdrawal Agreement is passed by 29 March 2019 but, if it does not, then the UK has until 12 April 2019 to indicate a way forward. The extension is formally agreed the following day.
T14	2019-03-22	13414	2444	**29 March 2019** The original end of the Article 50 period and the original planned date for Brexit. Third vote on the Withdrawal Agreement after being separated from the Political Declaration. UK Government defeated again by 344 votes to 286.
T15	2019-03-30	9509	1840	**5 April 2019** May requests for a second time that the EU extend the Article 50 period until 30 June 2019.
	2019-04-05			*–dataset end–*