



Investigation of Online Argumentation in Social Media Context

How are arguments fought out in cyberspace?

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Problem Statement

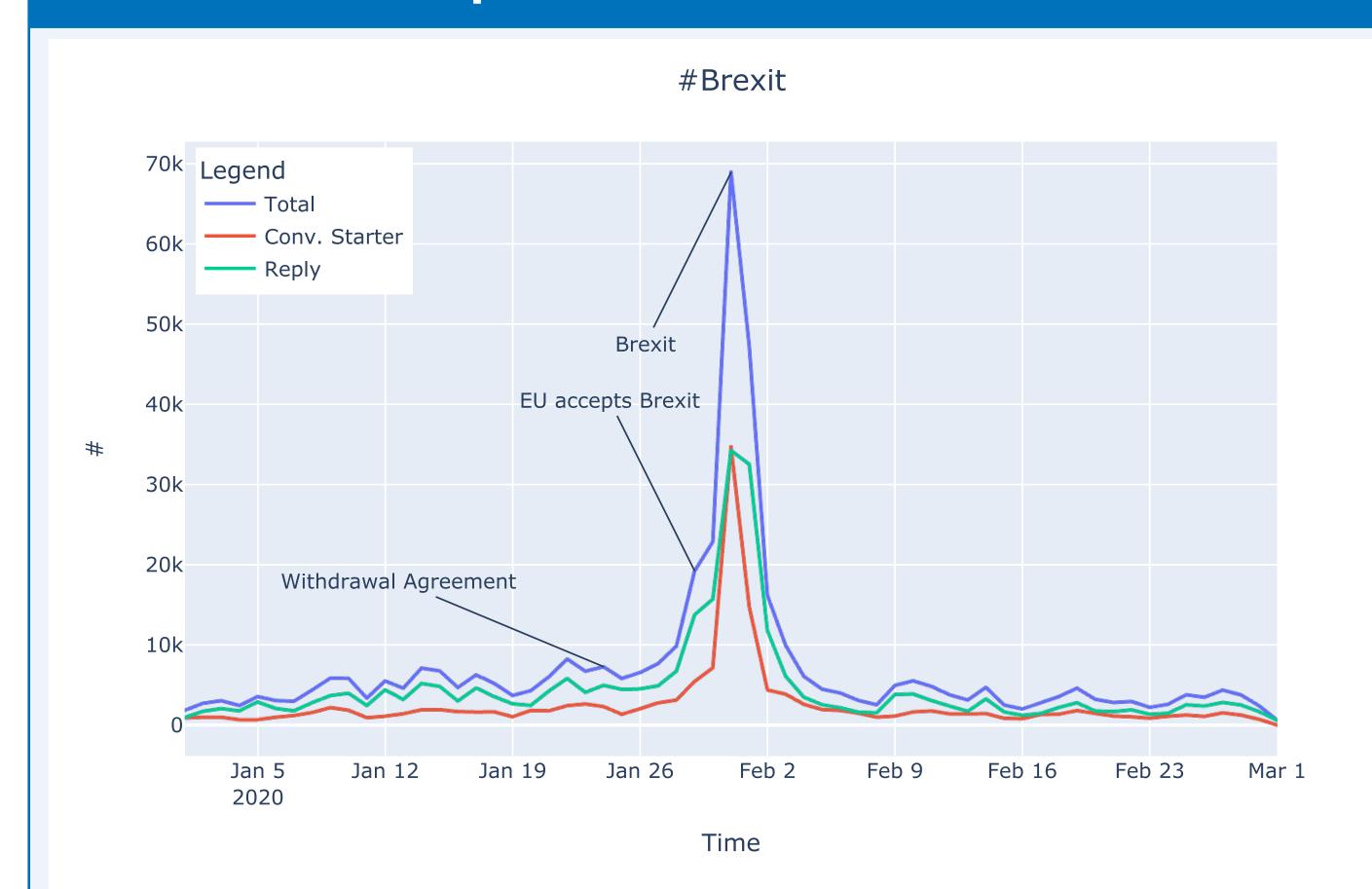
Everyday life is constantly being transferred to the digital space, meaning it is hardly surprising for everyday problems, such as opposing opinions, to arise also in Social Media.

In particular, platforms such as Twitter are the focus of an increasingly growing user base and personal information acquisition.

While such platforms are becoming increasingly popular and are sometimes used as forums for private and political disputes, the question immediately arises to what extent **Twitter** really fosters public debate in the form of argumentation.

Therefore, in combination with argumentation theory and methods of artificial intelligence, conversations taking place on **Twitter** will be examined with regard to their argumentative quality in order to reduce these to their underlying argumentation.

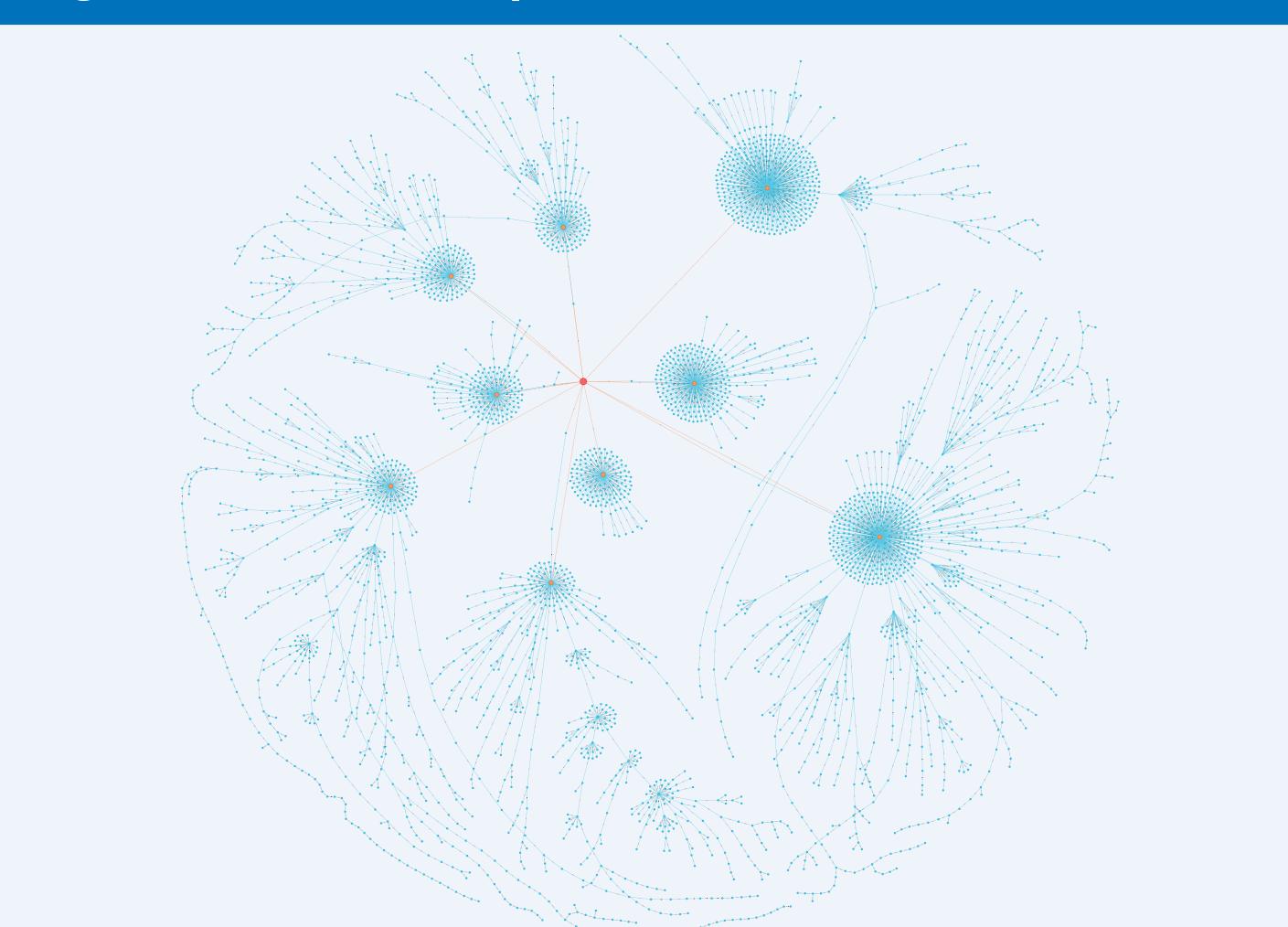
Twitter – Online platform for conversation



Twitter enables the reconstruction of entire conversations via their API v2 for research.

Mining entire conversations and the freedom to extract them in their original form enables detailed investigation of topic-related hashtags such as #Brexit in terms of temporal and historical events, content, and interconnectedness.

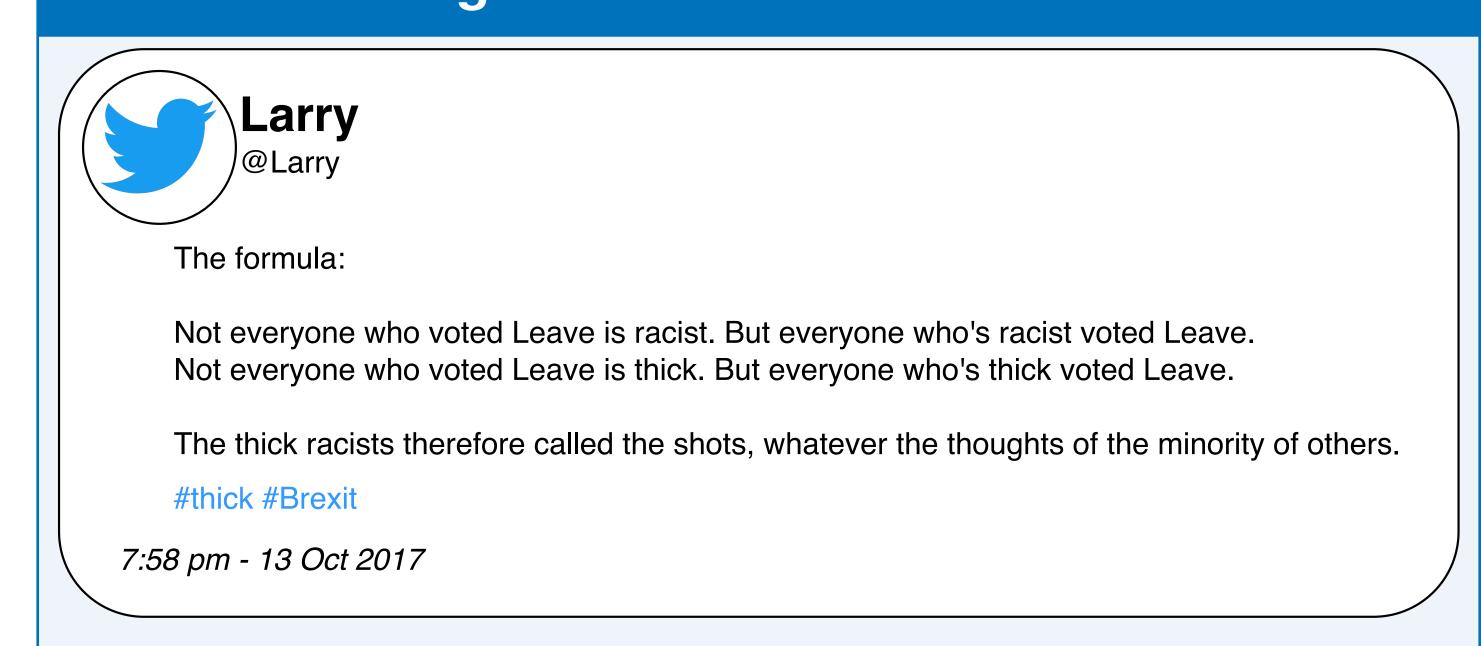
Argumentation – A special conversation



In terms of content, entire conversations are mapped and managed as networks of tweets using **Neo4J**.

This allows conversations to be viewed globally and analyzed in terms of structure.

Tweets – As Arguments



We aim to find those tweets whose content serves the function of an argument without being subjected to a right or wrong classification.

Problematic are those tweets that do not have obvious markers such as **but**, **not**, **whatever** or **therefore**, showing a high degree of subjectivity or formulated as a reaction to other tweets being context-dependent.

Argument Model – Toulmin Data/Information Inference What do I need to know? What should I take away? Inference suggests a conclusion, Data/Information adds information. it encourages, it seeks conviction without evaluation of its "correctness" or in general data, which is related from the reader, it can be controversial either to the Inference or to the and does not have to be necessarily substance of the subject. classified into "right" or "wrong". Data/Information Inference Everyone who's racist voted Leave Thick racists called the shots Everyone who's thick voted Leave #thick #Brexit Inference Rule **Exceptions Difficulty** <Moral Standard, Intuition, Convention> Not everyone who voted Leave is racist Not everyone who voted Leave is thick How do you get there? Exclusion is regressive The Difficulty asks how well the scheme can be applied according to the appearance of the Tweet itself and **Support** how apparent the argument or the <Experience Value, Result, Evidence> individual parts become through these properties. Minority thoughts of others not heard Leaving is excluding Racism is excluding Brexit result was Leave

Nice to meet you! marc.feger@hhu.de