RATIONAL-CRITICAL USER DISCUSSIONS

How Argument Strength and Platform Features are Linked to (Reasoned) Disagreement

Hanna Marzinkowski & Ines Engelmann

WHY DELIBERATE?

According to the deliberative theory of democracy, **rational-critical discussions**, i.e. the exchange, reflection and critical discussion of reasonable arguments, are a fundamental prerequisite for the legitimacy of political decisions (Mutz, 2006). Expected effects are a broad knowledge of the presented arguments and mutual understanding (Graham, 2015).

User comment sections on news websites can provide the framework for rational-critical discussions. Encountering opposing opinions is very likely due to anonymity and lack of preference-based filtering. Previous research has found that arguments and disagreement vary depending on the context (Graham, 2015). The decision to engage in a critical-rational exchange of arguments also depends on other users' comments. So far, we don't know which characteristics are decisive.

Which user comments promote rational-critical discussions?

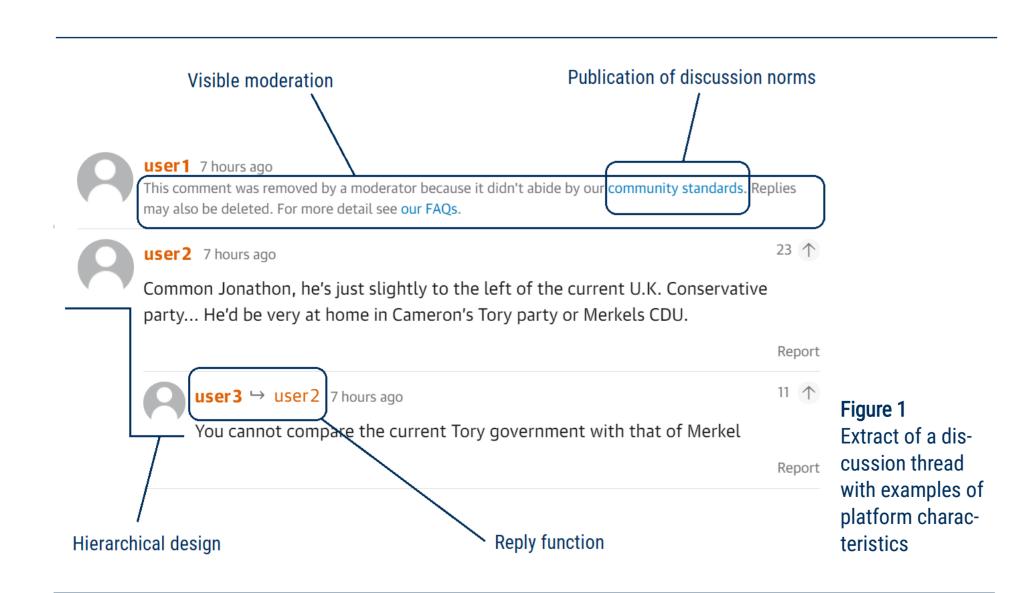
THEORY

If users perceive opinions or facts that conflict with existing beliefs, they have a feeling of cognitive dissonance. If these opinions or facts are considered relevant, a **need for dissonance reduction** comes into effect (Festinger, 1957). Relevance can be attributed to potentially convincing comments and a higher assumed reach. Dissonance reduction can be achieved by expressing **disagreement**, in order to prevent that these comments are left uncontested and influence others (Lu, 2019), and **justifying the disagreement** in order to convince others.

H1: The stronger the argument of a comment, the more likely it receives disagreement and reasoned disagreement.

News sites set the ground for user discussions by **enforcing norms** and setting the **technical design**. In their discussion **guidelines**, news sites publish the criteria for accepted comments (Ksiazek, 2015). Violations of these rules can be a motive for removing comments, which can be taken out in a **visible** manner (Yeo et al., 2019). Design factors that promote rational-critical discussions are a **reply function** (Peacock et al., 2019) and a **hierarchical view** (Aragón et al., 2017). When users read a dissonant comment and have to decide whether to write a disagreeing reply, the social norms and technical features can influence this decision.

H2: Norms and design features promoting rational-critical discourse increase the effect between argument strength and (reasoned) disagreement.



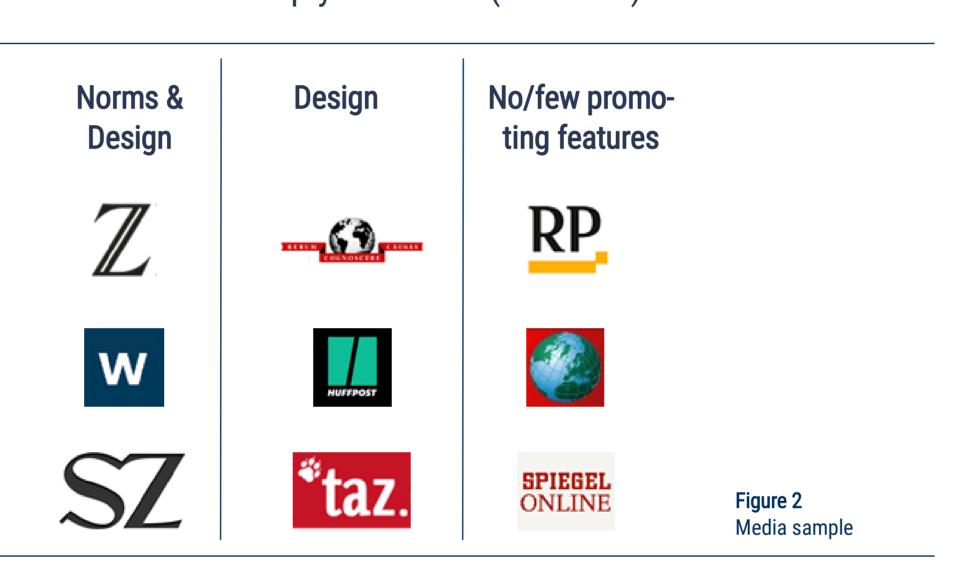
METHODS

We conducted a manual relational content analysis of 175 discussion threads with 14.690 user comments. For the analysis, we chose two controversial issues:

- Upper limit on refugees (November 2015 –November 2016)
- Pension reform (November 2016 –September 2017)

Categories:

- Argument strength (no justification / subjective / objectively verifiable justification, $K-\alpha=.92$)
- Reply direction (disagreement / agreement / other, $K-\alpha = .77$)
- ID of initial and reply comment (K- α = .93)



RESULTS

Subjective (OR = 1.44; SE = .08; p < .001) and objectively verifiable justifications (OR = 1.83; SE = .08; p < .001) increase the probability of eliciting disagreement.

Similarly, subjective (OR = 1.54; SE = .09; p < .001) and objectively verifiable justifications (OR = 2.02; SE = .09; p < .001) lead to a higher probability of receiving reasoned disagreement. In both cases, the probability is higher for objectively verifiable justifications. **H1 can thus be confirmed.**

We could not find any interaction effects between the types of argument strength and the medium types. Thus, H2 has to be rejected.

However, the main effects of the two medium groups were significant in the model for disagreement (Norms & Design: OR = 2.47; SE = .07; p < .001; Design: OR = 2.47; SE = .07; p < .001) and for reasoned disagreement (Norms & Design: OR = 1.75; SE = .08; p < .001; Design: OR = 1.36; SE = .07; p < .01). In both models, the Norms & Design group show the highest probability. We can thus conclude that the overall levels of (reasoned) disagreement increase with the level of platform characteristics that promote rational-critical discussion.

	DV: Disagreement		DV: Reasoned disagreement	
	Exp(B)	SE	Exp(B)	SE
Verifiable justification	1.83***	.08	2.02***	.09
Subjective justification	1.44***	.08	1.54***	.09
Norms & Design	2.47***	.07	1.75***	.08
Design	2.07***	.10	1.36**	.12
Verifiable justification * Norms & Design	.88	.10	1.09	.11
Non-verifiable justification * Norms & Design	.96	.11	1.14	.12
Verifiable justification * Design	1.00	.15	1.35	.17
Non-verifiable justification * Design	.98	.11	1.20	.18
χ^2	1563.70***		1109.737***	
Nagelkerke R ²	.15		.12	
Logistic Regressions. N = 14471. ***p<.001; **p<.01. Controlled for: issue, position, civility, negative emotion.				

Table 1
Logistic regression mo
dels for explaining the
likelihood of receiving
(justified) disagreement

DISCUSSION

We conclude that a higher argument strength of a dissonant comment is perceived as more relevant and potentially influential and thus evokes the need to argue against. Concerning the news sites, we assume that their norms and design do not have an effect in specific situations, but influence user discussions in the long term. Over time, users learn which rules are enforced and how to use the provided technical features.

While previous research found that discussions often do not live up to the deliberative ideal, our results show how individual comments can stimulate others to participate in critical-rational discourse through stronger arguments. News sites can help creating communities where critical-rational discourse is practiced. Setting up a technical infrastructure which promotes replies and makes sequences of arguments visible is already helpful, however, strong guidelines and visible moderation can further increase this effect.

LITERATURE

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