Trust-oriented argumentation in rhetorical sub-arenas: from corporate communication to online stakeholder discussions. The "The Facts About Facebook" case.

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Abstract. This paper lays the foundations for a research project aimed at analysing trust-oriented argumentation in crisis communication in online contexts. While the argumentative dimension of trust-oriented strategies is fundamentally neglected in existing crisis management and communication research, the analysis of the argumentative configuration underlying trust-related standpoints is left unexplored also in argumentation studies. We propose a systematic methodology for the reconstruction of the argumentative and rhetorical features in polylogues featuring trust-repair messages and their reception in digital media rhetorical sub-arenas through a multilevel annotation. We showcase our procedure taking as as a case in point the "The Facts about Facebook" article published by Mark Zuckerberg along with newspaper articles and forum posts commenting on it. Besides uncovering the reasoning and rhetorical strategies used by Facebook CEO, we show what arguments are perceived as controversial by the public. We plan to empirically validate our methodology through larger annotation projects with the final aim to scale up our analysis through the use of argument mining technologies.

Keywords: trust \cdot persuasion \cdot digital media \cdot crisis communication \cdot argumentative reconstruction.

1 Introduction

Social media companies, such as Facebook, have in recent times been exposed to severe public criticisms in which their trustworthiness is explicitly questioned. According to 2018 Edelman's Trust Barometer, ³ only one quarter of the population in the UK affirms to trust social media platforms as a source for news and information. To mention some illustrious cases, *Facebook* and *Google* have seen a 11 percent drop in credibility. As an attempt to counter this progressive erosion of trust, corporate CEOs have issued several apologetic argumentative speeches

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in which trustworthiness features as the main standpoint. As companies publicly disclose their apologetic discourse to persuade different stakeholders (e.g. customers, investors, employees, media), a conversational context is generated in which their trust-oriented argumentation is critically discussed (i.e. supported, replicated, questioned, refuted, etc.) by such stakeholders. Crisis communication scholars [3] refer to this conversational context as *rhetorical arena*, in turn made of sub-arenas [2], which are social/digital media-based spaces where a more restricted public (e.g. the readers of a blog) discuss a crisis event and the trust issues entailed by it. In this paper, we lay the foundation for a larger research project in which the trust-oriented discourse generated in crisis-related rhetorical (sub-)arenas is investigated from an argumentative point of view. Our research is innovative and relevant from several disciplinary perspectives: (a) From an argumentation theory viewpoint, the relation between argumentation and trust has been predominantly tackled by considering trust as a premise in ethotic arguments (arguments from authority) for epistemic or practical standpoints. The uses of argument to build inferences for trust-related standpoints remain instead largely unexplored; (b) We contribute to existing crisis management and communication studies in trust-repair processes. While within this huge body of literature the importance of persuasive/rhetorical strategies has been emphasized. the argumentative nature of such strategies has been fundamentally neglected and, consequently, the role of argumentation for trust-repair remains unexplored; (c) We extend the recently developed rhetorical arena theory both conceptually, by conceiving it as an argumentative polylogue, and methodologically, as we suggest to analyse publics' reactions occurring in rhetorical sub-arenas not only as stance or tone (e.g. supportive/opposite/neutral) but also and foremost as argumentatively-relevant moves. To this purpose, we are designing a project aimed at building a macroscope capable to show not only what arguments for trust are proposed by social media companies, but also which ones are perceived as relevant and/or controversial by the public opinion active on a variety of online sub-arenas. To lay the methodological foundations of such a project, we zoom on the Facebook case, focusing on data-sharing matters. We collect those CEOs' reports which have achieved most visibility on social fora, newspaper articles commenting on them as well as forum posts. We provide an argumentative analysis through a multi-layer inter-textual annotation encompassing argumentation structure, argument schemes and heteroglossic strategies. Since this is still work in progress, we manually showcase our analysis on a subset of the data. We, then, intend to engage a larger group of annotators and state of the art argumentation mining techniques to scale up our analysis.

2 Case Study

We have considered the public debate about data sharing with advertising companies focusing on Facebook as a case in point.

2.1 Data Collection and Tools

As a starting point for our analysis, we have chosen the *Wall Street* journal article The Facts about Facebook by Mark Zuckerberg for two main reasons. First, the 1,000 words article, dated 24th January 2019, comes as an apologetic epilogue after a sequel of scandals (among which Cambridge Analytica, the Soros Conspiracy, the MyanMar Genocide), thus constituting a privileged viewpoint for the study of trust-repair strategies. Second, the article marks a turning point in Zuckerberg's communication strategy since it constitutes his first attempt of defending Facebook's business model in print, choosing stakeholders policy makers as well as institutional investors as privileged audience. Despite the formal initial choice of the WSJ, Zuckerberg has then reposted the column on his personal Facebook page, reiterating his usual communication practice and opening up the discussion to the digital media rhetorical arena. In order to collect a relevant sample of data to investigate the public sphere reactions, we have looked up the most controversial threads (those containing a high number of comments) appearing on *Reddit*, using as a keyword the article' title "The facts about Facebook". It turned out that the two out of the three most controversial threads were on top of two newspaper articles commenting on the original article, namely The facts about Facebook Zuckerberg wants to redefine "transparency, choice and control" -let's not give him consent on https://techcrunch.com and Mark Zuckerberg Thinks You Don't Trust Facebook Because You Don't 'Understand' It on https://gizmodo.com. As a result of our sample collection, two sub-arenas are defined: a sub-arena featuring investors as a public and one featuring as actors readers with an interest in technology who, in turn, open up new discussion flows posting on Reddit.

2.2 Levels of analysis

At this pilot stage of the project, the annotation has been undertaken by the two authors who have collaboratively discussed the analysis. We, however, plan to perform annotations with experts and validate them through IAA metrics.

Argument Structure For the annotation of argumentation structure we adopt the one proposed by [9], which builds on the classification proposed by [4]. At the level of simple argumentation, this schema includes a *major claim* —the proposition expressing the fundamental author's *prise de position*—; claims propositions expressing the author's stances —; premises — propositions expressing reasons in support of claims/major claim. As to complex argumentation, this schema includes not only convergent structure, but also linked structure, when multiple premises support the conclusion only if taken together, as well as serial structure, when a supporting premise receives support from another one. As far as attack relations are concerned, a distinction is made between rebutters, which directly attack either the claim or the premise and undercutters, which undermine the validity of the inferential relation connecting the premises to the conclusion. 4 Rudi Palmieri and Elena Musi

Argument Schemes In order to annotate argument schemes, we have followed the heuristics presented in [6] which is based on a simplified version of the Argumentum Model of Topics taxonomy [11]. This procedure is based on semantic, context independent principle, and it is to our knowledge the only methodology, accounting for the entire set of schemes, which has been positively verified through interannotator agreement in multiple experiments [7,8]. Besides offering an operational classification of argument schemes, the Argumentum Model of Topics constitutes an analytic asset for the analysis of inferential configurations of arguments since it spells out procedural as well as material premises showing their interrelations. Procedural premises take the form of maxims, which define the inferential connections at issue. They are based on loci, ontological relations which "bind the truth value of the standpoint to the acceptance by the considered public of propositions referring to specified aspects of the ontology of the standpoint" [10]. Material premises are two-fold: the *endoxon*, a major premise that refers to shared general knowledge (generally left implicit), and the *datum*, a (minor) premise where factual pieces of information are expressed.

Heteroglossic Strategies We adopt the Appraisal Theory framework to investigate heteroglossia focusing, more specifically, on the dimension of engagement [13]. We, in fact, aim at tracing back how the textual voice engages with alternative points of view which, in the context of social media, fall under the broad and loosely defined community of online users. Differently from truth-functional approaches to language, where linguistic resources such as modal and hedging values are considered to reflect non-optimal epistemic conditions, Appraisal Theory recognizes their interpersonal functions which show alternative sociosemiotic positions, explicitly highlighted even by the authors of the comment articles.

3 Results of the Analysis

3.1 Argumentative reconstruction and engagement

We present a pilot argumentative reconstruction of our corpus sample. For types of relations, we use the same notation conventions used in [?]: support relations are arrow-headed links, while attack relations of the rebuttal type are circle-headed and those of the undercutter type are square-headed. Dark Grey boxes contain statements from the articles responding to Zuckerberg's one, while light-grey boxes give voice to *Reddit* users. Due to space constrains, we report here a simplified ri-elaboration of the text, while the entire annotation represented through GraPat will be made accessible at: https://github.com/musielena:

Zuckerberg's article As suggested by the title which makes reference to "facts", Facebook CEO frames his discourse as an argumentatively justified clarification of how FB deals with users' data with regard to advertisers, charitably presenting users' critiques as misunderstandings due to the lack of information.

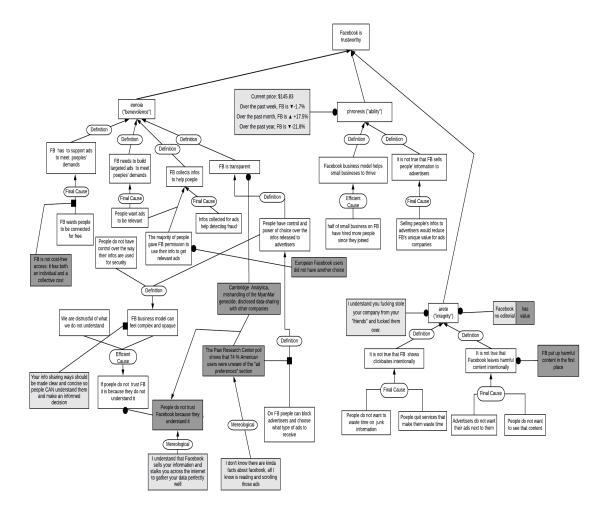


Fig. 1. Reconstruction of polylogical argumentation structure

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As shown by the argumentative reconstruction, the major claim is that Facebook is indeed trustworthy. It has to be noted that Zuckerberg does not directly claim that FB bears the essential traits of a trustworthy company, but he indirectly conduces his audience to draw such conclusions elaborating on reasons behind FB's choices which are symptomatic of companies whom culture conforms to the Aristotelian *ethos*, envisaging benevolence (*eunoia*) competence (*phronesis*) and integrity (*arete*) among their core values [1]. ⁴. These properties match, in fact, with Facebook's five core values ("be bold", "focus on impact", "move fast". "be bold", "build social value") making up the company culture.

In line with Zuckerberg's rhetoric goal to present his company as a philanthropic service to people, FB's benevolence is the quality supported by more arguments, presenting FB behavior as the only effective means to achieve the goal of providing people the service they want, namely a free, secure and transparent platform with relevant ads. The undeniable massive collection of people's infos released to advertisers is justified through a causal reasoning from lesser evil: its negative side effects are less relevant compared to the security it helps achieving. Interestingly, the main attack from the public opinion regarding FB's transparency is not dealt through a counter refutation, but as a *prolepsis*: the CEO anticipates users' skepticisms, presenting them as possibly understandable, instead of presenting them as voices that have been already raised in the public opinion, probably with the aim of mitigating their rebutting force. More specifically, Zuckerberg concedes users' distrust as reasonable due to the opacity of FB business model. In doing so, Zuckerberg changes engagement strategy passing from an exclusive we used in the entire article to make reference to FB as a company to an inclusive we through which he presents himself as a peer in the wide community of Internet of Things. Direct counter refutations are, instead, addressed in support of FB's competence as well as integrity, mainly through causal instrumental reasonings based on business rationales.

Commenting articles and posts Zooming into commenting articles and posts, they mainly callout FB transparency as well as integrity, using both undercutters and rebutters. One main counterargument against transparency points to the defeasibility of the inferential relation connecting the presence of transparency tools to users' actual control over their data: as shown by a the *Paw Research Center* poll, and well exemplified by one of the posts, most people are unaware of the availability of such tools and control, as any other agentive action, calls not only for adequate means but also for knowledge of their presence to events such as the *Cambridge Analytica* case where the lack of the core definitional traits of transparency are apparent. The premises of these two attack relations support in turn the negation of the standpoint advanced as a *prolepsis* ("People do not trust Facebook because they understand it"). Another rebutter from a post advocates (note the use of capital letters) for a switch in the

 $^{^4}$ as a translation for the Aristotelian components making up "credibility" we appealed to [5]

use of the modal *can* from a mean for dialogic expansion – inclusion of alternative points of view which consider the FB model opaque– to a modal of ability, indicating that the people are given the means to understand such a model. As to integrity, besides direct rebutters against FB *arete* making reference to its historical starting points as well as the lack of an editorial value, the validity of one of the premises is attacked negating the lack of intentionality. Overall, this polylogical reconstruction shows that both news articles and posts unanimously point to the controversiality of FB transparency and integrity.

4 Conclusive remarks

The goal of this short paper was to suggest a novel approach to the analysis of trust-repair discourse in crisis communication contexts. Argumentation is a crucial component of trust-building strategies in general as it provides skeptical publics with reasons why trust has to be (re-)established. By reconstructing the (numerous) arguments that Facebook CEO has advanced to defend the company's trustworthiness, we have brought to light how key constituents of trust (ability, benevolence, integrity) become justified standpoints. On the basis of this analysis, it is possible to evaluate the quality of trust-repair arguments which in turn can help explaining the persuasion potential of the corporate response to a crisis. Our contribution, however, goes far beyond the examination of the corporate trust-repair discourse. Drawing from recent polyphonic approaches in crisis communication research, we have proposed a method to reconstruct the argumentative polylogue characterizing the rhetorical arena generated by a crisis episode. Our method shows more precisely which aspects of the trust-repair corporate discourse are supported or attacked by publics and to what extent their reaction is argumentatively justified. This way, the effectiveness of the trust-repair argumentation can be measured directly against the argumentative responses put forward by corporate publics in different online rhetorical subarenas. While this paper has only presented an initial analysis of a single case, we hope to have stimulated future research taking a argumentative and polylogical perspective to trust-oriented communication. Our methodology is also meant to inform argument mining research for the analysis of larger datasets of crisis-related polylogues.

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