Resolving Conflict Situations in Reddit Community Driven Discussion Platform

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Abstract. The subject of conflict nature of the Reddit community driven discussion platform has been considered. The Reddit section entitled "Unpopular Opinion" has been selected, as it is a base for the most conflicting users' comments. The comments to the conflict situations have been discovered by means of linguistic markers and manipulative contexts. Phrases and sentences marked with manipulative, implicit or explicit nature of utterance have been found and grouped. The algorithm of sequence of step analysis concerning the Reddit social network comment system has been considered. The linguistic markers of the most contradictory posts have been analyzed using Linguistic Inquiry and Word Count (LIWC).

Keywords: Reddit community driven discussion platform, conflict situation, comment, linguistic markers, Linguistic Inquiry and Word Count (LIWC)

1 Introduction

The conflict situation is an integral part of human nature. To manage it effectively it takes time to be a skilled interlocutor. To find a solution to the raised issue requires the following steps: to realize the conflict situation exists for real (being open about the issue); to allow the communicators to freely exchange their opinions concerning the issue (expressing emotions); to consider the problem (defining its negative impact); to discover needs (before finding solutions); to agree on some points (discussing what is in common); to keep in mind that something can go wrong (determining other ways to deal with the issue).

2 Studies referring to the issue

Nowadays, each conflict situation when people are arguing and try to be right from either side ends up with agreement or disagreement, but the consequences might be far unexpected. The issue of resolving conflicts has been studied in such areas as contact linguistics, sociolinguistics, psycholinguistics etc.
Conflict arises from differences. Conflict resolution implies negotiation and peace as the main factors of meaningful discussion. It also depends a lot on different languages which convey various versions of reality [1]. Lingual factor matters when it comes to

bridging the gap between communicators in dispute trying to handle the conflict with compromise. Moreover, such factors of human complexity nature as gender and culture are involved. Culture provides individuals with particular roles to play in society and duties they tend to be responsible for. Gender helps structure people's activities and relationship according to their preferences [2, 3]. A particular branch dealing with language conflicts is called contact linguistics [4]. Sociologists mark 'conflict' as disagreements which involve fearful conditions (implicit and explicit), preferences and moral principles, the aim of which should strongly differ from those of another representative group in order to balance the opposition or to stick to your area of interest [5]. Each conflict is resolved in the end, either peacefully or in a resistant manner.

3   Analysis of the Reddit conflict situations

Reddit is one of the social entertaining and news networks which is suitable for social analysis. It is a source of various insightful patterns of how to interact with each other through a vast majority of comments [6]. In this paper, there is an attempt to outline a general structure of the Reddit social network and exemplify each step of its virtual elaboration. Moreover, we allocate the section "Unpopular opinion" within the Reddit social network as it possesses statements with the utmost degree of contradiction of all sections included. In terms of this rubric we refer to the most challenging and contradictory section of today – 'Coronavirus Megathread' (https://www.reddit.com/r/unpopularopinion/comments/fhrs6r/coronavirus_megathread/). We apply five conflict response modes [7] in order to handle the following contradictory situations:

1. Compromising mode is characterized by its moderate assertiveness and moderate cooperation. It involves negotiating, finding a middle ground, assessing value, making concessions.
2. Accommodating mode is featured with low assertiveness and high cooperation. Such characteristics as forgetting your desires, selflessness, ability to yield, obeying orders are considered.
3. Competing mode is represented by high assertiveness and low cooperation encompassing the following: arguing or debating, using rank or influence, asserting your opinions and feelings, standing your ground, stating your position clearly.
4. Avoiding mode has low assertiveness and low cooperation in terms of ability to withdraw, ability to sidestep issues, ability to leave things unresolved, sense of timing.
5. Collaborating mode is high assertiveness and high cooperation. Its skills are as follows: active listening, nonthreatening confrontation, identifying concerns, analyzing input.

There are lively discussion statements and comments from different users in social network Reddit. Taking into account lively statements and comments of a variety of community members we select those for analysis to which linguistic markers of ma-

nipulation, implicit and explicit influences, contradiction, arguments, approval, disapproval, etc. can be applied [8, 9, 10, 11, 12, 13]. The rubric 'Coronavirus Megathread' can be sorted by such a range of comments as: best, top, new (suggested), controversial, old, Q&A. We choose controversial as it will be easier to trace the contradictory nature of comments. The first Figure is a rubric (the one chosen challenging topic) in a form of a statement to be discussed. The second Figure represents the member's comments sorted by the scale of controversy. We analyze the comments referring closely to the statement and those having any modes of conflict responses (Fig. 1, Fig. 2).

Fig. 1. 'Unpopular Opinion' Reddit Section, 'Coronavirus Megathread' rubric-contradictory statement
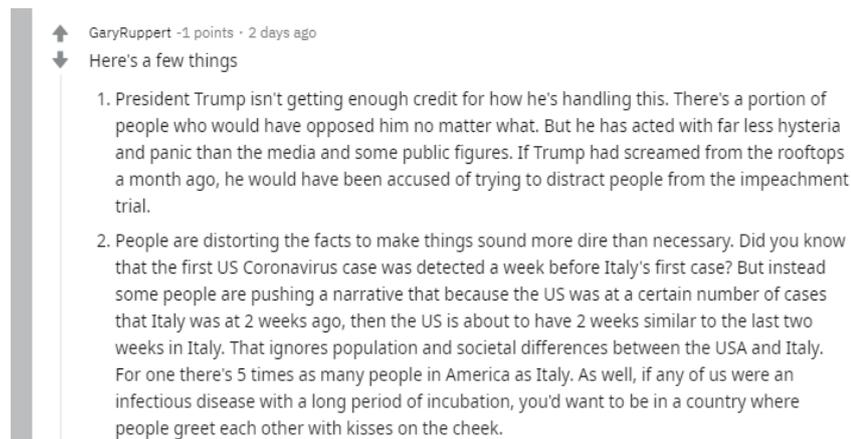

Fig. 2. Initial comment

After initial comment we define such linguistic markers in next comments (NC) (Fig. 3) and further comments (FC) (Fig. 4). The NC are defined when there are linguistic markers which indicate any of the above-mentioned conflict response modes. Each of them has its own degree of conflict response mode. The first NC and its FC to the initial comment are as follows:

- NC: Trump and his admin have not been giving consistent messaging; If he and his administration can't get his shit together by the middle of next week, I can't in good conscience vote red next election. I just can't (competing – standing your ground, stating your position clearly),

- FC: Why are you blaming Trump when you just laid out exactly… (accommodating – ability to yield), They both fucked up. Someone decided not to use the WHO test. the CDC fucked up, and since he's the boss, he is accountable too (collaborating – identifying concerns, analyzing input), I (usually) vote red too. This might be the most coherent, fair and informative criticism of trump I've ever seen. You're a rare breed (collaborating – nonthreatening confrontation, analyzing input), Lol imagine thinking Trump is a decent president now or compared to most any who preceded him. He's ignorant and incompetent (avoiding – ability to sidestep issues, ability to leave things unresolved, sense of timing), Americans need to pull Trump out of the White House tonight (competing – arguing or debating, using rank or influence, asserting your opinions and feelings), Wow. That's a scary opinion since it would violate our democracy but I wouldn't say it's an unpopular one lol (avoiding – ability to withdraw, ability to sidestep issues, ability to leave things unresolved).

The outrageous behavior concerning the president is expressed explicitly by means of obscenities, implicitly – by rhetorical questions, spoken exclamations.
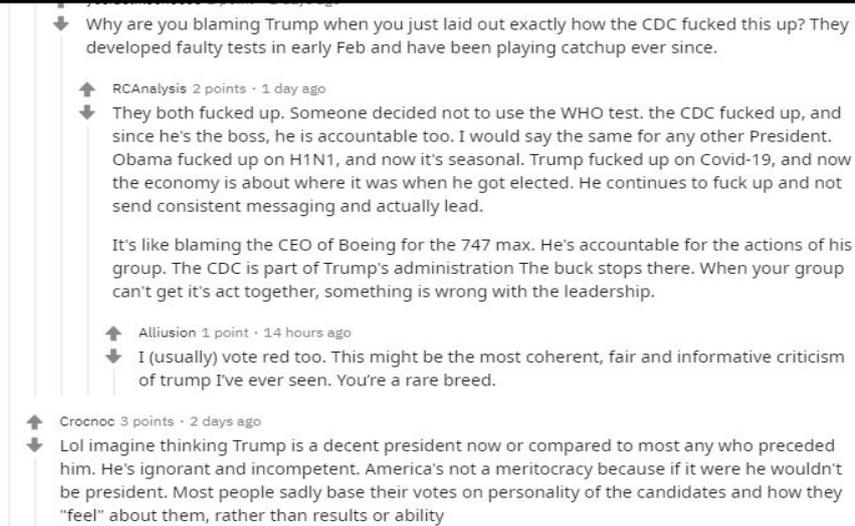

Fig. 3. Next comments (followed by the initial ones)

Each 'next comment' has its own comment followed by "n more replies", where n – number of opinions of community members, who comment on the initial comment using their own behavioral social patterns through virtual environment → (Fig. 4).

Fig. 4. Further comments to the 'next comment'

Next topic concerning the main statement is represented by the following NC (Fig. 5).

Fig. 5 NC concerning the main statement

- NC: All this talk of "selfishness" and "hysteria" is just their way of coping with the anger of being late to the party (competing – standing your ground, stating your position clearly), It is not my problem you waited until the pandemic was right in our faces before taking precautions (competing – arguing, asserting your opinion and feeling), Stop whining, be proactive about being prepared for emergencies (competing – stating your position clearly),
- FC: That's what it is though. It's selfish. Healthy individuals are wayyy overpurchasing (collaborating – identifying concerns, analyzing input), Only anticipate the actual need and stretch it as much as possible. Don't over stock and say, "Well, it's your fault I made it there before you." That's heartless (accommodating – obeying orders are considered), These masks are NOT medical masks and will do NOTHING to stop a virus yet panic buying folks have depleted them. So now work that needed to be done isn't being done (accommodating – ability to yield), Why are medical professionals sourcing their PPE from the same location as civilian customers? That seems like a supply chain problem (avoiding – ability to leave things unresolved), Thats awesome. MANY companies are not that large and do buy from local stores in the area I am in. The point is moot apparently (competing – stating your position clearly).

This comment section is characterized by explicit negative contradictory tone of the comments and explicit rhetorical questions.

Next Comments relate to the rubric-statement concerning the controversy in terms of Coronovirus itself (Fig. 6).
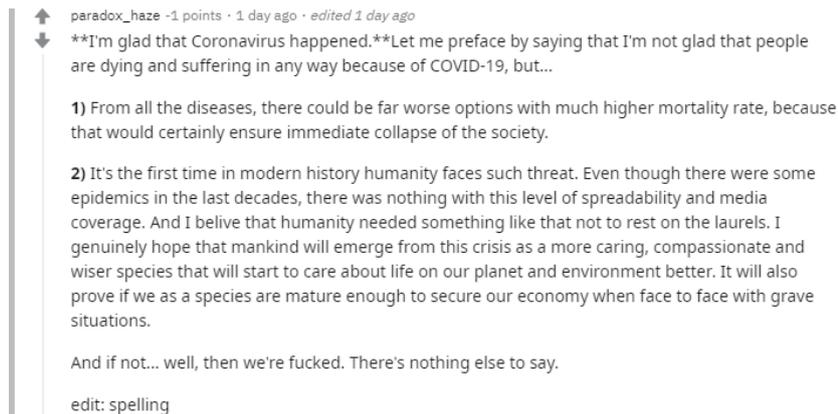

Fig. 6 NC concerning the main rubric-statement

- NC: Let me preface by saying that I'm not glad that people are dying and suffering in any way because of COVID-19, but..(competing – stating your position clearly),
- FC: Coronavirus is a good thing because all the healthy people are coming out alright or better, and all the old people and people in poor health who can't contribute to the economy or the better advancement of humanity are dying off (avoiding – ability to leave things unresolved), Why should I care if some 80-year-old who has lived their life, but continues to live because modern medicine refuses to let them die, dies off? (collaborating – identifying concerns), Is it sad? Not really. A lot of people die every day (accommodating – selflessness, ability to yield), The truth is this thing is serious. Trump supporters. Listen I honestly have defended Trump many times and have tired to be fair unlike most Americans. Do I like him? No. But I've defended him at times and understand why people like him. But stop giving him excuses (collaborating – identifying concerns, analyzing input), You can deny news but I think there are truths to what people are saying about this virus and disease (collaborating – identifying concerns, analyzing input), But to be optimistic our country need to not give up and not think things will be hard (collaborating – identifying concerns, analyzing input),
  Again this isn't war but this situation isn't a joke (collaborating – identifying concerns, analyzing input).

This comment section is too controversial as members easily raise the issue of death in a sarcastic way and simultaneously try not to implicitly sound too much rude.

Even such ridiculous comment sections occur as the following (Fig.7). But it only proves that a range of human social patterns can be unexpectedly various, and they are often intensified when the panic factor takes place.

Wargasm69 0 points · 9 hours ago

Everyone should get infected by the Coronavirus. Those who survive, survive and those who die, die. Everyone who lives develops immunity and the virus is completely wiped out.

Fig. 7 NC concerning the main rubric-statement

- NC: Those who survive, survive and those who die, die. Everyone who lives develops immunity and the virus is completely wiped out (competing – asserting your opinions and feelings, standing your ground, stating your position clearly),
- FC: This is stupid on so many levels (competing – arguing or debating), You could say it's unpopular being stupid endangers others, being unpopular only affects yourself. I just made that up. Does it sound right? (collaborating – nonthreatening confrontation), Sounds good to me (collaborating – nonthreatening confrontation), Explain yourself? Everyone should get infected by the coronavirus? Are you willing to submit yourself to that? Are you willing to submit all your friends and family to that? Are you willing to put your money where your mouth is and watch as a percentage of the people you know die? (accommodating – ability to yield), Yeah sign me up! Where's the closest person you know with Coronavirus? I'll square up (accommodating – ability to yield), Wow Darwinism hope ur part of the equation that gets wiped out since its just an opinion for u. Or maybe I should live as watch the ones u love die one by one. Yeah second choice (competing – arguing or debating).

This comment section is rather sharp than previous ones as each comment is expressed explicitly in a rude way in rhetoric questions and assertive statements.

In Fig. 8 there is an algorithm covering the general structure of the Reddit social network comment system, which was described in detail in previous publication.

In order to define linguistic markers and some psychological patterns we apply Linguistic Inquiry and Word Count (LIWC, https://liwc.wpengine.com/results/). It is a text analysis program that counts word for semantic groups as well as structural characteristics. This program groups psychologically and linguistically marked categories. It checks target words in the dictionary and calculates frequencies. Such trustworthy results have been used in a lot of studies to allocate data concerning personality [14, 16, 19], deception [15, 17, 20, 21], and health [14, 18]. Of course, such overview of the LIWC automatic analysis does not claim 100% true results, but in order to prove controversial factor of the rubric comment section it is more than enough (Fig. 9).
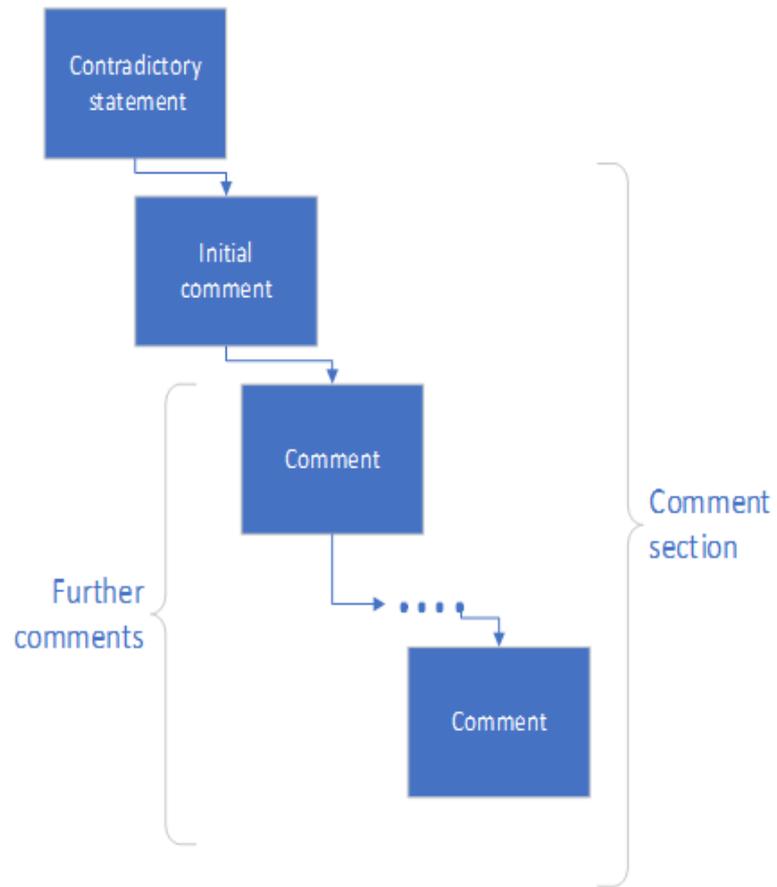
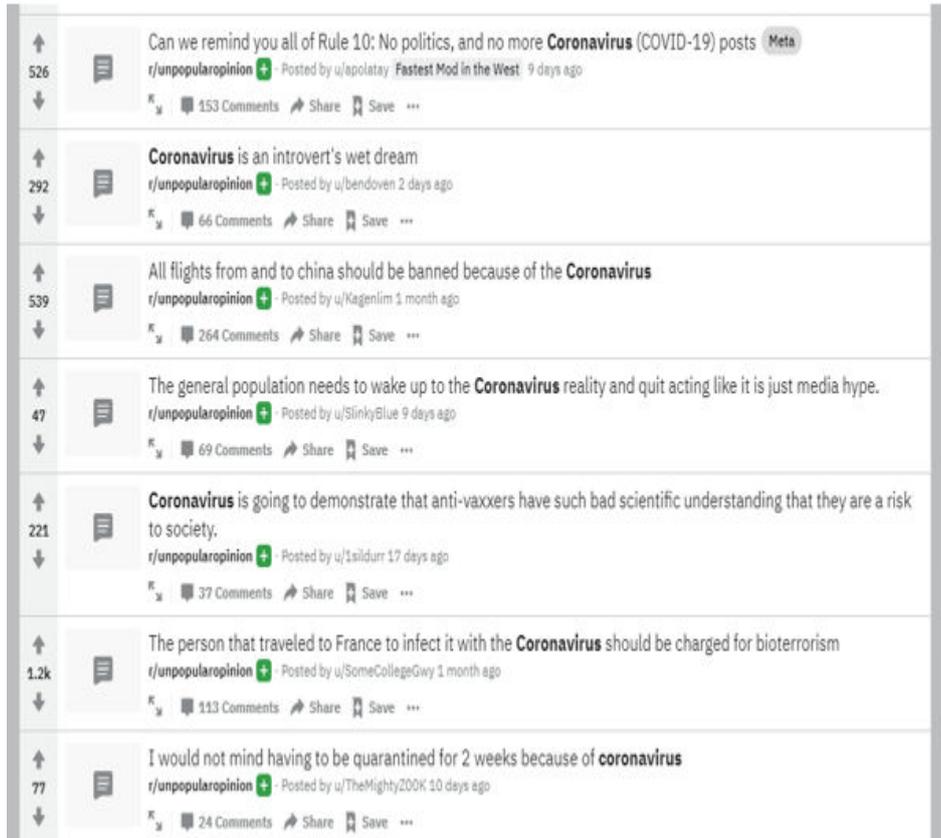**Fig.8** General structure of the Reddit social network

Fig. 9 Percentage overview of the LIWC automatic analysis of the semantics of the Reddit comment section

In comparison to the average for social media our textual comments represent and prove their contradictory nature, particularly, when it comes to negative emotions, social words and cognitive processes. All other indicators do not influence a general layout of the material analyzed.

The following Reddit statements will be beneficially analyzed and compared between each other to fully detect the capacity of resolving conflict situations in a social network environment.

4   Conclusions

The section itself ('Coronavirus Megathread') sounded contradictory as it was chosen in terms of contradictory statements. Particular statements of comment section were selected and analyzed according to implicit and explicit linguistic nature of utterances. In this paper a general structure of the Reddit social network and exemplifications of each step of its virtual elaboration as well as conflict response modes and its possible strategic solving principles were considered. The analysis of linguistic markers of discussion was outlined. To define the ways of dealing with a conflict statement, the conflict response modes were applied to the comments. As a result, five different conflict response modes were allocated. The frequency of response conflict modes of these conversations was calculated (see Table 1).

Table 1. Table of frequency of response conflict modes of conversations.

Comment section	Compromising	Accommodating	Competing	Avoiding	Collaborating
1	0	1	2	2	2
2	0	2	3	1	1
3	0	1	1	1	4
4	0	2	3	0	2

In general, competing and collaborating conflict response modes dominated in these comments. They show that the discussion was active and community members emotionally reacted and responded in order to gain a necessary result of conversation. Compromising was not achieved as none of the comments was discussed for a while. Accommodating was characterized with sharp explicit rhetorical questions and ability to yield. The most frequent conflict response mode was collaborating, as people eagerly identified concerns, analyzed inputs and confronted non-threateningly.

The contradictory statements were solved in a rhetoric way implicitly or explicitly but bombarded with various opinions, facts, evidences and user's own experience. The LIWC automatic analysis of the semantics of the Reddit comment section was conducted.

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