JOURNAL OF WORLD LANGUAGES
2018, VOL. 5, NO. 1, 46–80
https://doi.org/10.1080/21698252.2018.1504856

Routledge
Taylor & Francis Group

News comments on facebook – a systemic functional linguistic analysis of moves and appraisal language in reader-reader interaction

Giang Hoai Tran and Xuan Minh Ngo

Faculty of English Language Teacher Education, University of Languages and International Studies, Vietnam National University, Hanoi, Vietnam

ABSTRACT

Many news publishers have integrated their news on Facebook to attract wider readership. On this popular social networking site, online news readers can contribute their comments to the news post and interact with their fellow readers. This form of user-generated contents has attracted increasing scholarship and raised concerns over the salient conflict and incivility in its language, the low quality of polarized argumentation, and the complex interaction among news commenters. To contribute to the current lack of in-depth qualitative description of such reader-reader interaction, the current study explores the types of communicative moves performed by Facebook users in their news comments, the patterning of those moves, and the attitudinal language used to realize such moves. Based on the two Systemic Functional Linguistic (SFL) frameworks of speech functions and appraisal for a close analysis of the moves and attitudinal lexis in Facebook news readers' comments to one news article, the research has shown that exchanges of Facebook news comments developed in different directions with varying levels and complex patterns of support and confrontation between interactants as well as different appraisal language use. Besides substantiating the existing description of online news readers' interaction, the paper argues that the SFL frameworks of conversation analysis are helpful for understanding CMC but more updated descriptions and a more visual approach to presentation of findings are needed to make the frameworks more relevant for online interactive discourses.

ARTICLE HISTORY
Received 24 February 2018
Accepted 24 July 2018

KEYWORDS
Participatory; moves; news comments; user-generated contents; appraisal

1. Introduction

Computer-mediated communication (CMC) has a short history, but its influence on people's communication in general and use of language in particular is substantial (Greiffenstern 2010). Among the CMC platforms, participatory websites — commonly referred to as Web 2.0 — have arguably become one of

CONTACT Giang Hoai Tran mygaqua@gmail.com

the most influential ones. These websites have their distinctive features, such as topical discussions among large, dispersed groups, varying levels of interactivity among users, and a central authorial message source, the combination of all of which "marks the evolutionary departure of Web 2.0 systems from previous forms of online messaging systems and websites" (Walther and Jang 2012, 3). On a broader scale, Walther and Jang classify contents on Web 2.0 into four types based on the source of the contents, namely proprietor or page-owner-generated content, visitor-generated content, deliberate machine-generated statistical representation of the users, and unintentional machine-generated statistics. Of these four, these authors remark that the visitor-generated content is the "defining feature of participatory websites and distinguishes them from the traditional web" (Walther and Jang 2012, 4). Reader comments now have become "the norm" of online news (Stroud, Scacco, and Curry 2015) and have given rise to a new form of interpersonal interaction, the reader-reader interaction.

Perceived as an interesting and complex phenomenon, this emerging form of reader-reader interaction has attracted increasing scholarly interests with quite a few studies done on different types of participatory sites, including the original participatory news websites (Stroud, Scacco, and Curry 2015, Ksiazek 2018), Facebook comments (Tagg and Seargeant 2016; Cionea, Piercy, and Carpenter 2017; Larsson 2017), Facebook instant messaging chats (Meredith 2017), YouTube video comments (Bou-Franch and Blitvich, Pillar 2014), Google groups (Lewiński 2010), news groups (Marcoccia 2004), chat rooms (Weger and Aakhus 2003), discussion board (Lander 2014), and Twitter (Mellor 2018). There have also been multiple studies that highlighted the similarities and differences across platforms like those done by Hille and Bakker (2014) and Rowe (2015) comparing interaction in news websites and Facebook news pages, by Ben-David and Soffer (2018) regarding conventional news websites, news websites with Facebook comment plugin, and Facebook page of the news media, and by Halpern and Gibbs (2013) contrasting YouTube video comments and Facebook news comments.

Such studies have provided several crucial insights into reader-reader interaction. First, it is generally agreed that this form of interaction seems to be short and underdeveloped with only a few exchanges and often ends incomplete or unresolved (Marcoccia 2004; Bou-Franch and Blitvich, Pillar 2014; Halpern and Gibbs 2013; and Lander 2014). In the terms of journalism, reader-reader news discussions regardless of the platforms are of low argumentation content (Ksiazek 2018; Larsson 2017). The interaction in such discussions reveals polarization of groups' ideologies rather than the weighing of diverse positions and persuasion that is characteristic of deliberation (Halpern and Gibbs 2013). Moreover, in terms of language, interaction in news reader comments has been found to have high level of hostility or conflict among interactants (Tagg, Seargeant, and Brown 2017). For example, YouTube video comments are notorious for aggression, incivility, and sometimes even hate

speech (Halpern and Gibbs 2013), and Facebook news comments, with less anonymity and thus apparently less aggression, are also found to contain a lot of confrontation (Rowe 2015).

Despite their contributions, these papers, most of which originate in the field of journalism, have yet to provide a detailed, systematic description of news readers' communicative actions when they engage in news discussion (Bou-Franch 2014; Herring, Stein, and Virtanen 2013). To be specific, although conversation analysis has been adopted to untangle the direction of interactions (Lewiński 2010) and turn taking (Hutchby 2014; Giles and Paulus 2017) in online reader comments, little is known about how interactants perform specific moves to navigate the complex many-to-many polylogues (Forbenius and Harper 2015). In an attempt to fill this gap, the current paper will examine the interactional patterns and linguistic realization of user-generated responses to a news post on Facebook, arguably the most popular social networking site in the world with approximately 2.19 billion monthly active users as of the first quarter of Statista n.d.).

To research online discourse, some researchers advocate developing brand new and dedicated methods (Rogers 2009, as cited in Bou-Franch 2014). This approach certainly has its merits, but developing new digital methods takes remarkable time and effort as well as extensive testing to ensure their relevance and rigor. Hence, Herring (2004) proposes adapting tools from conventional conversation analysis to study online discourse, an approach she refers to as computer-mediated conversation analysis (CMCA). In this study, following CMCA approach, we have adapted frameworks of conversation analysis from Systemic Functional Linguistics (SFL) to analyze the Facebook news reader-reader interaction. This theoretical framework has been chosen because as Eggins and Slade (1997) argue, SFL is suitable for analyzing casual spoken interaction, to which news reader comments on Facebook bear striking resemblance. To lay the foundation for this study, a brief introduction about SFL will be provided in the next section.

2. Theoretical framework

As stated above, to investigate Facebook news inter-reader interaction, this study has adapted the SFL conversation analysis framework as outlined in Eggins and Slade (1997). In their book, these authors propose a detailed network of speech functions to label individual moves in a casual conversation as an adaptation of the previous works of Halliday, Eggins, and Martin (Eggins and Slade 1997, 193–214). Despite its ground-breaking nature (Martin 2009), this network was originally devised to analyze face-to-face conversations among a limited number of interactants rather than online news readers' polylogues. Hence, its linear representation of interaction structure and staging of moves found in conventional conversation analysis and genre studies may

not be able to capture and show the true extent of complex many-to-many interaction among news readers. Thus, we have employed a more visual method involving mind maps to show the complex development of multiple strands of interaction within the Facebook news polylogues, to reflect the temporal distribution of messages left by news readers, and to present at the same time the parallel, horizontal expansion as well as the linear vertical direction and the polarization of viewpoints expressed in such comments.

The schematic structure of texts is seen by Eggins and Slade (1997, 57) as the "overall staging patterning of texts" that includes individual moves, "a stretch of spoken or written discourse which achieve a particular purpose in a text" (Cortes 2013, 35). In this study, a move is defined as a specific stage in the whole structure of texts. To meet the overall communicative purpose of a text, each move has its own communicative purpose and can be compulsory or optional in the move staging pattern. Identifying the schematic structure of texts of a certain genre, including the specific moves and their order, as well as their lexicogrammatical realization, is central in understanding a genre (Eggins and Slade 1997; Henry and Roseberry 2001; Swales 2004). How a move is identified depends on whether texts are long, well-structured, with a specific "pragmatic" purpose such as a research paper, or whether texts are spoken interactions with short exchanges for interpersonal purposes (Eggins 2004, 5).

As noted earlier, analysis of moves is often accompanied by examination of the lexicogrammatical realizations of such moves. For this purpose, the current study has adopted the Appraisal theory developed by Martin and White (2005) to answer the third research question on the linguistic realizations of moves in the Facebook news comments. Martin and White (2005) argue that appraisal has three domains of attitude, engagement, and graduation. The main focus of this study is the first domain of attitude, which is subdivided into affect, judgment, and appreciation, but we also looked at graduation language to further understand levels of attitudinal meaning in the Facebook news reader comments. Figure 1 provides a summary of Martin and White's system of attitude in appraisal theory.

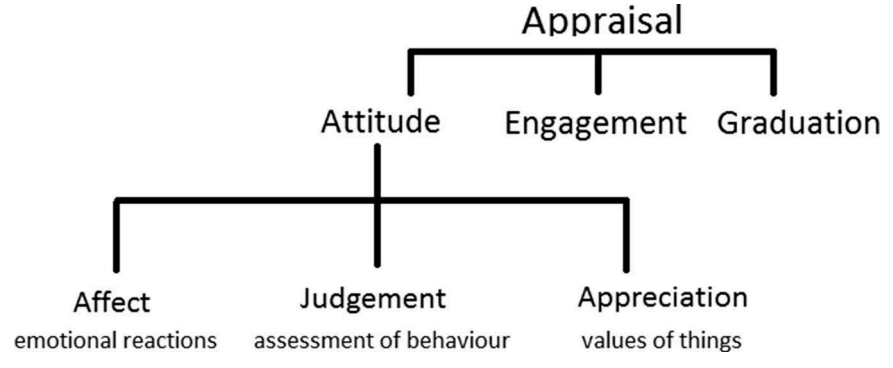

Figure 1. The system of appraisal.

In short, following CMCA approach, two frameworks from the Systemic Functional Linguistics tradition, namely the speech function network and the system of attitudinal appraisal language, have been employed as analytical frameworks to answer the three following questions.

RQ 1: What communicative moves are performed in Facebook news comments to show readers' levels of agreement and disagreement?

RQ 2: How does interaction develop within Facebook news comment exchanges? (more specifically, what, if any, are the patterns of communicative moves in the interaction?)

RQ 3: How is attitudinal language used to realize different communicative moves?

3. Methods

According to the review of Naab and Sehl (2016), quantitative analysis of big data dominated studies on user-generated contents. Acknowledging such imbalance in research methods, journalism and communication scholars have emphasized the importance of case studies and called for more in-depth treatment of data (Lewiński 2010; Herring 2013; and Giles and Paulus 2017). In light of this recommendation, this study has been designed as an exploratory case study to offer insight into specific levels of language use and emerging patterns rather than generalizability based on large sample size and feature counts.

3.1. *Context*

As indicated in Section 1, this study is drawn on data collected from Facebook, which originally started in 2003 as an exclusive network for university students in the United States but has now become a leading social networking site that allows anyone in the world aged 13 or above to connect to other people and follow each other's updates. To capitalize on this site's popularity, many news publishers have established their Facebook pages and posted their prominent news and stories on a regular basis. Among a wide range of activities, in response to what they have read or seen, Facebook users can choose a reaction to the news (like, angry, sad, and so on), share the news with other Facebook users, or leave comments on posts in the form of text and multimedia, without limit to the number and length of the comments and replies. All the comments on a particular Facebook post can be seen in the order of time or popularity, the latter depending on the number of people clicking "likes" to the comments or the number of replies to those comments. When a comment has several replies, the replies are shown chronologically and grouped below that comment to make them appear like a continuous conversation. These unique characteristics of this platform and its growing popularity are the main reasons why Facebook was chosen as the source of data for this study into news reader responses.

Among the Facebook fan pages of major news broadcasters in Australia, the Pan-Australia Media Group (PMG) page (pseudonym) has been chosen for this study due to its wide appeal to the general Australian public. In fact, it had one of the largest number of followers compared with similar pages in Australia. This is an important consideration to ensure that the patterns identified in this study would not be confined to a distinct group of population. Regarding the typical structure of a post on this Facebook page, each includes a very brief summary of the news and the link to the full original article on its official website. When the news is controversial, the brief summary is often followed by a question that encourages readers to express their opinions.

The post whose comments constituted the data in this study concerns the Australian government's budget in 2014. The budget was the first budget under the new government elected in 2013. At the time of data collection, the initial reception of the budget among Australian people and the mass media was fairly negative as it tightened the fiscal policy and broke several pre-election promises. The new budget received wide media coverage and became one of the most heated topics for discussion then. This news story was selected firstly because it was of interest to many different groups of people regardless of their ages, genders, occupations, interests, and financial and social statuses. Similar to the choice of PMG page as explained above, the selection of such a news story will help to avoid skewing the comments toward a particular group. Secondly, the topic was controversial enough to attract different viewpoints. Finally, the topic was sufficiently familiar to the researchers, which would facilitate the data analysis.

3.2. *Data collection*

After the proposal of the budget, one Facebook post of the said news broadcaster was linked to an article that presented the reactions of a number of Australian individuals to the new budget. All the comments on this Facebook post, excluding the original article, were collected by means of a screen capture tool to build the original corpus. After collection, the comments were retyped, numbered, and classified based on the form of message they took, namely texts, images, links, or their combinations. The focus of this study is on the functional and linguistic aspects of the comments, and so a multimodal analysis, however desirable, is out of the scope of this study. Therefore, images and links to other Internet sources embedded in the comments were excluded in the analysis. Moreover, the original news article and its related features were not part of the analysis either, although their content was consulted by the researcher to help contextualize the reader responses. To avoid any perceived harm to the Facebook users whose comments were captured and used for this study, pseudonyms would be used in comments

quoted in this paper, and potentially identifiable details such as the exact news post title and its web address link to this Facebook post would not be mentioned. Comments that were obviously advertisements or contained completely irrelevant, off-topic contents were removed. Finally, the corpus is composed of 23,657 words from 500 comments given by 223 different Facebook users. Of these comments, the shortest has only one word, while the longest has 330 words. On average, a comment is 43.7 words long.

When a comment had at least one reply, that comment and all the comments replying to it made up one exchange. Within the original 500 comment corpus, there were 59 exchanges of this kind. The average exchange had 6.6 comments in it, with 33 exchanges having from one to five comments. Given the small scale of the study and the researcher's interest in the interaction between readers in their responses, the average number of 6.6 comments per exchange was used as the cutting value to sample exchanges for a smaller corpus. Thus, this sub-corpus contained only exchanges of six or more comments, which were then analyzed to answer the research questions. Among the 26 exchanges that met this criterion, initial screening of the contents revealed that one exchange appeared to have some comments removed from the discussion and thus was excluded from the later analysis. Therefore, in short, analysis was done to 25 exchanges of comments taken from the original corpus.

3.3. *Data analysis*

The process of data analysis was divided into two major stages to successively answer the research questions. However, in both stages, the same four-step procedure was followed, namely a) identifying the units of analysis; b) tagging the 25 exchanges using analytical frameworks; c) summarizing the tags to reveal patterns; and d) interpreting the patterns in context.

In the first stage of move analysis to answer the first two research questions, the unit of analysis was the clause or groups of clauses. In casual conversations, the customary unit of analysis is the clause as it often matches the speakers' turn taking sequence. However, in written texts, groups of clauses or even whole paragraphs can work together to achieve a single communicative move. Therefore, in the current study of CMC texts that resemble both speech and writing, more flexibility is needed to identify the move boundaries. This explains the researchers' decision to examine both single clauses and groups of clauses within the same comments for move identification.

The analytical framework used to tag clauses in the comments was the Speech Function network, introduced by Eggins and Slade (1997) from their synthesis of related works in SFL. The Speech Function network contains two broad categories of opening and sustaining moves. The sustaining move category itself is further divided into monitoring moves for the speakers to check their audience's engagement in the conversation, prolonging moves for the same speakers to take the

next turn in the conversation and continue speaking, and reacting moves for other speakers to take the next turn and react to the previous speaker's moves. Each of these move categories has more specific moves with their own conversational purposes. Since the online presentations of exchanges in the Facebook comments are made to resemble continuous conversations and at least two interactants are involved in each exchange, the Speech Function network originally designed for spoken conversations was applied to the move analysis in this study. The full description of the network can be found in Appendix A, which was constructed by the authors based on Eggins and Slade (1997).

In the second stage, after specific moves and their possible orders had been identified, analysis of attitudinal language was conducted to answer the third research question. At this stage, the unit of analysis was lexical words and phrases found in each move. These words and phrases were tagged according to the Attitude branch in the Appraisal theory, elaborated in the work of Eggins and Slade (1997) and Martin and White (2005), both following the SFL approach. Attitudes in the Appraisal theory include the categories of Affect (expression of speaker's emotional states), Judgment (speaker's evaluation of the ethics, morality, or social values of other people), and Appreciation (speaker's reactions to or evaluations of objects or processes). In addition to these three sub-categories, speakers also modify their expressions of attitudes through grading language that helps them enrich, intensify, or mitigate attitudinal meanings. Therefore, the category of Graduation was also included in the analytical framework for this study. Appendix B provides more detailed explanation of each sub-category together with identification clues and lexical examples.

4. Results

4.1. *General description of the news comment corpus*

The majority of article-comments in the data had no replies (106 out of 167). As there were 500 comments in total, this figure means more comments were generated when readers interacted with each other using the "reply" function of Facebook than when they responded directly to the article (333 reply-comments compared with only 167 article-comments). The longest reply-comment had 330 words, and the most expanded exchange had 42 comments. Out of 59 exchanges identified, 25 had six or more comments and became the focus of interaction analysis in this study.

Moreover, there were much more commenters than the comments directly aimed at the article (223 commenters vs 167 article-comments), which means many of the Facebook news readers only replied to other readers without commenting directly on the article. The majority of commenters (145 out of 223) left only one comment, and only six people contributed more than 10

Table 1. General description of the Facebook news comment corpus.

Comments and replies	
Total word count of all comments	23,657 words
Total number of comments (article-comments + replies)	500 comments
Average word count per comment	47.3 words
Longest comment	330 words
Number of article-comments	167
Number of article-comments with no reply	106
Number of reply-comments	333
Commenters and their contribution	
Number of different commenters	223 people
Number of commenters with 1 comment	145 people (65%)
Average number of comments per commenter	2.24 comments
Average word count per commenter	106 words
Exchanges of comments	
Total number of exchanges (comments + replies)	59 exchanges
Average length of exchange	6.6 comments
Longest exchange	42 comments
exchanges with 1–5 comments	33 exchanges
exchanges with 6–10 comments	20 exchanges
exchanges with 11–15 comments	0 exchange
exchanges with 15–20 comments	3 exchanges

times, with the most active one leaving 41 comments in different exchanges. More information can be found in Table 1.

4.2. *Research question 1: levels of confrontation and support in the moves*

In the 25 exchanges of 287 comments analyzed, 322 moves were identified, including both initiating and reacting moves. There were more moves than comments because many of the comments perform more than one move. A summary of move statistics is presented in Table 2.

Among the reacting moves, there were more confronting moves than supporting ones, with 160 of the former and 97 of the latter. The most common type of confronting move was Counter, done 73 times, to express interactants' confrontation by "offering an alternative, counter-position or counter-interpretation of a situation raised by a previous speaker" (Eggins and Slade 1997, 212). The next two most frequently performed moves were Rebound (33 times) to question the relevance, legitimacy, or veracity of a previous move, and Refute (32 times) to react to a previous confronting move by contradicting it. The most frequent supporting move was Develop (56 times), which helps interactants to elaborate, clarify, enhance, or add more details to previous interactants' moves. The relationships between all these different move types are shown in more detail in Appendix A.

4.3. *Research question 2: development of interaction*

Although there was no fixed move order that applied to all the exchanges of comments, some patterns were observed in how the exchanges

Table 2. A summary of move statistics.

Category of move	Frequency
Open	
Initiate	27
Give information (statements)	19
Sustain	
Continue	32
React	
Respond	
Support	
Develop	56
Reply	
Comply	1
Agree	18
Answer	2
Confront	
Reply	
Non-comply	2
Disagree	8
Contradict	10
Rejoinder	
Support	
Track	
Confirm	2
Clarify	5
Probe	4
Response	
Resolve/Repair	9
Confront	
Challenge	
Rebound	33
Counter	73
Response	
Unresolve	2
Refute	32

developed and how this development was realized through the choice of certain moves.

4.3.1 *Incomplete exchanges*

As can be seen in Table 2, the majority of initiating moves (19 out of 27) were done through statements of opinion. With regard to the closing moves, generally there were more Rejoinder moves to sustain interaction than Respond moves to conclude the interaction, which left most of the exchanges of studied comments incomplete, or unresolved. Fourteen of the exchanges were obviously incomplete since they ended with Rejoinder moves that require responses from previous interactants, who did not return to the discussion. Many of the closing Rejoinder moves were of confronting type, which means the confrontation in these exchanges was not completely resolved.

4.3.2 *Branches of exchanges*

All of the exchanges examined in this study, with six or more comments within each, contained at least one sub-cluster of exchanges that branched out from

them. In other words, although the Facebook interface showed the initiating comment and all the subsequent comments replying to it as one long conversation, such conversation was further developed into different directions based on some of the reply-comments. The typical branching structure of an exchange containing a sub-exchange within it is illustrated in Figure 2 below. Similar to branches of a tree, these sub-exchanges had the potential to extend, and the further they grow, the less they depended on the initial comment they branched from in terms of content.

4.3.3 *Vertical versus horizontal development of interaction*

Horizontal direction describes exchanges in which three or more comments were aimed at the same initiating comment in a parallel manner and apparently independent of each other in terms of content. In other words, the attention was mainly given to the initiating interactant and was spread throughout the whole exchange. Meanwhile in vertical direction, each comment was added in response to the one right before it, and three or more comments developed in this manner create a line of argument. Lewiński (2010) has made a similar observation of these two distinct directions of argument development in Google group interaction. However, as the exchanges in this study contained within themselves multiple strands of interaction, the relationship between horizontal and vertical interaction was more complicated.

More specifically, first-level analysis of the exchanges revealed that more of the main exchanges developed in horizontal direction (16 exchanges) than vertical one (9 exchanges). The most extended discussions, exchanges E53 and E54 containing 42 and 29 comments, respectively, also unfolded in horizontal manner

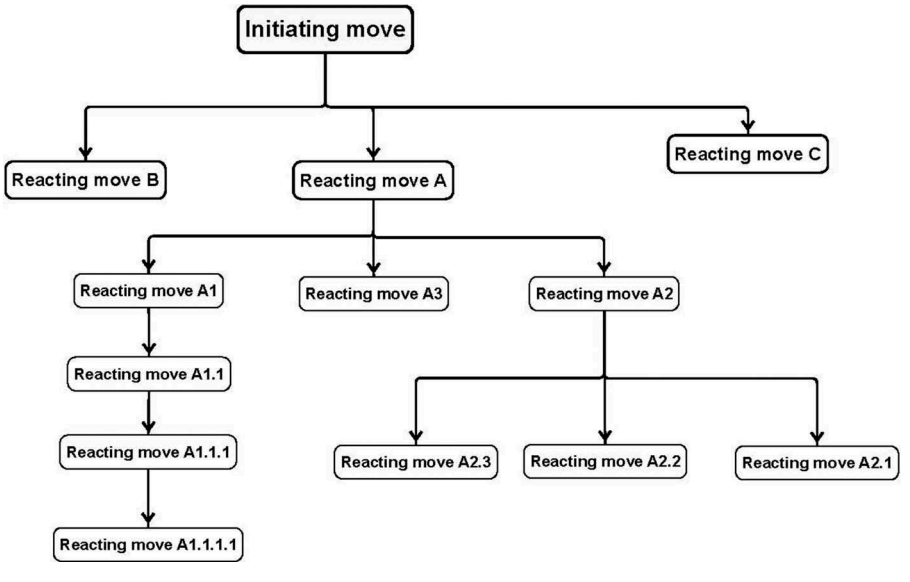

Figure 2. The "branching" structure of Facebook news comment exchanges.

with most of the comments replying directly to the initiating ones. While horizontal exchanges were characterized with large number of commenters and their parallel comments, vertical exchanges in the data engaged only up to six participants and comments. Moreover, as horizontal interaction involved more readers and generated more exchanges of ideas, some of their comments became the departure point for smaller, more narrow-scoped, vertical interaction between a small number of readers. In other words, many shorter vertical exchanges were contained within large horizontal ones, making it impossible to exclusively categorize an exchange as either horizontal or vertical.

4.3.4 *Polarization of viewpoints*

4.3.4.1 ***"Support" exchanges.*** Regarding the level of support and/or confrontation between the interactants, the exchanges in this study showed clear signs of polarization of opinions. In one extreme where there was unanimous agreement between the interactants, most or all of the moves done were Respond-Support ones such as Develop and Agree moves, which show positive reaction to previous moves without sustaining the discussion. Four of the exchanges in this study were labeled "Support" exchanges for possessing such move pattern. Three of such exchanges grew horizontally, as illustrated in the structure of exchange E20 (see Figure 3). This exchange started with Craig's article-comment, which received five replies containing supporting moves. One of such replies made by Brigit was further supported by Kay and then Megan, making a vertical branch exchange.

4.3.4.2 ***"Confrontation" exchanges.*** The opposite of "Support" exchanges are "Confrontation" ones. All the nine confrontation exchanges identified in the data were incomplete and ended with Rejoinder-Confront-Counter moves that offer alternate positions to the preceding comments and require the previous interactants to

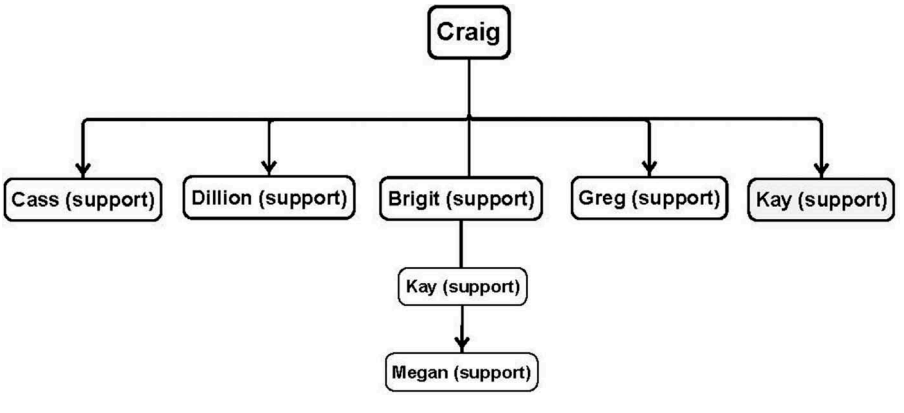

Figure 3. The structure of horizontal "support" exchange E20.

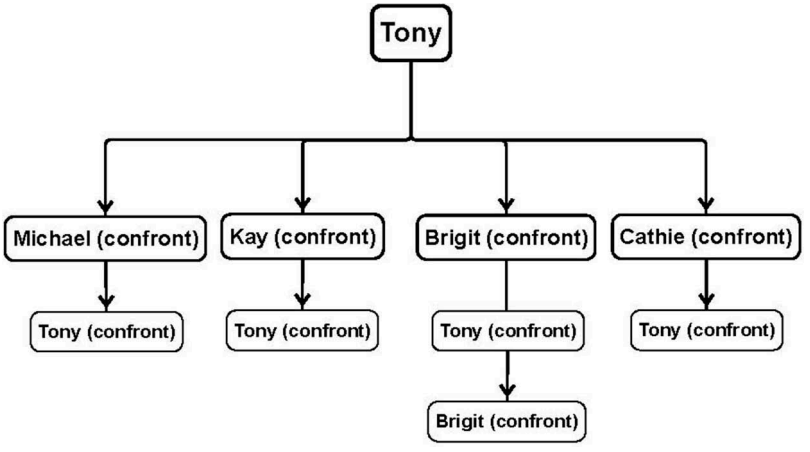

Figure 4. The structure of horizontal "confrontation" exchange E48.

respond to. Throughout these confrontation exchanges, interactants constantly disagreed with each other and challenged and rechallenged each other. Exchange E48 (see Figure 4) illustrates horizontal interaction in which four Facebook users disagreed with Tony's initial comment in parallel comments. Tony then replied to these in confronting moves and received in return some more confrontation. Exchange E55 (see Figure 5), on the other hand, showcases a vertical exchange. The initial comment by Jules only had three replies, but one of them developed into a vertical line of debate between Jules and John who disagreed with her. At the same time, Jules also replied to the other confronting moves with more confrontation.

4.3.4.3 ***"Alternation" exchanges.*** The other 12 exchanges were labeled "Alternation" to acknowledge the presence of opposing viewpoints and the switching of turns between commenters of each viewpoint who supported like-minded people and confronted the opposite side. In alternation exchanges, polarization of opinions could be further observed as many commenters at the same time either lent support to a fellow reader or confronted them and two opposing schools of thoughts gradually emerged from the interaction. Between the two extremes of "Support" and "Confrontation," the 12 "Alternation" exchanges in the data showed mixture of agreement and disagreement among interactants, resulting in the co-existence of supporting and confronting moves in these exchanges with complex organizations.

An exchange like E32 (see Figure 6 below) with an apparently high level of agreement among its seven commenters and horizontal direction of development was still categorized as "Alternation" instead of "Support" because one particular commenter (Jud) showed disagreement with Mark's initiating

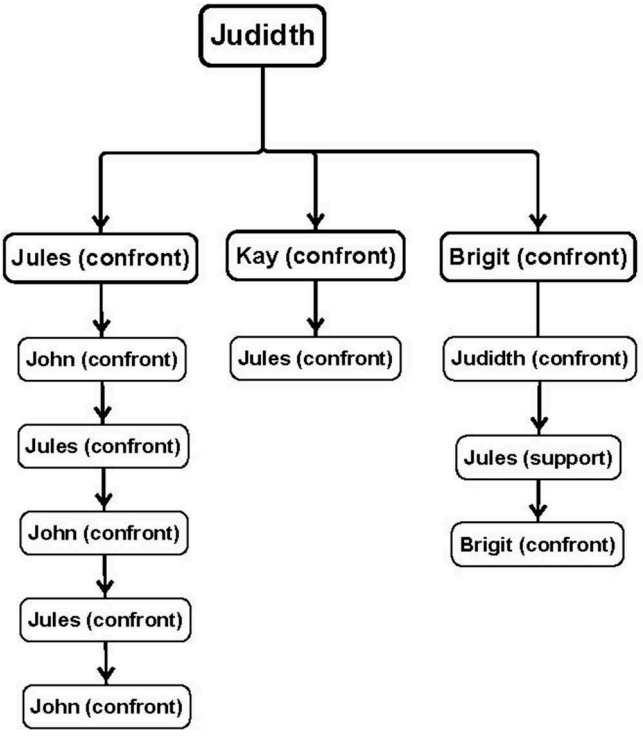

Figure 5. The structure of vertical "confrontation" exchange E55.

comment and thus attracted five more comments with both confronting and supporting moves from the other commenters who shared viewpoints with Mark and disagreed with Jud. Jud further replied to some of those comments, making this sub-exchange a vertical one branching from the horizontal main exchange E32 initiated by Mark. But for this branch of vertical exchange starting from Jud's, E32 would have been labeled "Support" for the unanimous agreement that the commenters showed toward Mark's initiating comment through supporting moves.

Another illustration of "alternation" is exchange E35. In this exchange initiated by Wendy, four commenters disagreed with her and performed confronted moves in response to her comment in parallel manner, making the interaction a horizontal one. Only Jud, the fifth commenter, showed support for Wendy and thus motivated two other commenters to participate in a branch exchange in a vertical direction with mostly supporting moves. Similar to exchange E32, the interaction developed in horizontal order with most comments coming from one side of the argument, and a branch developed from the main exchange in vertical order focusing on the other side given by an "odd-one-out" commenter.

In some very horizontally expanded Alternation exchanges like E53 and E55, a large number of parallel reply-comments (42 and 16, respectively) aimed at

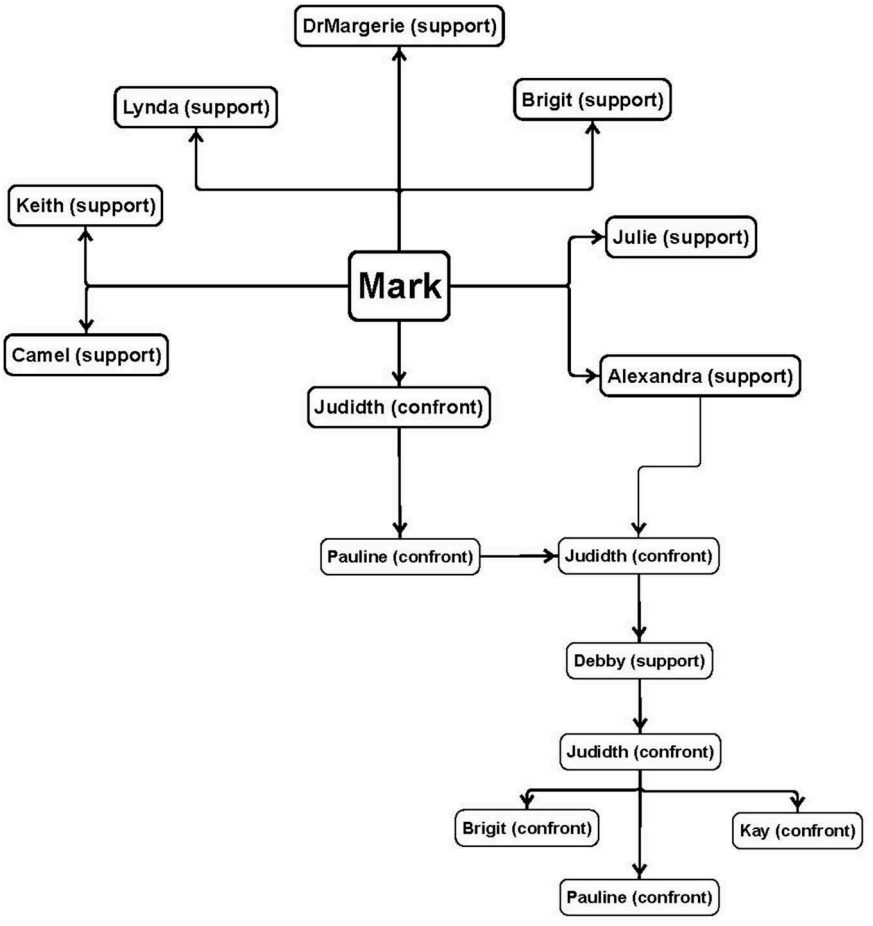

Figure 6. The interaction structure of "alternation" exchange E32.

the initiating one, consisting of both confronting and supporting moves. There was no clear domination of either side of argument, and some particular reply-comments were further developed into branch exchanges with a few contributors. On the contrary, in the much less developed exchanges, the initiating comments received only one or two replies, but these replies further expanded horizontally or vertically with mixture of supporting and confronting moves, earning these exchanges the "alternation" label. Thus, even in exchanges of only six or seven comments in total, it was still possible to observe polarization of viewpoints.

The features of these three categories of exchanges in terms of their move patterns, levels of expansion, and directions of development are summarized in Table 3 below (see Appendix C for the full script of the example exchanges). Overall "Support" exchanges where most moves performed were of supporting nature tended to develop horizontally, were the least frequent in the data, and contained the smallest average number of comments, with also the smallest

Table 3. Categories of exchanges of Facebook news comments based on move patterns.

Description	Support exchanges	Confrontation exchanges	Alternation exchanges
Number of exchanges	4	9	12
Average number of Facebook users per exchange	6	5.4	10.3
Average number of comments per exchange	7.75	10.22	13.67
Average number of words per comment	15.77	54.57	28.42
Level of agreement	Strong agreement	Strong disagreement	Mixed agreement and disagreement
Typical types of moves	Response-Support moves (Develop, Agree)	Rejoinder-Confront moves (Rebound, Counter, Refute)	Both Confront and Support moves
Direction of interaction	More horizontal (3 out of 4 exchanges)	Both directions (4 horizontal, 5 vertical exchanges)	More horizontal (8 out of 12 exchanges)

average word count per comment. Compared with "Support" exchanges, "Confrontation" ones were dominated by confronting moves, were more frequent in the data, developed in both horizontal and vertical directions, contained much more comments, and had the greatest word count per comment — over three times larger than that for "Support" exchanges and almost twice as that for "Alternation" ones. Lastly, the combination of both supporting and confronting moves at roughly equal proportions made "Alternation" exchanges the most salient in the data of this study. Unsurprisingly, this last type of exchanges also engaged far more interactants than the other two, had much more comments per exchange, and tended to expand horizontally.

4.4 *Research question 3: appraisal language in the Facebook news comments*

The data revealed that Affect appraisal was used far less than the other three types, accounting for only 8% of all appraisal items. Meanwhile, Judgment and Appreciation types of appraisal were produced more frequently in similar proportions (28%). To help interactants grade their attitudes in those three broad categories, Graduation lexis was used generously and was the most salient feature in the analyzed comments, making 36% of all appraisal items found. Of the three sub-categories of Graduation appraisal, interactants used Augmentation words and phrases significantly more than the other types (60% of Graduation lexis) to add emphasis to and intensify their points. The marked discrepancy between the use of Affect appraisal and the other categories was possibly an indication of interactants' inclination to express more of their judgments and evaluations than their emotional states, and the prominent presence of augmenting language implied a tendency to intensify those attitudes, either positive or negative.

Table 4. Summary of appraisal language across move types.

	In all moves	Respond moves	Rejoinder moves	Support moves	Confront moves
Average number of appraisal items per move	2.74	2.39	2.98	2.59	2.85
Affect	0.22	0.23	0.21	0.27	0.19
Judgment	0.76	0.56	0.95	0.67	0.88
Appreciation	0.76	0.74	0.95	0.77	0.74
Graduation	1.00	0.90	1.09	0.92	1.07

4.4.1 *Appraisal language across move types*

Table 4 encapsulates how appraisal language was used in different types of moves.

In general, there was more appraisal language in Rejoinder moves than in Respond ones. Moreover, slightly more appraisal language was also found in confronting moves than in supporting ones. This feature may imply that the Facebook users in the data were more interpersonally involved in the discussion when they confronted rather than when they supported each other, especially when they wanted to prolong the discussion through Rejoinder moves. This finding also echoes the previous ones in Section 3.3 regarding the length of the exchanges, with Confrontation exchanges having more commenters contributing more and longer comments than Support exchanges, indicating greater reader engagement in the interaction of confronting nature. Interestingly, although the interaction with Respond and Support moves seemed less developed, it contained slightly more Affect appraisal language than the more prolonged interaction with Confront and Rejoinder ones.

Of the five specific move types most commonly found in the data, namely Develop, Agree, Rebound, Refute, and Counter, on average Refute moves had the most, approximately four and a half, appraisal items per move. One way to interpret this is that Refute moves were interactants' self-defensive, confronting response to previous challenging moves done by other interactants, so interactants may be more interpersonally involved in this move than in other types.

4.4.2 *Appraisal language across patterns of exchanges*

The appraisal language was also analyzed according to the three patterns of exchanges identified in Section 3.3. The findings of this analysis are presented in Table 5.

In general, there were noticeable differences among the three patterns of exchanges regarding the use of appraisal language. Overall, appraisal language was used most in Confrontation exchanges with about three and a half items per move. More specifically, despite having fewest and shortest comments, Support exchanges had far more Affect items and much less Appreciation items per move and than any other categories, which suggests that more feelings and emotions are expressed in this type of exchanges. Meanwhile,

Table 5. Appraisal language in patterns of Facebook news comment exchanges.

	Support exchanges	Confrontation exchanges	Alternation exchanges
Total number of appraisal items	82	378	374
Average number of appraisal items per Move	2.83	3.57	2.20
Affect	0.41	0.22	0.18
Judgment	0.97	0.95	0.61
Appreciation	0.48	1.10	0.60
Graduation	0.97	1.29	0.81

Confrontation exchanges topped with Appreciation and Graduation items. In other words, in Confrontation exchanges, interactants seemed to express their preferences and evaluations of objects more frequently as well as used more language that helps them grade their attitude. Such a contrast reflects the distinct move patterns in these exchanges, as Confrontation and Support exchanges were the two extreme patterns with either strong confrontation or support between the interactants. With mixture of both supporting and confronting moves, Alternation exchanges were often in the middle in levels of appraisal categories and generally had more moderate use of appraisal than the other extreme categories.

5. Discussion

The findings from the current study add to the general consensus that there is more confrontation than support, or more disagreement than agreement, in the online news reader comments across platforms as revealed in Section 1. To be specific, based on the SFL's speech function network (Eggins and Slade 1997), this paper indicates that at the specific level of move, the Facebook news comments contained more confronting moves than supporting ones. The most frequently performed moves in the data in decreasing order of frequency were Counter, Develop, Rebound, Refute, and Agree moves, three of which are of confronting nature. At the more general level of interactional patterns, there were also more Confrontation exchanges than Support ones in the data. Moreover, the paper also deepens our understanding of how such moves were realized linguistically. Further lexical analysis showed that Facebook news readers used more appraisal language in confronting moves than in supporting ones, which implies higher levels of interpersonal engagement in the former move type. All these findings point to the conclusion that Facebook news comments seem to show more conflict than support among interactants. On the one hand, this reflects the nature of news consumption, in which the more controversial and political topics attract wider readership. On the other hand, the act of constantly challenging each other is also a sign of equal power status among Facebook interactants, similar to that observed between friends or close family members' casual face-to-face conversations

(Eggins and Slade 1997). Thus, these findings lend support to the notion of user-generated contents as space for public democracy, which is often discussed in recent studies of journalism and politics (Rowe 2015).

Many of the descriptions of Facebook news comments in this study resonate extant literature on online news reader response. In Bruce's (2010) corpus of 1000 reader comments on news websites, the average word count was 97 words. In our study, the average length of comment was only half as long, of roughly 47 words. Similarly, Ben-David and Soffer (2018) also found news comments on Facebook significantly shorter than those following articles on official news websites. In Bou-Franch and Garcés-Conejos Blitvich's examination of YouTube comments, almost 70% of participants contributed a single comment and an average of 2.1 comments each. The current study produced very similar results, with 65% of Facebook users leaving only one comment, and on average each contributed 2.2 comments.

However, the study also highlights some features of news readers' interaction that are more prominent in Facebook than on some other platforms thanks to Facebook affordances. The concept of affordances in CMC refers to how and the extent at which some platform design features can facilitate or hinder mediated communication (Hutchby 2001). Rowe (2015) compared news comments on the Washington Post news website and its Facebook page and found that interactivity, among many features, was much higher in the former than the latter. However, it should be noted that in 2013 at the time of his data collection, Facebook had not launched the "Reply" function in the comment section, and any comment with at least one reply in his study was coded as "interactive." In our current study, as Facebook news users could choose a particular comment to reply to and tag the involved people in their comments, interaction was quite developed, with at least six turns of comment per exchange and 20 exchanges of six to ten comments. As users scroll down the Facebook comment section, the "top" comments, those that are most liked or replied to, tend to be shown first by default in many news page, and thus they are more likely to attract even more replies and reaction. From the perspective of technological affordances, such design features of Facebook help to explain why many Facebook news comments are left alone and even hidden from initial view, while some particular comments become the centre of attention and are considerably expanded with remarkable numbers of interactants and messages. Moreover, while Facebook company emphasizes the interpersonal relationships and constantly updates Facebook functions to facilitate interpersonal interaction (Tagg and Seargeant 2016), news media tend to rely more and more on third party like Facebook to facilitate the reader response section to avoid the complex task of comment management and to focus more on news production and report (Ben-David and Soffer 2018). Thus, it can be argued that higher levels of interactive and interpersonal

news commenting will possibly be observed on Facebook than on the conventional news websites.

The findings from our study also echo some general remarks on the quality of deliberation found in online news comments. Similar to Bou-Franch and Blitvich, Pillar (2014) and other scholars' conclusion, we found the Facebook news comments under scrutiny a form of public deliberation, though possibly not in its ideal form. Firstly, despite the interactant's willingness to prolong discussion through their choice of Rejoinder moves, most of their exchanges ended incomplete in unresolved conflict, which rarely happens to face-to-face argumentation (Lander 2014; and Cionea, Piercy, and Carpenter 2017). Secondly, the Facebook news comment exchanges in this study tended to expand horizontally in size rather than vertically in depth. Generally, there were more horizontal exchanges than vertical ones in the data, with the former having more interactants and more comments than the latter. However, a closer look revealed that when many of the main exchanges expanded horizontally with multiple interactants adding parallel replies, some of such comments became the starting point for branch exchanges of smaller scale and often in vertical direction. In addition, most interactants in our study did not contribute more than twice, and thus it was likely that their arguments were not given enough time, space, and thought to be thoroughly developed.

However, what Facebook news comments lack in depth, they can compensate in quantity. As the majority of exchanges found in our data develop around disagreement and mutual confrontation, the Facebook news readers were exposed to a range of different or even opposing viewpoints and personal narrations and were motivated to present their positions in fairly rational manner, as seen in another finding from our study. Lexical analysis using the SFL Appraisal framework showed there were marked differences in interactants' use of attitudinal language across move types and exchange patterns. Typically, there was more appraisal language in Rejoinder moves to prolong interaction than Respond ones to conclude it, and more in Confront moves to show disagreement than in Support ones. In the two extreme exchange patterns of unanimous support and strong confrontation, interactants used much more appraisal language than in the more moderate Alternation exchanges. Support exchanges contained more Affect language, but these exchanges were the least common type in our data, while Confrontation ones had more Appreciation and Graduation appraisal items. Moreover, when all exchanges were seen as a whole regardless of their move patterns, there was a tendency toward greater use of appraisal language to show judgments and appreciation and much less expression of affection. These seem to indicate Facebook news readers' choice of language to avoid emotional reactions and to express themselves in more impersonal ways, thus possibly enhancing the quality of their argumentation. Thus, in effect, it can be inferred from the results that Facebook news comments act as a form of mass

public deliberation that exposes individuals to ideologies and motivates them to discuss political topics, but it also reinforces group polarization and thus may not be the ideal place for careful deliberation.

Regarding Affect appraisal language in particular, our finding that Facebook news comments were not very emotional somehow contradicts that by Ben-David and Soffer (2018) who found that news comments on Facebook platform regardless of the topics were more emotional than those on the official news websites. Thus, much more research is needed to understand this particular interpersonal aspect of online news comments.

The comments analyzed in this study also demonstrated a mixture of features typical of both speech and writing. While the exchanges of Facebook comments were sometimes highly interactive with very small time lapses in between and with very short, even one-word clauses like in spoken conversations, they were at other times more similar to written emails with delayed or even no feedback, and at some other times they resembled short argumentative essays with multiple moves done in the introduction, body, and conclusion. Therefore, the findings of this study support the view that the division between spoken and written genres is no longer relevant to genre identification and methods and tools to analyze face-to-face spoken conversations must be considerably adapted to meet the hybrid and changing nature of interaction in user-generated contents.

The current study can serve as an illustration of such necessary adaptations. We employed the SFL speech function network used for face-to-face conversation among a limited number of interactants to understand online news readers' polylogues. Although the speech function network was originally devised to analyze casual conversations, its detailed classification of moves and the mapping of interactive relationships between these moves make the network also suitable for coding other forms of interaction involving multiple participants. Since the descriptions of specific moves and tests to identify those moves are data driven, more linguistic examples and subsequent generalizations based on them can and should be added to more accurately describe the language of online user-generated contents. Furthermore, our study also showed that the linear representation of interaction structure and staging of moves found in conventional conversation analysis and genre studies may not be able to capture and show the true extent of complex many-to-many interaction among news readers. Thus, we employed a more visual method using tree-like maps to show the complex development of multiple strands of interaction within the Facebook news polylogues, at the same time presenting the parallel, horizontal expansion as well as the linear vertical direction and the polarization of viewpoints.

6. Conclusion

To recapitulate, the current study was carried out to help fill the gaps in the literature related to online user-generated interactive discourses, more specifically news readers' comments on Facebook. The SFL approach has provided the study with the two frameworks of Speech functions and Appraisal language for a two-stage analysis of the communicative moves and interpersonal language found in the interactive exchanges of Facebook news readers' comments. The results from these two types of analysis offer an initial overview of these exchanges of comments in terms of their development patterns and language to express interactants' attitudes.

The findings from this study have added more evidence to the existing description of online news response, including its shared features with both traditionally spoken and written language, and its occasionally high level of confrontation and less affective expression between interactants, its polarization of viewpoints, its inclusion of multiple small exchanges within a larger one typical of polylogues, and its tendency to expand horizontally without ever coming to a conclusion. The findings have also helped to draw some distinction between the interaction typical of Facebook news comments and that found in conventional news websites thanks to the concept of affordances.

Because of the exploratory nature and small scale, this study has some limitations that future research can help to address. Firstly, the small size of a purposefully sampled corpus from only one news source prevents the results from being generalized. Therefore, throughout the paper, attempts have been made to compare our findings with those of previous studies whenever relevant to generate more insightful understanding of the data. It must also be acknowledged that it is hardly possible to find news sources with neutral political inclination, and the Facebook page chosen for this study may not be an exception.

With a broader scope of study in a more relaxed time frame, the aforementioned limitations could be significantly overcome. Since the language in CMC in general as well as online social networks in particular is a recent area of research, there is plenty of room for extending and modifying this study in very different directions. The directions subsequently outlined in this section are only some most closely related to the current study. From a more quantitative approach, further studies can compile a larger corpus with criterion-based selection of varied news topics, news sources, time periods, and different demographic groups. Such a sample will enable the researchers to statistically measure the correlation between the occurrence of specific moves and their linguistic realizations as well as between exchange patterns and interactants' choice of specific moves.

Qualitative techniques to investigate Facebook users' perception can also be used to complement the researchers' analysis. Information provided by the interactants themselves can offer valuable insight into the context of language

use and insiders' explanations of the phenomena observed by the outsider analysts. Moreover, researchers can consider involving multimodal data present in the comments such as images, videos, and hyperlinks as both the context of and contents for the analysis.

Another way to extend the scope of the current study is by the inclusion of standalone comments, which can also vary greatly in length, structure, and linguistic realizations. The exchanges of comments and the replies attached to them in this study are a prominent feature of the news comments but by no means sufficient to represent general online reader response. Thus, when the standalone comments and the comments with attached replies are examined together, patterns different from those found in this study may emerge.

Lastly, for a more comprehensive picture of interpersonal interaction in the Facebook news comments, other aspects of interpersonal meaning could be studied. The current study focused on the Attitude branch of the Appraisal theory, but further studies can include analysis of other features such as emoticons and various categories of involvement language including the use of names, slangs, swearing, and humor.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Giang Hoai Tran is a lecturer at the VNU University of Languages and International Studies, Hanoi. Giang takes a genuine interest in building and analyzing corpora of learner writings as well as their applications in EFL teaching and assessment.

Xuan Minh Ngo is also a lecturer at the VNU University of Languages and International Studies, Hanoi. Minh is particularly interested in exploring the social dimensions of language testing and assessment and second language writing via qualitative approaches.

ORCID

Giang Hoai Tran http://orcid.org/0000-0003-0773-6929
Xuan Minh Ngo http://orcid.org/0000-0002-0252-3513

References

Ben-David, A., and O. Soffer. 2018. "User Comments across Platforms and Journalistic Genres." *Information, Communication & Society* Advance online publication. doi:10.1080/1369118X.2018.1468919.

Bou-Franch, P. 2014. "The Pragmatics of Textual Participation in the Social Media." *Journal of Pragmatics* 73. doi:10.1016/j.pragma.2014.08.009.

Bou-Franch, P., and G.-C. Blitvich, Pillar. 2014. "Conflict Management in Massive Polylogues: A Case Study from YouTube." *Journal of Pragmatics* 73 (C): 19–36. doi:10.1016/j.pragma.2014.05.001.

Bruce, I. 2010. "Evolving Genres in Online Domains: The Hybrid Genre of the Participatory News Article." *In Genres on the Web: Computational Models and Empirical Studies* eds. A. Mehler, S. Sharoff, and M. Santini, 323–348. doi:10.1007/978-90-481-9178-9.

Cionea, Piercy, & Carpenter. 2017. "A Profile of Arguing Behaviors on Facebook." *Computers in Human Behavior* 76: 438–449. doi:10.1016/j.chb.2017.08.009.

Cortes, V. 2013. "The Purpose of This Study Is To: Connecting Lexical Bundles and Moves in Research Article Introductions." *Journal of English for Academic Purposes* 12 (1): 33–43. doi:10.1016/j.jeap.2012.11.002.

Eggins, S. 2004. *An Introduction to Systemic Functional Linguistics*. New York: Continuum.

Eggins, S., and D. Slade. 1997. *Analysing Casual Conversation*. London: Cassell.

Frobenius, M., and R. Harper. 2015. "Tying in Comment Sections: The Production of Meaning and Sense on Facebook." *Semiotica* 2015 (204): 121–143. doi:10.1515/sem-2014-0081.

Giles, S., and T. Paulus. 2017. "The Microanalysis of Online Data: The Next Stage." *Journal of Pragmatics,115* 37–41. doi:10.1016/j.pragma.2017.02.007.

Greiffenstern, S. 2010. *The Influence of Computers, the Internet and Computer-Mediated Communication on Everyday English*. Berlin: Logos Verlag.

Halpern, D., and J. Gibbs. 2013. "Social Media as a Catalyst for Online Deliberation? Exploring the Affordances of Facebook and YouTube for Political Expression." *Computers in Human Behavior* 29 (3): 1159–1168. doi:10.1016/j.chb.2012.10.008.

Henry, A., and R. L. Roseberry. 2001. "A Narrow-Angled Corpus Analysis of Moves and Strategies of the Genre: 'Letter of Application'." *English for Specific Purposes* 20 (2): 153–167. doi:10.1016/S0889-4906(99)00037-X.

Herring, S. C. 2004. "Computer-Mediated Discourse Analysis: An Approach to Researching Online Behavior." In *Designing for Virtual Communities in the Service of Learning*, edited by S. A. Barab, R. Kling, and J. H. Gray, 338–376. New York: Cambridge University Press.

Herring, S. C. 2013. "Discourse in Web 2.0:: Familiar, Reconfigured, and Emergent." In *Discourse 2.0: Language and New Media*, edited by D. Tanen and A. M. Trester, 1. Washington, DC: Georgetown University Press.

Herring, S. C., D. Stein, and T. Virtanen. 2013. "Pragmatics of Computer-Mediated Communication." In *Handbooks of Pragmatics [HOPS]; 9*, edited by W. Bublitz, A. H. Jucker and K. P. Schneider. Berlin/Boston: De Gruyter Mouton.

Hille, S., and P. Bakker. 2014. "Engaging the Social News User: Comments on News Sites and Facebook." *Journalism Practice* 8 (5). doi:10.1080/17512786.2014.899758.

Hutchby, I. 2001. *Conversation and Technology*. Cambridge: Polity.

Hutchby, I. 2014. "Communicative Affordances and Participation Frameworks in Mediated Interaction." *Journal of Pragmatics* 72: 86–89. doi:10.1016/j.pragma.2014.08.012.

Ksiazek, T. B. 2018. "Commenting on the News: Explaining the Degree and Quality of User Comments on News Websites." *Journalism Studies* 19 (5). doi:10.1080/1461670X.2016.1209977.

Lander, J. 2014. "Conversations or Virtual IREs? Unpacking Asynchronous Online Discussions Using Exchange Structure Analysis." *Linguistics and Education* 28: 41–53. doi:10.1016/j.linged.2014.08.005.

Larsson, A. O. 2017. "The News User on Social Media: A Comparative Study of Interacting with Media Organizations on Facebook and Instagram." *Journalism Studies. Advance Online Publication*. doi:10.1080/1461670X.2017.1332957.

Lewiński, M. 2010. "Collective Argumentative Criticism in Informal Online Discussion Forums." *Argumentation and Advocacy* 47 (2): 86–105. doi:10.1080/00028533.2010.11821740.

Marcoccia, M. 2004. "On-Line Polylogues: Conversation Structure and Participation Framework in Internet Newsgroups." *Journal of Pragmatics* 36: 115–145. doi:10.1016/S0378-2166(03)00038-9.

Martin, J. R. 2009. "Discourse Studies." In *Continuum Companion to Systemic Functional Linguistics*, edited by M. A. K. Halliday, 154–165. London: Continuum.

Martin, J. R., and P. R. R. White. 2005. *The Language of Evaluation: Appraisal in English*. New York: Palgrave Macmillan.

Mellor, A. 2018. "Classifying Conversation in Digital Communication." arXiv. 31 January. arXiv:1801.10527. *Social and Information Networks*. Retrieved from https://arxiv.org/abs/1801.10527

Meredith, J. 2017. "Analysing Technological Affordances of Online Interactions Using Conversation Analysis." *Journal of Pragmatics* 115: 42–55. doi:10.1016/j.pragma.2017.03.001.

Naab, T. K., and A. Sehl. 2016. "Studies of User-Generated Content: A Systematic Review." *Journalism* 18 (10). doi:10.1177/1464884916673557.

Rowe, I. 2015. "Deliberation 2.0: Comparing the Deliberative Quality of Online News User Comments across Platforms." *Journal of Broadcasting & Electronic Media* 59 (4): 539–555. doi:10.1080/08838151.2015.1093482.

Statista. n.d.. *Number of monthly active Facebook users worldwide as of 1st quarter 2018 (in millions)*. Retrieved from https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/

Stroud, N. J., J. M. Scacco, and A. L. Curry. 2015. "The Presence and Use of Interactive Features on News Websites." *Digital Journalism* 4 (3): 1–20. doi:10.1080/21670811.2015.1042982.

Swales, J. M. 2004. *Research Genres: Explorations and Applications*. New York: Cambridge University Press.

Tagg, C., and P. Seargeant. 2016. "Facebook and the Discursive Construction of the Social Network. The Social Network." In *The Routledge Handbook of Language and Digital Communication*, edited by A. Georgakopoulou and T. Spilioti, 339–353. Abingdon: Routledge.

Tagg, C., P. Seargeant, and A. A. Brown. 2017. "Taking Offence on Social Media Conviviality and Communication on Facebook." Cham: Springer International Publishing.

Walther, J. B., and J.-W. Jang. 2012. "Communication Processes in Participatory Websites." *Journal of Computer-Mediated Communication* 18 (1): 2–15. doi:10.1111/j.1083-6101.2012.01592.x.

Weger, H., and M. Aakhus. 2003. "Arguing in Internet Chat Rooms: Argumentative Adaptations to Chat Room Design and Some Consequences for Public Deliberation at a Distance." *Argumentation and Advocacy* 40 (1): 23–38. doi:10.1080/00028533.2003.11821595.

Appendix A
The Speech Function Network constructed based on Eggins and Slade (1997)

CATEGORIES OF MOVES						Discourse functions	Typical linguistic realizations	Examples (S = speaker)
	ATTEND					Seek attention	Minor clause, formulaic	Hey David!
OPEN	**INITIATE**: the first		Goods & Services = Offer			Give goods and services	Modulated, interrogative	Would you like some more wine?
		GIVE	Information	Statement of fact		Give factual information	Full declarative, no modality, no appraisal	You met his sister.
				Statement of opinion		Give attitudinal/evaluative info	Full declarative, modality, appraising lexis	This conversation needs Allenby.
			Goods & Services = Command			Demand goods and services	Imperative	Look.
			Information	Open question	of fact	Demand factual information	Wh-interrogative, no modality, no appraisal	What's Allenby doing these days?
		DEMAND			of opinion	Demand opinion information	Polar interrogative, no modality, no appraisal	What do we need here?
				Closed question	of fact	Demand confirmation/agreement with factual information	Polar interrogative, no modality, no appraisal	Is Allenby living in London now?
					of opinion	Demand agreement with opinion information	Polar interrogative, modality, appraisal	Do we need Allenby here?
SUSTAIN	**CONTINUE**: the same speaker takes the next turn	**MONITOR**				Check that audience is still engaged	Elliptical major/minor clause (+interrogative)	You know? Right?
			Elaborate			Clarify, exemplify or restate previous move	Full declarative, linked (or linkable) by: for example, I mean, like	S1: He's a bridge player, a naughty one. **S1**: He gets banned from everywhere because of his antisocial or drunken behaviour.
		PROLONG	Extend			Offer additional/contrasting information to previous move	Full declarative, linked/linkable by: and, but, except, on the other hand	S1: she used to be our mutual cleaning lady. **S1: except** that she sacked these guyes, except Roman.
			Enhance			Qualify previous move by giving details of time, place, cause, conditions	Full declarative. Linked/linkable by: then, so, because	S1: we don't need him for this conversation. **S1: 'cause** all you'd get is him bloody raving on.
			Elaborate			Clarify, exemplify or restate previous move after other speaker's intervention	Elaborating nominal group	**S1**: That's David's sister. S2: Oh right **S1: Jill.**
		APPEND	Extend			Offer additional/contrasting information to previous move after other speaker's intervention	Extending nominal group	S1: I don't want to be involved with people. I'd rather be involved with soil erosion… S2: Everybody has to be though **S1: …or desalination.**

(*Continued*)

(Continued).

CATEGORIES OF MOVES					Discourse functions	Typical linguistic realizations	Examples (S = speaker)
		Enhance			Qualify previous move after other speaker's intervention	Enhancing prepositional/adverbial phrase	S1: Look. See that guy? He plays the double-bass. S2: Does he? **S1: in the orchestra.**
REACT: anothespeaker takes the next turn	**RESPOND:** another speaker's move completes the exchange	**Support**	**Develop** similar to "Continue" move but done by another speaker	Elaborate	Restate, clarify, exemplify previous speaker's move	Full declarative, linked (or linkable) by: for example, I mean, like	S1: This conversation needs Allenby **S2 (to S3)**: He's a bridge player, a naughty one.
				Extend	Add further supporting/contrasting details to previous speaker's move	Full declarative, linked/linkable by: and, but, except, on the other hand	S1: He's a bridge player, a naughty one. He gets banned from everywhere because of his antisocial or drunken behaviour. **S2: and** he just yap yap yaps all the time.
				Enhance	Qualify previous speaker's move by giving details of time, place, cause, conditions	Full declarative. Linked/linkable by: then, so, because	S1: I've put the garbage out. S2: Why so early? Does your garbage go on Sunday morning? Mine goes on Monday morning. **S3**: He's just making sure he doesn't miss the early boat on Monday.
r			**Engage**		Show willingness to interact by responding to salutation	Minor clause, typically "yeah" or matched response	S1: Hi – **S2: Hi** S1: Nick? – **S2: Yeah**
			Register		Display attention to the speaker	Repetition of previous speaker's words, paralinguistic expressions (Mmm, Uh huh), ritual exclamations, minor clauses	S1: Who's Stephanie? S2: The cleaning lady. **S3: Oh, the cleaning lady.**
			Reply	Accept	Accept proffered goods and services	Non-verbal, expressions of thanking	S1: Have another? **S2: Thanks** [takes one]
				Comply	Carry out demand for goods and services	Non-verbal, expressions of undertaking	S1: Can you pass the salt, please? **S2: Here** [passes it]
				Agree	Indicate support of information given	Yes, positive polarity	S1: Jill's very bright actually. She's very good. **S2: She's extremely bright.**
				Answer	Provide information demanded	Complete missing structural elements	S1: Where's Allenby? **S2: In London.**
				Acknowledge	Indicate knowledge of information given	Expressions of knowing	S1: You met his sister that night we were doing the cutting and pasting up . D'you remember? **S2: Oh yea**
				Affirm	Provide positive response to question	Yes, positive polarity	S1: Have you heard from him lately? **S2: Yes, I have/only yesterday.**
		Confront	**Disengage**		Refuse to participate in the exchange	Silence	

(*Continued*)

(Continued).

CATEGORIES OF MOVES				Discourse functions	Typical linguistic realizations	Examples (S = speaker)
		Reply	Decline	Decline proffered goods and services	Non-verbal, expressions of declining/ thanking	S1: Have another? **S2: No thanks**
			Non-comply	Indicate inability to comply with prior command	Non-verbal, no expressions of undertaking, negation of verbal command	S1: Could you pass me the salt please? S2: Sorry/Can't reach/Got my hands full
			Disagree	Provide negative response to question	Negation	S1: Is he in London now? **S2: No.**
			Withhold	Indicate inability to provide demanded information	Negative elliptical declarative	S1: When is he due back? **S2: I've no idea**
			Disavow	Deny acknowledgement of information	Expressions of disclaiming knowledge	S1: Well he rang Roman a week ago. S2: Did he? **I didn't know that.**
			Contradict	Negate prior information	No, switched polarity	S1: Suppose he gives you a hard time? **S2: Oh I like hiim a lot.**
	Support	**Track**	Check	Elicit repetition of a misheard element or move	Elliptical polar or wh-interrogative	S1: That guy that used to live with us he was a Limnologist or whatever it's called. **S2: A what?** **S3: Who?**
REJOINDER: another speaker's move prolongs the exchange			Confirm	Verify information heard	Elliptical wh-interrogative, wh- or element from prior move	S1: Well he rang Roman a week ago. **S2: Did he?**
			Clarify	Get additional information needed to understand prior move	Elliptical interrogative, wh- or element from prior move	S1: The cleaner lady won't come back to our place. S2: It's that bad? S1: Yea **S2: What's her name?** S1: It's Stephanie, I think.
			Probe	Volunteer further details/ implications for confirmation	Full clause, new subject, but in logico-semantic relation with the moves it's tracking or tagged declarative	S1: Well he rang Roman a week ago. S2: Did he? I didn't know that. What he rang Denning Road did he? S1: [nods] **S3: Because Roman lives in Denning Road?**
		Response	Resolve/ Repair	Provide clarification, acquiesce with information	Elliptical declarative, mood adjunct of polarity or modality	S1: The cleaner lady won't come back to our place. S2: It's that bad? S1: Yea S2: What's her name? **S1: It's Stephanie, I think.**

(*Continued*)

(Continued).

CATEGORIES OF MOVES				Discourse functions	Typical linguistic realizations	Examples (S = speaker)
	Confront	**Challenge**	Detach	Terminate interaction	Silence, expression of termination	
			Rebound	Question relevance, legitimacy, veracity of prior move	Wh-interrogative, elliptical	S1: I always put out the garbage **S2**: When was the last time you put out the garbage?
			Counter	Dismiss addressee's right to his/her position	Non-elliptical declarative, negation of understanding/rightness	You don't understand, Nick.
		Response	Unresolve	Not provide clarification, acquiesce with information		
			Refute	Contradict previous move	Elliptical declarative, negation	S1: You don't understand, Nick. Guys that do the cleaning up do all of the unseen things that you never thought of like putting out the garbage. **S2: I – no, no – I always put out the garbage.**
			Rechallenge	Offer alternative position		

Appendix B
Categories of Attitudinal Language in the Appraisal Theory

Constructed based on Martin and White (2005) and Eggins and Slade (1997)

CATEGORIES	Sub-Categories	Description	Tests for Identification	Positive Examples	Negative Examples
AFFECT Expression of emotional states Answer: How do you feel about it?	**Un/ happiness**	Happy or sad feelings. Two types: - Mood (own emotional state) - Antipathy (directed feeling at others)	-How happy/secure/ satisfied did you feel? -Person feels [affect] about something -It makes person feel [affect] that (proposition)	Cheer, affection, embrace, laugh, be fond of, adore	Cry, rubbish, abuse, down, angry, misery, hate, dislike
	In/security	Feelings of peace/anxiety		Together, confident, assured, comfortable, trust	Uneasy, anxious, freaked out, startled, surprised, astonished
	Dis/ satisfaction	Feelings of achievement/ frustration		Involved, absorbed, pleased, impressed, thrilled	Flat, stale, cross, angry, furious, bored with, sick of, fed up with

(*Continued*)

(Continued).

CATEGORIES	Sub-Categories	Description	Tests for Identification	Positive Examples	Negative Examples
JUDGEMENT Judgements about the ethics, morality, or social values (other people)	**Social sanction**	Judgements concerned with moral regulation, or ethical/truthful behaviour, the domain of "right and wrong". Two types: -Propriety (how moral) -Veracity (how truthful)	General: -It was [judgement] for/of person to do that -For person to do that was [judgement] **Social sanction** (more common in writing) -**Propriety**: How moral is that behaviour? -**Veracity**: How honest is that person/How believable is that behaviour? **Social esteem** (more common in casual conversations) -**Normality**: How special? -**Capacity**: How capable? -**Tenacity**: How dependable/how committed?	-**Propriety**: good, moral, ethical, law abiding, fair, just, sensitive, kind, caring, unassuming, modest, humble, polite, respectful, reverent, generous, charitable -**Veracity**: Truthful, honest, credible, frank, candid, direct, tactful, upright	-**Propriety**: immoral, evil, corrupt, unfair, unjust, insensitive, mean, cruel, vain, snobby, arrogant, rude, discourteous, irreverent, selfish, greedy -**Veracity**: dishonest, deceitful, lying, manipulative, devious, blunt,
	Social esteem	Judgements concerned with how behaviour lives up to socially desirable standards. Three types: -Normality -Capacity -Tenacity		**ADMIRE** -**Normality**: lucky, natural, familiar, cool, stable, predictable, fashionable, celebrated -**Capacity**: powerful, vigorous, robust, sound, healthy, fit, adult, mature, experienced, witty, humorous, insightful, clever, gifted, balanced, sane, sensible, expert, shrewd, literate, educated, competent, accomplished, productive -**Tenacity**: brave, heroic, cautious, wary, patient, careful, thorough, meticulous, tireless, persevering, resolute, reliable, faithful, constant, flexible, adaptable, accommodating	**CRITICIZE** -**Normality**: unlucky, odd, peculiar, unpredictable, dated, retrograde, obscure -**Capacity**: mild, weak, unsound, sick, immature, childish, helpless, dull, grave, slow, stupid, thick, insane, naïve, inexpert, foolish, uneducated, ignorant, incompetent, unaccomplished, unproductive, unsuccessful -**Tenacity**: timid, cowardly, rash, impatient, impetuous, hasty, capricious, weak, distracted, despondent, unreliable, unfaithful, inconstant, stubborn, obstinate, willful

(*Continued*)

(Continued).

CATEGORIES	Sub-Categories	Description	Tests for Identification	Positive Examples	Negative Examples
APPRECIATION Reactions to/ evaluations of reality (objects, processes)	**Reaction**	Reaction to an object, whether people like it	**General**: -Person considers something [appreciation] -Person sees something as [appreciation] -**Reaction**: Did the object grab me? Did I like the object? What did I think of it? -**Composition**: How did it go together? Was it hard to follow? -**Valuation**: How did I judge it? Was it worthwhile?	Captivating, engaging, fascinating, exciting, moving, lively, dramatic, intense, remarkable, notable, sensational, fine, good, lovely, beautiful, splendid, appealing, enchanting, welcome	Dull, boring, tedious, dry, uninviting, flat, predictable, monotonous, unremarkable, yuk, nasty, plain, ugly, repulsive, revolting
	Composition	Evaluations of detail, balance, harmony, texture of objects/processes		Balanced, harmonious, unified, symmetrical, proportioned, consistent, logical, simple, pure, elegant, lucid, clear, precise, intricate, rich, detailed	Unbalanced, discordant, irregular, uneven, flawed, contradictory, disorganized, shapeless, distorted, extravagant, unclear, plain, simplistic
	Valuation	Evaluations of the content/ message being put across.		Penetrating, profound, deep, innovative, original, creative, timely, long awaited, landmark, inimitable, exceptional, unique, authentic, real, genuine, valuable, priceless, worthwhile, appropriate, helpful, effective	Shallow, reductive, insignificant, derivative, conventional, dated, overdue, untimely, everyday, common, fake, worthless, pricey, ineffective, useless
GRADUATION Grade speakers' attitude	**Enrichment**	Speakers add an attitudinal coloring to a meaning when a neutral word could be used instead	-Choice of lexical items: "he killed them at cards" (instead of "he won at cards") -Explicit comparison: "to run like a bat out of hell"		
	Augmenting	Speakers intensify attitudinal meanings	-Intensifying adverbs: very, really, incredibly -Repetition of neutral word -Lexical items of quantity: heaps, much, a lot, totally, everyone, all		
	Mitigation	Speakers down-play attitudinal meanings	-Adverbs: Just, merely, only, quite, hardly, scarcely, (not) much, actually		

Appendix C Examples of Exchange Patterns

A horizontal "Support" exchange – E20

Craig: I want to see him carry out his pledge to call an election if the senate refuses to pass the budget. or is that another blatant lie

Dillon: doubt he would. he realises he'd get completely shafted in a snap election

Cass: The way it's going, we could get a DD..bring it on..and get rid of this heartless govt…

Greg: Blocking supply precipitates an election!!! Normally that is.

Megan: If the senate blocks supply, but Brer R'Abbott refuses to call an election, can't the GG sack him?

Brigit: We can only hope he'd do the honerable thing.

Problem is there's been nothing honerable in what he's already done, so I bet he'd not do it.

Kay: Sorry **Brigit** he has no concept of honour

Megan: he couldn't even spell the word "honour".

Kay: He won't do it all he has ever wanted is to be PM

A horizontal "Confrontation" exchange E48

Tony: The debt has to be paid back… thanks to the idiot socialists & (false) " greens"… that's life… get over it & get on with it….

Cathie: Can you explain how 30 yr olds and under are meant to survive if they lose their jobs – for six months without unemployment benefit?

Tony: There are always catch nets. I advocate food stamps and provision for shelter at night. The days of a handout mentality have to end. We are paying around $33,000,000 every day to service interest alone. Imagine what we could do for young kids with that $33,000,000 every day in a different part of Australia? The party is over & we are left with the hangover….

Michael: There was no crisis. You have been sucked in by bullshit.

Tony: I have been educated to the reality. Socialist followers are the ones being sucked in like sheep.

Kay: Tony you are an idiot, there aren't enough shelters for the homeless already without the massive increases in homelessness that this budget will lead to. We have the 3rd lowest debt in the world and a triple A rating means we are more than able to service our debt which is what really matters. Your precious Coalition under Howard sold off our profitable assets (commonwealth Bank made as much profit this year as Howard sold the bank for) ensuring that our revenue would fall, he also cut taxes, another revenue cut. go and read a few facts and maybe lern about economics.

Tony: So **Kay**…. you think paying $33,000,000 every day just to service debt (for what?) is OK? At what point would you consider debt and interest to be unsustainable??? Are you paying taxes?

Brigit: Tony go & volunteer in a refuge or a foodbank & put a face to those you are perfectly willing to judge and vilify.

Tony: Brigit… put a face to you name so I know you aren't a troll & I"ll consider responding.

Brigit: Classical action of a bully. Belittling posturing and badgering than admit that maybe they've been misinformed. False accusations is a classic bullying ploy to devalue the opinions of someone who dares to disagree with them.

The simple fact you have not recognised WHAT my current profile photo actually is says a lot more about your age/experience than really much else.

& FTR I recently worked out I've done various Volunteer for 30 years. The last decade+ was in tuck shops and the local foodbank, & frankly I bet if you actually have a heart, you'd be horrified at what I've seen.

A vertical "Confrontation" exchange E55

Jules: I'm sick of seeing people saying that this budget "takes" more from lower income earners on welfare than higher income earners. No it doesn't! People on welfare are being "given" less – welfare is a gift not a right! And I am the provider of a one in a one income family that gets welfare so I do know what I am talking about!

Brigit: As the parent of a disabled teen I know what I'm talking abut when I say I didn't know the Government was into "gag gifts".

Judith: I am sorry that your child is disabled, but that child is still your responsibility to feed, clothe and shelter. Any benefits ARE a gift from the taxpayers

Jules: Absolutely **Judith**. The nations attitude needs to turn from being entitled to being grateful that we live in a nation with any amount of support for the people who need it most.

Brigit: Wow I hope you never have to deal with someone with a disability with that arrogant elitist attitude

No parent of disabled children asked for it – we do the best we can, struggling with little or no useful support, while being judged by narrow minded gits with no medical knowledge who make the most cruel inhuman comments that only makes a bad situation even more difficult.

My daughter can do a lot of things – even maybe hold down a job – if given the proper support. But people are more interested in what she cannot do & not what she can do.

Kay: not a very saint like attitude there saintgran Judith

Kay: Jules you make the assumption that everyone on welfare have never contributed. most peole on welfare spend all of their income, therefore they pay GST, excise etc, they contribute through their spending not only by those taxes but by helping to keep other people in work. Many off us have worked for years, many pensioners started work at 14 or 15 and have worked and paid tax for 50 years as well as raising the present taxpayers without benefit of baby bonuses, child care rebates, 1st home owners grants, paid parental leave etc. maybe if you actually looked beyond your McMansion, shiny new 4WD and privileged life to the reality of this world you might begin to understand. but i doubt you would bother as you are clearly selfish and self centred.

Kay: Oh I forgot we also had to contend with mortgage interest rates ranging from 11%–17% when our children were young

Jules: You make some very huge assumptions there **Kay**… All of which are wrong. I don't at all think pensioners have never contributed… And by all means think that pensioners should get the assistance they do. I never once said any differently. If I had it my way, all baby bonuses, child care rebates, paid parental leave would be scrapped .. That's where they need to take it from.. Not pensioners. My only point was that Australia is a blessed nation and the fact that welfare exists at all means that we are all a priveleged nation. If you understand where I am coming from… There are family's who chuck a stink cause the government is giving them less to raise their kids… When it is our responsibility.. Not the governments. And Brigit it would be horrible and I'm glad there is extra assistance for you. There is a difference between people in genuine need (like pensioners and people with a disability etc.), and people who expect things cause they are slack. My entire point is that we should be grateful for what we get. Kay… We do not live in a mansion.. We do not have a shiny new car.. And the only thing privileged about our life is that my husband went to uni, got a degree (debt is still being paid off).. Therefor has a job Which means we can then make sacrifices so that I can stay home with the kids. We see that as a privelege. However we have worked hard for everything. Although we do get family assistance.. We don't rely on it as we know it's a gift and it could be taken at any time. We are not selfish and self centred.. We work hard and are grateful for what we have.

Jules: Also… We don't even have the money to have a house mortgage. One of the sacrifices we made deciding to stay home and parent our young children. Not selfish, not self centred.. We are in the reality of this world and we do understand

Jules: Additionally **Kay** it is important to make clear exactly what Joe Hockey has said – pension is income replacement while family welfare is income supplement. Very important to distinguish the two:)

John: Sez the guy who wants to replace families' incomes while they go away and have babies.

Jules: I think the parental leave payments are ridiculous and an unnecessary waste of money, If families choose to have babies they should make sacrifices and support that with their own income.. Not welfare.

John: Seems you and Hockey have a definition conflict.

Jules: Family tax benefits (welfare) is income supplement according to Joe Hockey, paid parental leave is income replacement… Two different things John Gaunt, two different things. I agree with Joe Hockey that pension is important but disagree that the size of his paid parental leave is important – labor's was just fine. Joe Hockey and I don't have a definition conflict, however I would disagree with him on his paid parental leave plans.

(*Continued*)

(Continued).

John: PPL = replacement; Pension = replacement? Weasel words to back arguments about which welfare is most worthy. Some family welfare is as necessary for the good of society, as any other sort of "worthy" welfare. Complaints here are mostly about the benefit to society of withdrawal of welfare from… everywhere. With grown kids and a job, I only complain for those I know need the help I pay for.

A horizontal "Alternation" exchange E32

Mark: The People Want a
"New Election"" BRING IT ON.

DrMargerie: Ooooooo Yes please early election.

Brigit: Please please please.
Get rid of this creaton & his cohorts before they can trash the country further

Lynda: Bring on a DD and block all supply bills in the Senate

Keith: Please yes yes a new Election pleeeese

Carmell: that's not a threat!!!

Judith: Spend more taxpayer money on another election? Economically rather absurd

Alexandra: The problem is that there are no suitable candidates to vote for. Unless I am missing something, I have yet to see a party worthy of my vote.

Pauline: Judith, the money spent on a new election would be worth every penny to get this corrupt and inhumane pack of lying idiots out of government. That's what I call investing in the future of this country, its health, education, people and environment.

Judith: Just hate to see even more taxpayer being wasted on an election AND there is no-one to vote for, **Alexandra**, Labour stuffed the country, Liberal is into harsh measures. Might be better not to vote, pay the fine, contribute to the country's coffers

Debby: If you can't find someone to vote for then find something to vote against.

Judith: That makes no sense at all. Why would anyone vote for someone did not want in charge of our nation just to vote against another.

Brigit: Debby has a valid method **Judith**.
I'v use it for decades after seeing a Robert Heinlein comment about it. I give the highest number to the person I least want to be elected and work backwards.
Very satisfying doing that with the Senate ballot… putting the < expletives> last

Kay: Strangely enough **Judith** that is exactly how this mob got elected in September 2013

Pauline: I think our only option is the Greens. We are in the most dangerous situation on climate change. No other party addresses that issue with any clarity or logic, they prefer to ignore it. The Greens have a much better budget proposal than anyone else. I want a humane government that care for the welfare of every Australian. I want a party that will protect me from having my garden fracked, my water poisoned and my Reef mined, my forests destroyed and the future of the children of this country sabotaged.

Julie: One can only hope…