

Systemic cohesion in social media conversations: Cases on Facebook and Twitter

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ABSTRACT

As a new way of communication, social media conversations on the Internet do have some characteristics that are different from common face-to-face conversations. One of the differences lies in the existence of systemic cohesion in addition to the established conventional cohesion. Systemic cohesion is a form of structural and textual unity which is generated by the system of a social media platform and is not available in offline discourse. This article is aimed at describing the phenomena of systemic cohesion of social media conversations, particularly on Facebook and Twitter, by analyzing them based on the classification of cohesive devices made by Halliday and Hasan (1976, 1985). In general, systemic cohesion can be distinguished into structural and textual cohesion. The former is represented by the functions of conversation components, indentation, and vertical line whereas the latter is implemented in the form of mention and hashtag. Facebook and Twitter share both similarities and differences in either case.

Keywords: Conversation; social media; systemic cohesion

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INTRODUCTION

Cohesion has long been an interesting issue in studying discourse. Along with coherence, it is believed as the other element that builds the unity of a text. De Beaugrande (1981) even includes the two into seven discursive standards besides intentionality, acceptability, informability, situationality, dan intertextuality. However, there remains a controversy about the differences between these two elements. Some experts, such as Halliday and Hasan (1976) and Martin (1992) count cohesion and coherence as the same thing and prefer using one of the terms— cohesion or coherence only—to refer to two different perceptions whereas the others, e.g: Widdowson (1978), De Beaugrande and Dressler (1981), and Hoey (1991), view them as two separated entities. It is also frequently questioned whether cohesion only deals with the

structure of a text or it has something to do with the meaning as well.

Halliday and Hasan (1976) tend to use the term 'cohesion' rather than 'coherence' for describing the relations between parts of a text, even though what they refer to sometimes includes coherence properties. They view cohesion as relations of meaning that exist within the text and its concept is semantic rather than structural or syntactical. However, the notion of cohesion as a semantic relation here seems contradictive to its detailed descriptions into grammatical and lexical types which involve syntactical elements. Martin (1992) also uses the same term, 'cohesion' to refer to the relation between either forms or meanings within a text. He even sees cohesion restrictedly as kinds of conjunctions between sentences

Meanwhile, Widdowson (1978) views cohesion and coherence as two different entities. He defines the

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former as the overt relationship expressed through sentences whereas the latter constitutes the relationship between the illocutionary acts whose propositions—not always overtly linked—are being used to perform. Later, De Beaugrande and Dressler (1981) make this distinction even clearer by defining cohesion as the ways in which the components of the surface text—i.e. the actual words we hear or see—are mutually connected within a sequence. He contrasts it with coherence as the ways in which the components of the textual world—i.e. configuration of concepts and relations which underlie the surface text—are mutually accessible and relevant.

Hoey (1991) further distinguishes cohesion and coherence by emphasizing that cohesion is a property of the text whereas coherence is a facet of reader's evaluation to the text. Therefore, coherence is a sort of judgement that is subjective and may vary from one reader to another. In same way, Thompson (2014) also views cohesion as a textual phenomenon, that is linguistic devices by which speaker can signal the coherence of a text whereas coherence itself is a mental phenomenon placed in the mind of the writer and reader. Therefore, unlike cohesion, coherence cannot be identified and quantified.

By considering various perspectives above, cohesion and coherence can be considered as two separated aspects in discourse. However, they have a close relationship since both are two significant elements that build the unity of a text. In addition, cohesion can also be seen a part of coherence in which the emergence of the former depends on the existence of the latter. Cohesion as a structural or lexical tie between two parts of a text has the function to mark coherence, that is the relation of meanings established within them.

Types of cohesion

Similar to its definitions, the types of cohesion also vary according to the classifications proposed by different experts. One that has become primary reference for analyzing cohesion is Halliday & Hasan's (1976) theory which distinguishes cohesion from grammatical and lexical point of view. Grammatical cohesion includes reference, substitution, ellipsis, and conjunction as its devices whereas lexical cohesion involves reiteration and collocation. Reiteration itself is indicated by the use of the same words, synonyms or near synonyms, superordinates, and general words. This classification has become the basis of systemic functional linguistic (SFL) viewpoint on cohesion developed by Halliday and other scholars.

Later, Halliday & Hasan (1985) updated their perspective on textual cohesion by introducing the terms co-reference, co-classification, and co-extension to classify different cohesive devices based on their tie relations. Grammatically, co-reference is constituted by referential cohesive devices— i.e: pronominals, demonstratives, definite articles, and comparative— whereas co-classification is constituted by nominal, verbal, or clausal substitution and ellipsis. Co-extension

itself is a form of lexical cohesive relation. Along with co-classification, it represents generic relations, namely repetition, synonymy, antonymy, and meronymy. Co-reference and co-classification relation can also be manifested instantially by lexical cohesive devices, such as equivalence, naming, and semblance. These all represent componential relations which are parallel to organic relations. Organic relations themselves comprise conjunctives and adjacency pairs as grammatical cohesive devices and continuatives as the lexical ones. Both these relations are typical of non-structural cohesion as the opposite of structural cohesion which covers parallelism, theme-rheme development, and given-new organization.

Another perspective of cohesive relations comes from Martin (1992). Similar to Halliday & Hasan (1976), Martin divides cohesion principally into two main groups as well, i.e.: grammatical and lexical cohesion. However, its structure is taxonomically different. Here, grammatical cohesion comprises referential item, substitution, ellipsis, and conjunction. Conjunction itself can further be subdivided into internal and external conjunctions as well as logico-semantics which consists of elaboration, extension, and enhancement. Meanwhile, lexical cohesion can be distinguished into taxonomic and non-taxonomic. The former can further be differentiated into superordination and composition whereas the latter comprises nuclear experiential and activity expectation. Superordination can then be subdivided into inclusion (i.e.: hyponymy, co-hyponymy) and similarity (i.e: repetition, synonymy, antonymy,) whereas composition subordinates collectivity, consistency, and constitution (i.e.: meronymy, co-meronymy).

Even though experts have different perspectives on cohesion, they generally agree on its distinction into lexical and grammatical type along with the subclassification of each into various cohesive devices from reference to substitution and repetition to collocation. Recent perspectives on cohesion analysis are likely the development of the immediate theory proposed by Halliday and Hasan (1976) to which new ideas from different viewpoints have been added.

Studies on cohesion

Based on researcher's observation of previous studies on either discourse or social media, there has rarely been any research which specifically studies the phenomena of cohesion in social media discourse. The only study found which matches the criterion is the analysis of cohesion in Javanese Facebook conversations made by Sukoyo (2010). Therefore, it is necessary to conduct further research on the topic in order to complete and update the established linguistic studies. Past researches on cohesion and coherence typically dealt with the concepts of cohesion and coherence (Moe, 1977; Carrell, 1982), the applications of cohesion and coherence in academic writing (Bamberg, 1984; Fitzgerald & Spiegel, 1986; McCulley, 1985; Neuner, 1987; Palmer, 1999; Parsons, 1991;

Tierney & Mosenthal, 1983; Witte & Faigley, 1981), the relation of cohesion and coherence with readers' understanding on the texts (Klebanov & Shamir, 2006) as well as the measurement of cohesion and coherence (Haswell, 1988; Graesser, McNamara, & Kulikowich, 2011). While all these researchers focused on studying textual materials, some others (Angermeyer, 2002; Gonzales, 2010; Klebanov, Diermeier & Beigman, 2008; Schiffrin, 1985) analyzed cohesion in spoken discourse, such in conversations and speeches.

Regarding the concepts of cohesion and coherence, Moe (1977) argues that cohesive ties which semantically connect sentences help the reader build coherence within a text. Therefore, cohesion contributes much to the comprehension of written texts and, thus, has the function to add textual coherence. Coherence itself is something the reader creates, or wants to create, in the process of reading an integrated text. It can be seen as a cognitive relation behind cohesion. Thus, if cohesion is a phenomenon related to the text, coherence is a matter between the text and its reader.

The distinction between cohesion and coherence is further emphasized by Carell (1982) who insists that cohesion is not coherence. Carrell disagrees with notion of cohesion as a tool for measuring the coherence of a text from the perspective of theoretical-schema on text processing such as reading activity as an interactive process between the text and its reader. She criticizes Halliday and Hasan's (1976) definition on coherence as merely a configuration of textual elements independent from reader factor and rejects its notion as textual coherence.

Meanwhile, dealing with the types of cohesion, in his article on lexical cohesion in telephone conversations, Gonzales (2010) proposes a new term 'associative cohesion' in addition to the established grammatical and lexical cohesion. Associative cohesion covers associative relations that operate across long or short stretches of discourse (either within or across utterances and turns). It implies the notion that all collocates involve particular associative relation, but not all associates need to have collocative relations.

From the different perspectives on the concepts of cohesion and coherence above, it can generally be inferred that cohesion is the textual markers for coherence. Coherence itself is a sort of shared knowledge between participants (i.e: speaker-listener and writer-reader) in discourse. Thus, the existence of cohesion relies upon the availability of coherence between the messages in discourse.

Social media

The advancement of technology has enabled people to communicate in various ways. Different options of communication media are now available to utilize, either oral or written and direct or indirect form. A product of technology which affects much to the development of communication is the Internet. The Internet has likely created a new separated universe called 'virtual world'.

According to Dillon in *Cybertalk* (quoted in Thurlow, Lengel & Tomic, 2004), communication technologies do not tend to replace each other completely but rather they blend together in a sort of communication soup. Thurlow, Lengel, and Tomic (2004) further explain that the Internet is not a single communication technology but rather a collection of different technologies for communicating. It is a system comprised of many sub-systems, and each sub-system has its own genre or type of communication. There is no single way of communicating on the internet and new ways of communicating through the internet are evolving and emerging all the time in response to both technological and social changes. Thus, almost all forms of communication in real world have now been duplicated and can be found in the Internet, from face-to-face conversations to radio and television broadcasts and from telephone calls to letter writings. Simply, the real and virtual world can be said to be parallel one another despite their practical differences.

Holt (2004) states that internet communication creates a climate in which multiplicities of connections provide a great number and variety of opportunities for ideas to be shared. One channel of communication that is currently popular in the Internet is social media. Meanwhile, Carr & Hayes (2015) define social media generally as "internet-based, disentrained, and persistent channels of mass personal communication facilitating perceptions of interactions among users, deriving value primarily from user-generated content". Nowadays, social media have become a daily need for making online conversations as well as sharing electronic materials. By social media, people can share their own ideas to which others can give responses. According to Rohmadi (2016) social media give possibilities to their users for establishing social relationships by making interactions, sharing information as well as building cooperation. He further adds that based on their functions, social media can be distinguished into social networks, forums, blogs, microblogs, social bookmarkings, social photo and video sharing, dan wikis.

Currently, there are lots of social media platforms available to use for different purposes, from just chatting up to photo and video sharing, such as WhatsApp, Facebook, Twitter, Instagram, YouTube, LinkedIn and so on. Although both Facebook and Twitter are the same social media, they are actually different in their subclassifications. The former is categorized into social networking sites (SNS) whereas the latter is included into microblogs. Boyd & Ellison (2013) define social networking site as "a networked communication platform in which participants (1) have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-provided data; (2) can publicly articulate connections that can be viewed and traversed by others; and (3) can consume, produce, and/or interact with streams of user-generated content provided by their connections on the site". Meanwhile, Stec, (2015)

simply defines microblog as a site where users interact in 'real time' using 140 character of messages (which is now extended to 280 characters) to their followers and converse each other using mentions, replies, and hashtags. In more details, Murthy (2012) defines microblogging as "an internet-based service in which (1) users have a public profile in which they broadcast short public messages updates whether they are directed to specific user(s) or not, (2) messages publicly aggregated together across users, and (3) users can decide whose messages wish to receive, but not necessarily who can receive their messages". Currently, Facebook and Twitter are considered as two among many popular social media which attract million active users globally. According to Statista (2019), up to July 2019, Facebook led in the first rank and had approximately 2,4 million of active users worldwide whereas Twitter was on twentieth position with 330 million of population. Other than that, Facebook and Twitter—along with Instagram—have long dominated as the preferred social media for different institutions and events.

The popularity of Facebook and Twitter as social media is not merely due to the enormous number of their active users. Both have also become interesting phenomena to study about. Stoycheff, Liu, Wibowo, & Nanni. (2017) found that over half of all social media studies conducted in the past decade relied on Facebook (52%). As a consequence, not all social network and social media brands are given equal attention in the existing literature. It resulted in a body of scholarship that contains Western and interpersonal communication biases and largely examines Facebook independent of other media uses and effects. Dealing with Twitter, Murthy (2012) argued that it was the most popular social media website. In his article, he took a step back and considered Twitter in historical and broad sociological terms to provide a selected literature review set of directions for sociologists. The article makes connections specifically to Goffman's (1983) interactionist work, not only to make the claim that some existing sociological theory can be used to think critically about Twitter, but also to provide some initial thoughts on how such theoretical innovations can be developed. Similarly, Alhabash & Ma (2017) also considered Facebook and Twitter as two leading social media platforms along with Instagram and Snapchat. In their research, they contrasted these four platforms in terms of intensity of use, time spent daily on the platform, and use motivations among college students which resulted in different values across the platforms.

Thus, social media communication is an interesting phenomenon to investigate from different aspects, including the way languages are used within the platforms. Amidst various social media platforms, Facebook and Twitter can be considered as the most influential ones, particularly due to their uniqueness and popularity at global scale. Therefore, this linguistic study chose them to be the samples for representing the existence of systemic cohesion—that is cohesive

relations generated by the system of application—in social media conversations.

METHOD

This article is a report of descriptive-qualitative research aimed at describing the phenomena of systemic cohesion in social media conversations. However, the material objects were limited to conversations on Facebook and Twitter only since it was a case study which applies purposive sampling technique. The reason for choosing the samples was based on the consideration that Facebook and Twitter were two among the most popular social media platforms on the Internet.

The underlying theory used for analysis was mainly Halliday & Hasan's (1976, 1985) perspective on cohesion. The phenomena of systemic cohesion on both social media were identified as well as compared and contrasted to various types of cohesive devices listed in the theory. The expected findings would be some similarities and differences between the systemic cohesion exclusively applicable in social media conversations and established conventional cohesion of discourse in general.

The data were obtained by observation and documentation technique. As many as conversations coming from posts on Facebook and tweets on Twitter were observed to identify any cohesive relations either between messages within a conversation or between conversations in the same platform which were typically generated by the systems of applications. No specific topic and participants were determined in the data collection. However, purposive sampling technique was applied to choose suitable data to the research purpose for describing systemic cohesion in social media discourse. All the data were actual Facebook and Twitter conversations. However, for the sake of confidentiality, all the account names involved in the conversations were intentionally disguised. The selected data were then documented to be compared and contrasted with various cohesive devices classified by Halliday & Hasan (1976, 1985) to find out the sameness as well as to make distinctions based on their functions.

FINDINGS AND DISCUSSION

Similar to other types of discourse, online conversations on social media also have cohesion as one of the elements that build the unity of the texts. However, the nature of cohesion in social media conversations is not exactly similar to that of common conversations. One special characteristic of cohesive devices working on social media conversations is that they are systemic. It means that the devices are provided by the system under the social media platform in building the cohesiveness of the conversational texts. The roles played by these systemic cohesive devices in building text unity are basically comparable to the conventional cohesive devices introduced and developed by Halliday & Hasan

(1976, 1985). However, there are some additional functions typical to online system of communication.

Particularly on Facebook and Twitter, there are several elements which contribute to the systemic cohesion of conversations on both platforms. These elements can optionally be distinguished into two categories, namely structural and textual cohesive devices. The former comprises conversation components, indentation, and vertical line whereas the latter consists of mention and hashtag. The followings are the detailed descriptions of each of these elements along with its comparison with conventional cohesive devices classified by Halliday & Hasan (1976, 1985).

Systemic structural cohesive devices

What are categorized into systemic structural cohesive devices are the elements outside the message or text of a social media conversation which contribute to the unity of the text. These elements collaboratively build the typical structure of a social media conversation as what can be graphically seen on the structure of conversation provided by the system which consists of conversation components, indentation, and vertical line.

Conversation components

Different from face-to-face conversations which use sounds or voices, conversations on social media

generally use texts to deliver the messages. Therefore, the structure of a social media conversation is visually available to the participants and other people who have access to it. Even before the conversation is started, there is already a template made up of components in the form a row of text boxes to facilitate the participants to put their messages appropriately either for starting a discussion or just responding to another message. It contrasts with a direct conversation whose structure can be gained after the events completed and the speeches transcribed.

To some extent, the conversation structure of social media conversation gives contribution in building the unity of the text since by looking at its components, one can identify the interactions between the messages of the conversants; which message is addressed to what message. The components play role as kinds of cohesive devices which tie two messages together in the conversation. Generally, the structure of a social media conversation is made up of two main components: *post* and *comment*, each of which can be named in different term depending on the platform. The post is the initial message that becomes the center or the axis of conversation to which the other messages respond as the comments.

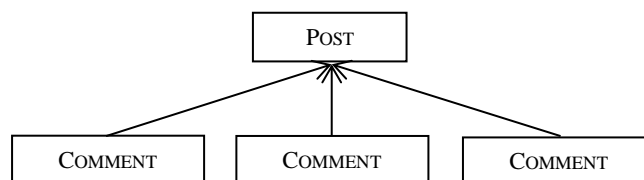


Figure 1. General structure of social media conversations

However, sometimes not all comments are directly addressed to the post, particularly for longer conversations. Some of them may respond to other previous comments instead of the post. It results in a multilevel of communication involving an interaction between two comments in addition to comment and post interaction. To facilitate this possibility, in its later version, Facebook has provided the third component named *reply* which is functioned to put the message addressed to a comment and not to the post or *status update*. It is different from Twitter which maintains using two components only for its conversation unit or *thread*, named *tweet* and *tweet reply*.

Table 1 shows that the structure of Facebook conversation has facilitated messages addressed to comments by providing *reply* as the third component in the structure. Thus, any Facebook user who wants to respond to a comment can easily put the message appropriately on its position as provided by the system. These three different components help the readers to identify interactions within the conversation whether a message responds to the status or directed to the comment above it instead.

In the case of Twitter, we cannot immediately recognize an interaction between comments or tweet

replies in a thread since its template of conversation consists of two components only and does not provide a specific box for any message responding to tweet reply as seen in Table 2. However, there are already other markers that substitute the function for showing a subordinating interaction between two tweet replies, namely vertical line and indentation.

Viewed from Halliday & Hasan's (1985) perspective, these components establish organic relations between messages in conversations since they represents adjacency pairs as manifested by status-comment, comment-reply interactions on Facebook and tweet-tweet reply on Twitter which are equal to statement-response, question-answer, and offer-compliance relations.

Indentation

Like in actual conversations, where the newer utterances which come later must be the responses to the older ones that came earlier, in social media conversations, the messages at lower positions are naturally addressed to the higher ones. However, relying on the order of messages only is not enough since there are commonly lots messages within a conversation and not all of them are directed to the post. A comment may respond to

another comment over it. As what has been described above, on Facebook, such a comment has been treated differently into *reply*. However, besides by using a different name for each of the conversation components, there is already another marker for indicating a subordinative relation in social media conversations. The marker is indentation.

Table 1. Conversation components on Facebook

Level	Component	Function
1st	Status	Start conversation
2nd	Comment	Respond to status
3rd	Reply	Respond to comment

Table 2. Conversation components on Twitter

Level	Component	Function
1st	Tweet	Start conversation
2nd	Tweet reply	Respond to tweet
		Respond to another tweet reply

Indentation is the space between the text and the left margin. It is the format we usually apply to the first line of a paragraph. In the structure of a social media conversation, an indentation indicates a subordination between two messages. However, since each message is placed inside a text box, what is actually indented is the

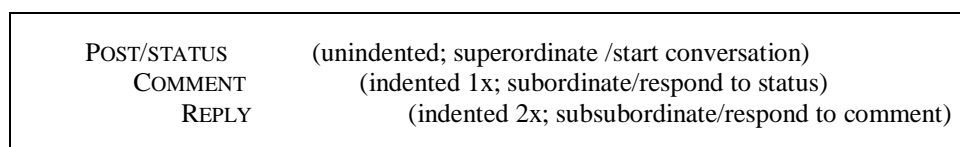


Figure 2. Indentations in Facebook conversation structure and their functions

The following is an example of a simple conversation showing the functions of conversation components and indentation on Facebook.

TH is with AJ:
You'll do great
 (photo of a man sitting in front of a desk and showing a sheet of paper written with: *1st day of school 8-13-18*)
 JW: *What are you learning?*
 AJ: *It's a class called fire service course design.*
 MB: *I almost did this for McKoy*
 TH: *That would have been awesome. Since he carries that lunch box*

In the conversation, TH's message *You'll do great* is the status as its position is at the top and unindented. It is then responded by JW with a question *What are you learning?* JW's message is a comment since its position is right next to the status and indented. Subsequently, AJ tries to answer JW's question by a reply *It's a class called fire service course design*. It can be seen from its position below the addressed message with a wider indentation. In the same way, MB and TH each gives a comment and reply as indicated by the different indentations of the texts.

In a simpler way, all tweet replies in a Twitter thread are also indented to indicate that they are the subordinates of the tweet at the top as a whole. However, different from those of Facebook, when there

emerges a subordinative conversation between two tweet replies, no further indentation is applied. In other words, indentation is only applied to show an interaction between tweet and tweet reply. For showing an interaction between two tweet replies, Twitter uses a vertical line instead of indentation.

Dealing with indentation, the three conversation components on Facebook are treated differently. The post or status is not indented showing that it is the primary message of the conversation and central to the other messages below it. Meanwhile, all comments and replies are both indented to show that they are subordinative to the status. All comments are indented to indicate that they are direct subordinates of or responding to the status. In the same way, any reply is also indented to indicate that it is subordinated by the comment right above it. The difference lies in the length of the indentations. The indentation of a reply is twice wider than that of the comment. In brief, in a Facebook conversation, the status superordinates all the messages below it—either comments or replies—whereas a comment may conditionally be the superordinate of a reply or more where available.

The following is an excerpt of a Twitter thread showing its simpler hierarchy of conversation components.

JC @joscam
A media outlet wasn't targeted today. A media outlet filled with fellow human beings was targeted today
 LL @loulou
Reply to @joscam
Mail clerks were attacked
 RR @piogrl
Reply to @loulou @joscam
I worked several positions @ the IRS and we were supposed to look out for stuff like this too. Nothing ever happened. But it worried my family.

The thread starts with JC's tweet which is directly responded by LL's tweet reply. Next, RO involves in by replying to LL as well as to JC. Here the positions of both LL and RO's text are indented since they are the subordinates or the responses of the tweet. However, there is no further indentation to RO's message even though it replies to LL's tweet reply above it. It is because, on Twitter, the interaction between tweet

replies is not marked by indentation but by the phrase *Reply to @ ...* which automatically appears at the upper part of the tweet reply box.

To sum up, an indentation in social media conversation structure marks an interaction between two messages in which one is the subordinate to the other. Hence, the indented message is a response to the unindented or less indented message above it. Thus, indentations do help build the cohesiveness of the texts in social media conversations since readers can quickly

spot the interactions between two messages within the conversation by noticing the indentations applied to the texts. Similar to conversation components, indentations indicate adjacency pair relation between messages in social media conversations. Viewed from their system of indentations, the structure of conversation on Facebook is considered more complex than that of Twitter since it applies two levels of subordination compared to one only.

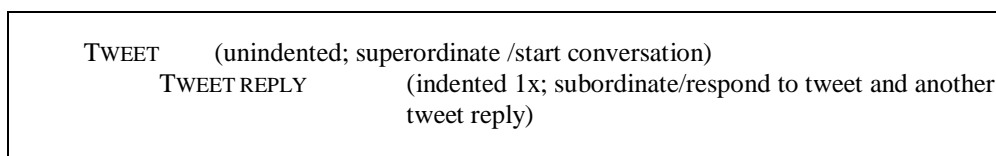


Figure 3. Indentations in Twitter thread structure and their functions

Vertical line

Another structural element of social media conversation which also has a contribution in building cohesion is vertical line. However, vertical lines apply on Twitter threads only and cannot be found on Facebook conversations. A grey vertical line sometimes appears on the left side of a Twitter thread between two profile pictures. It functions to link two messages tweeted by the users in the profile pictures showing that they interact directly in which one respond to the other. Indeed, the function of this vertical line resembles to that of indentation. It substitutes the role of indentation that is not applied to the tweet reply which directly responds to another tweet reply.

The role of vertical lines in a Twitter thread can be seen in the following thread:

BS @brisch
Christmas is in 4 days and it's 61 degrees. Something ain't right. #GlobalWarming

 TF @timfre
 Replying to @brisch
Can you stop complaining?
 |
BS @brisch
I want a white Christmas!! The world is dying but u don't care cus u egocentric #sheryl #fake
 |
 MT @mstmxxg
#Sheryl (laughing)

Under the tweet posted by BS above, there are two subordinate interactions between replies as shown by the two vertical lines which connect the three tweet replies. Here, firstly, TF replies BS's tweet which is in turn replied by BS himself. Then, MT involves in by replying to BS's tweet reply. When these subordinative interactions are accessed separately from the whole thread, the vertical lines will soon disappear and be replaced by indentations to the responding messages as in the followings.

Subordinated interaction 1:

TF @timfre
 Replying to @brisch
Can you stop complaining?
 BS @brisch
I want a white Christmas!! The world is dying but u don't care cus u egocentric #sheryl #fake

Subordinated interaction 2:

BS @brisch
I want a white Christmas!! The world is dying but u don't care cus u egocentric #sheryl #fake
 MT @mstmxxg
#Sheryl (laughing)

Systemic textual cohesive devices

Aside in structural form, systemic cohesive devices perform textually within the messages of social media conversation as well. They are realized by *mention* and *hashtag*, each of which is made up of an alphanumeric symbols followed by certain name, word, phrase or clause.

Mention

Mention is basically a hypertext of an account name appearing in the message of social media conversation. Since it is a hypertext, a mention is linked to the respective account. Therefore, the owner of the mentioned account would know if he/she is being talked about in a conversation since there will be a notification on his/her account homepage. Thus, one function of mention is for inviting another user to involve in the conversation. It is different from face-to-face conversation in which a person does not know when his/her name being talked unless he/she is one of the participants in or being around the conversation.

Mention is available both on Facebook and Twitter although the format of each is slightly different. On Facebook, a mention can be made by precisely typing the account name referred which is case and space sensitive. When, a Facebook mention has been managed, the respective text will soon appear in bold format and automatically linked to the typed account. On Facebook, a mention will automatically appear on

the reply boxes of a conversation. Therefore, all messages in reply boxes will always begin with the account name addressed unless the sender erase it beforehand manually.

The following is an excerpt of a Facebook conversation with mentions.

JF:
Finished my latest project. A baby blanket.
 (a photo of an embroidered blanket)
 ...
 AB: *That turned out cool.*
 AMR: *I need to learn how to make something like this.*
 JF: **AMR** *You could do it.*
 AMR: **JF** *i need to find a pattern or video on how to*
 DMQ: *Very nice!*

In the conversation, a mention initiates both JF's and AMR's replies showing that they interact by summoning each other name. Those mentions are automatically provided by the system to manage interactions between replies.

On Twitter, a mention is constituted by an account name as well. However, since all Twitter accounts typically require symbol @ at the initials and disallow spaces, its format looks different from that of Facebook. In addition, to indicate it as a hypertext, a Twitter mention appears in blue text instead of bold format. Another difference between Twitter and Facebook mention lies in their automations. When on Facebook a mention automatically initiates a reply only, on Twitter, it comes at the beginning of any tweet reply and even in a multiple form comprising as many as the account names addressed. It can be illustrated as follow.

JN @jesnig
Hooray, I just voted!
 CS @chlshi
 Replying to @jesnig
Yay! Thank you!
 ZL @zoelan
 Replying to @jesnig
Congrats!
 MPG @madprog
 Replying to @jesnig
I'd vote too if I could

The thread shows a tweet from JN which is subsequently responded by CS, ZL, and MPG. Here, All the tweet replies are initiated by the phrase *Replying to* which is followed by the account name addressed @jesnig. It is a standard system on Twitter where the account name addressed is automatically mentioned at the initials of the following replies. However, if it is necessary user can also utilize mention manually anywhere in the text to poke another user as exemplified below.

NS @nausun
Really? Oh so @jenmed means he looks intelligent and generous and giving and helpful? Yup. He does.

In the tweet above, NS mentions an account named @jenmed in his message. Unlike that of the previous

example, this mention is not automatically generated by the system but deliberately typed by the user. Here, the mention is not purposed to reply, but to involve or invite the respective account user into the conversation.

Based on Halliday & Hasan's (1976) classification of cohesive devices, the action performed by mentions in social media conversations, especially on Facebook and Twitter, is comparatively similar to that of reference, particularly the exophoric one since a mention means summoning a person outside the text by his/her account name.

Hashtag

A complete hashtag consists of # symbol which is followed by a word, phrase or clause representing the topic of conversations, for example #SaveTheEarth. It was firstly introduced by and became very popular on Twitter. It was then adopted by Facebook but does not gain popularity there. A hashtag integrates all messages within a conversation and even all conversations in the platform which have the same topic. By reading the hashtag, one can identify the topic of a conversation without having to read the whole conversation. Aside from that, when he/she is interested in involving in the conversation he/she can just add the same hashtag into his/her text.

Nevertheless, the effectiveness of a hashtag in building the unity of a conversation depends on the responses of the participants since one can optionally ignore including it although the message he/she sends has the same topic of the post. This is what happens on Facebook where users rarely use any hashtag in their conversations for either introducing or just responding to it. Contrastively, hashtag is an important tool on Twitter since it is massively utilized by its users. There is even provided a section entitled *Trending Topics* on Twitter for listing the most popular topics being talked by the tweeps. Here, the popularity of a topic is determined by the sum of its hashtags.

The following is an example of the use of hashtags on Facebook.

EP:
Today I hugged some elephants ... p.s., the one here painted the picture I'm holding ... #savetheelephants #endangeredspecies
 ANF: *Wow! Where did you do this?? How fun!*
 EP: *ANF near Fredericksburg!!!!*
 SE: *Wow! What an amazing experience! I am so jealous!*
 CS: *Where???? I wanna go!!*
 EP: *CS in Stonewall, Tx... near Fredericksburg!!! You should go!!*
 CS: *EP omg I so want to!!! Thank you*

In the conversation, two hashtags are introduced by EP in her status, namely #savetheelephants and #endangeredspecies. However, none of the responses—either comments or replies—includes the hashtags. Therefore, the purpose of using hashtags to mark the unity of the conversation is not accomplished. This is a common phenomenon on Facebook where a hashtag does not meet its function to show cohesiveness of the

text and is merely an expression of the status updater related to his/her post.

In contrast, hashtags play a significant role in Twitter thread as exemplified by the following conversation:

TGC @tgocit

*As long as there are people who believe in god because of a Bronze Age text but deny **#ClimateChange** despite all the evidence then our nation will always be in peril.*

FA @fanari

If you want a real solution to our energy crisis and reduce our dependence on coal.

#ClimateChange

In the thread, the hashtag **#ClimateChange** indicates the subject discussed by the participants. It can be put as part of the sentence as shown by the tweet above or just a marker positioned outside the sentence like the one in the tweet reply.

Nevertheless, the coverage of a hashtag is not restricted to a single conversation or thread only. It can also work between threads to interrelate their similar topic of conversations. The following is another tweet having the same topic as that of the previous example about climate change.

UNC @unc

*You can run, but it won't help you. The time to act on **#ClimateChange** is NOW!*

According to Halliday & Hasan's (1976) perspective on cohesion, this function of hashtag is parallel to repetition. Both in conventional dan online conversations, a repetition tends to apply to a significant word, phrase or clause indicating the subject of discussion. In case of social media conversations, a hashtag should be inserted repetitively across messages and conversations to show the topical unity in a conversation or between conversations.

The result of this research shows that there have been other types of cohesive devices due to the application of social media for conversations, such as Facebook and Twitter. These include conversation components, indentation, vertical line, hashtag, and mention. The functions of all these social media properties conform to some basic functions of cohesive devices in building the unity of a text, such as repetition and reference, which were introduced by Halliday & Hasan (1976) and developed by other linguists afterwards. These new types of cohesive devices can optionally be termed as 'systemic cohesive devices' which produce 'systemic cohesion' within the texts since their availability are uniquely provided by the system of social media applications and cannot be found in common types of discourse established before the invention of the Internet.

The existence of these systemic cohesion have not come into the awareness of many researchers yet since all the available studies on cohesion remain to focus on conventional cohesive relations based on discourse theories without considering the emergence of other forms of cohesive devices due to the advancement of

technology, especially the invention social media as a new channel of communication.

CONCLUSION

As another form of discourse, conversational texts on social media do have cohesion and coherence, the two elements that build text unity. However, different from that of conventional discourse, certain elements that contribute to cohesiveness of social media conversations are systemic or automatically provided by the platforms. Particularly on Facebook and Twitter, the phenomena of systemic cohesion in structural form can be seen on the roles of conversation components, indentations, and vertical lines, whereas in textual form, they are worked out by mentions, and hashtags.

All the structural systemic cohesive devices, i.e: conversation components, indentations and vertical lines, generally have a common function to mark the interactions between two messages in a conversation demonstrating what Halliday & Hasan (1985) state as adjacency pairs. Both conversation components and indentations apply on either Facebook or Twitter whereas vertical lines can only be found on Twitter.

Each of the conversation components that collectively builds the structure of a social media conversation has its own task for showing the interactions between messages. On Facebook, a comment is the response to a status, similar to a reply which specifically responds to the comment above it. In a simpler way, a tweet reply on Twitter may interact with either tweet or another tweet reply prior to it.

In case of indentations, an indented message means that it is the subordinate of the unindented or less indented message right above it and indicates that the former responds to the latter, like what is demonstrated by the horizontal positions of reply, comment, and status on Facebook as well as tweet reply and tweet on Twitter.

In the same way, vertical lines which sometimes appear between two profile pictures on Twitter show a direct interaction between two messages within a thread of conversation, that is the message at the bottom of the line responds to the one on the top. A vertical line actually substitutes the task of indentation at the initial display of a thread since it will disappear and soon replaced by the system of indentation when the respective messages are further accessed.

On the other hand, each of systemic textual cohesive devices has a different role. In social media conversations, a mention has nearly the same task to what is termed as exophoric reference by Halliday & Hasan (1976). However, besides pointing to something outside the text—in this case an account name—it has an additional role to involve or even invite the account owner to take part into the conversation. Both on Facebook and Twitter, a mention is made by typing the account name addressed precisely. However, on some occasions, it automatically appears such in the reply box of Facebook and the tweet reply on Twitter.

Lastly, hashtag itself resembles repetition in Halliday and Hasan's (1976) classification of cohesive device. A hashtag which comprises symbol # and a text representing the subject of discussion has the function to unite all the messages within a conversation and even all conversations which have the same topic. Although being applicable both on Facebook and Twitter, hashtags are broadly used on Twitter only and do not gain such popularity on Facebook. It is reasonable because this system originates from the former from which the latter then adopted.

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