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Original Research

Digital Conversation Analysis on Screen-Captured Data: Comparing Instagram Online Discourse on Smartphone vs Laptop

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Abstract

The study of online discourse on social networking sites (SNSs) is a relatively recent field of study where most of the methodology to study online conversations has been derived from spoken conversation analysis (CA). With the way that the COVID-19 pandemic has directly and drastically changed the way individuals around the world communicate online, there is a need to explore the methodology further so that CA approaches can be developed and tailored better for the study of online discourse. Since digital conversation analysis is still in its infancy compared to spoken conversational analysis, this study attempts to contribute to the development of digital conversation analysis by analysing screen-captured data of publicly available online conversations on Instagram on April 2020. 149 screen-captured data are analysed with digital conversation analysis to discuss and compare the turn-taking, repair, action formation, action sequencing and the role of technology on the production of online conversations. Results show tentative proof that the screen-capture method of data collection has a unique strength in that it gives researchers insight onto the moment-by-moment production of the online conversation that is not available from the traditional method of transcribing. The novelty of this digital conversation analysis research is the comparison between smartphone- and laptop-version of screen-captured data, specifically how the different medium affects the production of online discourse of the same SNS.

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1. Introduction

Conversation analysis (CA) is an investigation or enquiry that pays great detail on the interaction between two or more individuals in any given context. The subject's importance is unquestionable in linguistics (Sidnell, 2020). A huge majority of research on language has been concentrated on the meaning of language, while the organisation of a speech exchange system might seem to be a form of science that pays too much attention to regular interaction and too obsessed to describe 'obvious' details in a 'chit-chat' in layman's eyes (Hutchby, 2017; Wulandari et al., 2019). However, the variety of aspects in people's interaction, the diversity of people who are interacting, the range of nonverbal signals people do when they interact and the endless type of context in which people interact are the objects of CA practitioners' fascination. Beyond the principal purpose of uncovering tacit reasoning behind the sequences of a conversation, CA contributes heavily to the continuing development of instructional and teaching

techniques, persuasive techniques, medical therapy, court procedures, helplines and anthropology (Paulus et al., 2016; Rancew-Sikora & Remisiewicz, 2020). Before, humans could only interact by face-to-face, written means, gestures, symbols and pictures. Now, information and communication technology (ICT) enables people to interact remotely and asynchronously with massive disposal of online features available in multifarious platforms. This study is interested in contributing to the field of CA research on online discourse, which is likely to become a primary resource for future social studies considering the current pandemic situation.

The status quo of the existing seven billion people is the reliance on social networking sites (SNSs) to interact with another person during the pandemic outbreak of the coronavirus disease 2019 (COVID-19). The outbreak of COVID-19 has changed the culture of people from different backgrounds and different countries and this fact should be of interest to many linguists and of course, CA practitioners. Almost every aspect of professional lives is migrating online and previous issues regarding ICT usage are forced to be addressed immediately (Junaidi et al., 2020). Ever since the year of 2020, much of the COVID-19-related research naturally comes from the medical and engineering disciplines and "research priorities around COVID-19 require us to embrace complexity by deploying multidimensional perspectives," (Holmes et al., 2020, p. 5). This study argues that studying the conversations cropping up in the current online discourse using authentic data of the conversations may aid future research on the development for better cyberspace atmosphere. Therefore, this study intends to explore the social science-leaning discipline, particularly on the conversations on current online discourse by using digital conversation analysis.

Digital conversation analysis is still in its infancy compared to spoken conversational analysis (Giles et al., 2015). It is apparent that digital conversation analysis still needs methodological discussions so that CA approaches can be developed and tailored better for the study of online discourse. The reasoning to differentiate digital conversation analysis from regular, face-to-face CA lies on the five distinctions of online discourse and spoken discourse. One is the obvious fact that typing is different than talking because there are certain features of the conversation exclusive to online discourse, such as strikethrough text (Gredel, 2017). However, there are also multiple other factors such as the anonymity of online discourse, as well as the distinct but blurry line between private and public online discourse (Stommel et al., 2019). Due to these significant differences between spoken conversation and online conversation, this study is convinced to analyse the digital data by using the developing digital conversation analysis. This choice is not only because of digital conversation analysis's suitability to study digital data but also because this study may contribute to its development by following the recommendation from a recent digital conversation analysis study conducted by a key CA researcher, Joanne Meredith. Meredith (2017) demonstrates the technological context of online discourse, namely how turn adjacency is impacted by people's inability to coordinate turns mutually and how such disruptions are often created even more by online users as they commit multiple turns.

This study follows Meredith's (2017) recommendation for future studies to use screen-capture data as they provide a moment-by-moment production of the virtual interaction in the eyes of the participants themselves—an insight that is lacking on timed transcription files. According to what is likely the first systematic review of CA research, Paulus et al. (2016) determined that Meredith's research method of using screen recordings of interactions is a noted exception from the vast majority of CA studies that still primarily rely on transcripts. This study found some empirical digital conversation analysis studies on the language use of the online data it collected, but these studies did not collect data by screen-capturing (Large et al., 2017; Salomaa & Lehtinen, 2018; van Hooijdonk & van Charldorp, 2019). This paucity calls for future research to continue developing the methodological analysis for multimodal online conversations.

Moreover, empirical research in the context of the current COVID-19 pandemic is centralised on medical and technological progression. Empirical research on social actions, interaction and language use in this context seems to be scarce for the moment. Quick search queries reveal that existing studies are a few published articles and mostly preprints about people's perceptions and anxieties about COVID-19 on Twitter and Instagram (Cinelli et al., 2020; Dubey, 2020; Duong et al., 2020; Ferrara, 2020; Hou et al., 2020; Kleinberg et al., 2020; Li et al., 2020; Lopez et al., 2020; Wicke & Bolognesi, 2020; Zarei et al., 2020), tips for the rapid migration towards online learning (Goh et al., 2020), the government's responses to the pandemic (Chouinard & Normand, 2020), the crime of social grooming during the pandemic (Kim, 2020), and a slide summary of a conference that asks how applied linguists can contribute for today's changing human civilisation (Saragih & Susanto, 2020). This study may serves a closer look at the online discourse among the 21st-century generation who are participating in a global self-quarantine, by pursuing the research

question, "How do software-related features of different SNSs affect the production of online discourse between laptops and smartphones?". Furthermore, this study compares the screen-captured data from both laptop-version and smartphone-version of Instagram, something that may not have been made as a distinction due to the reliance on time log files. The results are hoped to become a starting point for future digital conversation analysis practitioners to consider as they explore the online discourses on other SNSs.

2. Literature Review

The uniqueness of online discourse on SNS must be stressed. Greeting texts are 'replacing' handshakes. Typographic emoticons are 'replacing' face-to-face facial expressions. Video calls are 'replacing' hugs and romantic physical actions. Reminders to stay healthy are 'replacing' ritualistic partings. Phone calls are the chosen medium to express condolences as people refuse to bury the infected who have died. Limited Internet quota and poor Internet connection are causing disturbances in synchronous online conversations. Huge numbers of elderly persons are gaining technical aptitude and learn internet language to engage online with their families. News and posts on COVID-19 are continuously dominating information outlets, very different from the usual swift changes of trending online topics. Social engineering and online crimes are increasing. Sales and marketing are competing in the same virtual medium. People in different sectors and industries are actively exchanging information regarding systems of infrastructure for management and treatment efforts. Individuals with different types and levels of experience are publicly sharing tips to maintain sanity and productivity during quarantine, while other individuals are publicly sharing their dismissals of the virus' danger. Overall, the status quo itself calls for this study to explore the change in culture and civilisation and the most suitable way to analyse conversations during this situation is by using data that are already publicly available and widely accessible online.

Conversation analysis research on online discourse using digital data may be transitioning into its branch of the discipline. Formally termed as 'digital conversation analysis,' it is still in its infancy compared to spoken conversational analysis (Giles et al., 2015). This analysis method, within the realm of Communication Studies, can be defined as the methodological adaptation of traditional conversation analysis (CA) to digital discourse dynamics, arising from instant messaging applications and other asynchronous or quasi-synchronous digital interaction formats (Jucker, 2021). It is apparent that digital conversation analysis still needs methodological discussions so that CA approaches can be developed and tailored better for the study of online discourse. The reasoning to differentiate digital conversation analysis from regular, face-to-face CA lies on the five distinctions of online discourse and spoken discourse. One is the obvious fact that typing is different than talking because there are certain features of the conversation exclusive to online discourse, such as strikethrough text (Gredel, 2017). Two, members typically involved in online discourse differ with members of a face-to-face talk typically due to the 'anonymity,' which leads to the third distinction, namely the extremely blurry line between private and public online discourse. Fourth, social networking sites (SNSs) keep visible records of previous posts so online users can refer and use the record of previous exchanges in their current posts. In contrast, references to previous exchanges in a face-to-face conversation would involve an element of distortion. Fifth, different SNS provide different features, such as Instagram giving multimodality to the online discourse, blogs easily limiting the interaction on a page to focus on the sole content, or YouTube making people face two distinctive views when they intend to interact through their smartphones or laptops.

This choice is not only because of digital conversation analysis's suitability to study digital data but also because this study may contribute to its development by following the recommendation from a recent digital conversation analysis study carried out by Joanne Meredith, a key CA researcher. Meredith (2017) found that conversation's turn adjacency is impacted by people's inability to coordinate turns mutually. Her findings also show how such disruptions are often created even more by online users as they commit multiple turns. In light of this unique technological context of online discourse, she recommends future studies to use screen-capture data as they provide a moment-by-moment production of the virtual interaction in the eyes of the participants themselves—an insight that is lacking on timed transcription files. She also advises future digital conversation analysis to analyse the online discourse before the analysis on the role of technology because there is a danger of leaving the former insufficient.

Paulus et al. (2016), likely the first systematic review of CA research on online discourse, determine that Meredith's research method of using screen recordings of interactions is a noted exception from the vast majority of CA studies that still primarily rely on transcripts. A previous publication of hers revealed that there had been studies using screen-capture software to collect online data (Meredith, 2016). Also, empirical

studies using digital conversation analysis remained few and focused on developing multimodal transcribing (González-Lloret, 2015; Michel & Cappellini, 2019; Mondada, 2018), or other machine learning means to explore digital conversation corpora (Compagno et al., 2018). This study found some empirical digital conversation analysis studies on the language use of the online data it collected, but these studies did not collect data by screen-capturing (Large et al., 2017; Salomaa & Lehtinen, 2018; van Hooijdonk, & van Charldorp, 2019; Zummo, 2018). In light of this paucity of methodological analysis for multimodal online conversations, this study heeds Meredith's ()2017, p. 53 recommendation to use screen-capture data to "provide additional insights into how the interaction actually unfolds."

3. Method

This study uses digital conversation analysis to understand the underlying organisation of the conversations occurring on Instagram comment box. While linguistics generally views the human mind as the home environment of language, CA is distinct as it understands that language adapts to the environment of the interaction (Sidnell, 2020). A particular technological platform should have consequences on the character of the online discourse. Therefore, this study needs to follow the analysis on the conversations with additional analysis on how the social networking site impacts the production of online conversations.

Practical consideration of the researchers' choice to use Instagram is the fact of the high accessibility on the existing online discourse. Instagram publicly display usernames and comments, allowing researchers to easily collect data without needing to acquire permission to collect the multimodal data from every relevant individual online user. "CA methods prioritize naturally occurring interaction because precisely which features of the context may be relevant for a particular phenomenon," (Kendrick, 2017, p. 3), thus the reason this study does not actively involve the online users. The second and third authors were recruited for their legal expertise and insight to ensure that the method of using online screenshots strictly involves data that were made public to not infringe on individuals' privacy. While the first author refined the discussion portion, the fourth and fifth authors were the ones mainly responsible in writing the first draft and collecting the data.

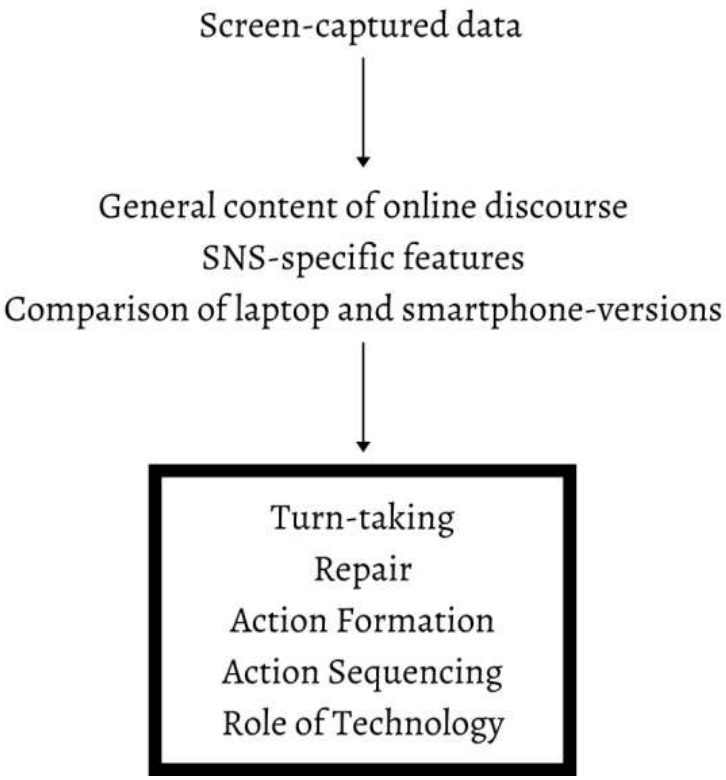

Figure 1. Steps of the Research Design

Examining previous research on social media content, the researchers did not manage to find an SNS study that made a distinction between how the smartphone-version of Instagram affects the production of online content compared with the laptop-version. As CA research must take into account of the conversation setting (Kunitz & Markee, 2016), using screen-captured data on both versions of Instagram may aid this digital conversation analysis study to identify specific distinctions on how smartphones and laptops affect the way online users participate in the online discourse.

The collected data on the online discourse only included posts and comments that were published during April 2020, since the selected time period should uniquely represent the public online discourse during a time where people worldwide have acclimated with the social distancing policy, which has effectively started since March 2020. Data collection uses the screen-capture function. This choice of instrument is to capture the online conversation as naturally as possible (Hoey & Kendrick, 2017). It heeds the recommendations by previous studies to analyse multimodal data, which includes text, typographic emoticons, pictures and videos (Gredel, 2017). This study perceives that screen-capture recording might be special in that it gives digital conversation analysis practitioners an identical sight of the occurring online conversation as the online users. This aspect of screen-captured data is not shareable with the traditional data gathering method on face-to-face conversations where researchers typically do not view the interaction with the 'same' eyes of the participants. Screen-captured data may enable more observations on online users' behaviour that would not be readily available with sole reliance on transcriptions.

The data are then analysed to identify the underlying norms of the production of online discourse. These norms are typically grouped as the four domains of what CA primarily seeks to describe, namely turn-taking, repair, action formation and action sequencing (Sidnell, 2020). Turn-taking is the conversation aspect of determining a participant's turn to speak or to listen. Repair is the aspect of remedying conversation problems to resume the interaction. Action formation is the aspect of the production and understanding of the actions in interaction to achieve interactional goals. Action sequencing is the aspect of the way the actions are organised into sequences to achieve mutual understanding. As a digital conversation analysis, this study will also collect data on how the software-related features of an SNS affect the production of online discourse, and a novelty of this study is the consideration on how smartphones and laptops' versions of the SNS affect online users in interacting online.

4. Results

Researchers recorded the naturalistic interaction on Instagram sites by using screen-capture function available on laptops and smartphones. In total, 149 screenshots are collected. Researchers used the screen-capture method repeatedly as they go through the comments of the SNS as online users normally do. The data are coded according to individual threads of online conversations to group individual files as part of an online discourse on a post. Researchers reached the point of data saturation when data passed the minimum 100 screenshots, as this amount should contain sufficient examples of online actions containing turn-takings and repairs.

4.1 A Comparison of How Instagram Posts Look Between Laptop and Smartphone

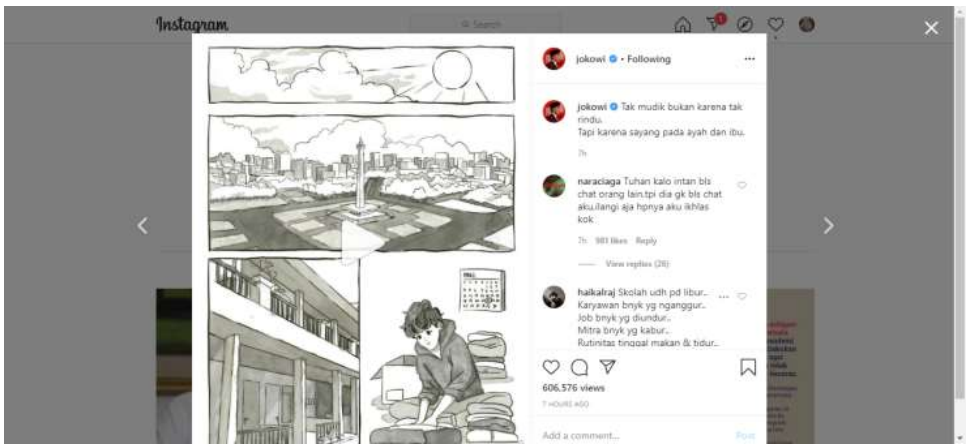

Figure 2. Laptop-view of Instagram Chat

Figure 2 shows that an Instagram post accessed on desktop is displayed on the centre of the screen. All other types of information are greyed out to bring the focus on the post, the comments, and the scrolling bar for the post. The post is accompanied with the comments beside it where online users can see the individual comments from different users. As there is no scrolling bar for the comment box for Instagram on laptops, users have to click the area of comment box and use arrows and spacebars to navigate existing comments. If the reply to a comment is multiple in number, Instagram would display them as numbers below the relevant comment. In order to reply a particular comment and engage them in an online interaction, Instagram users click the comment and the SNS automatically entered the target's username as part of the tagging feature on Instagram.

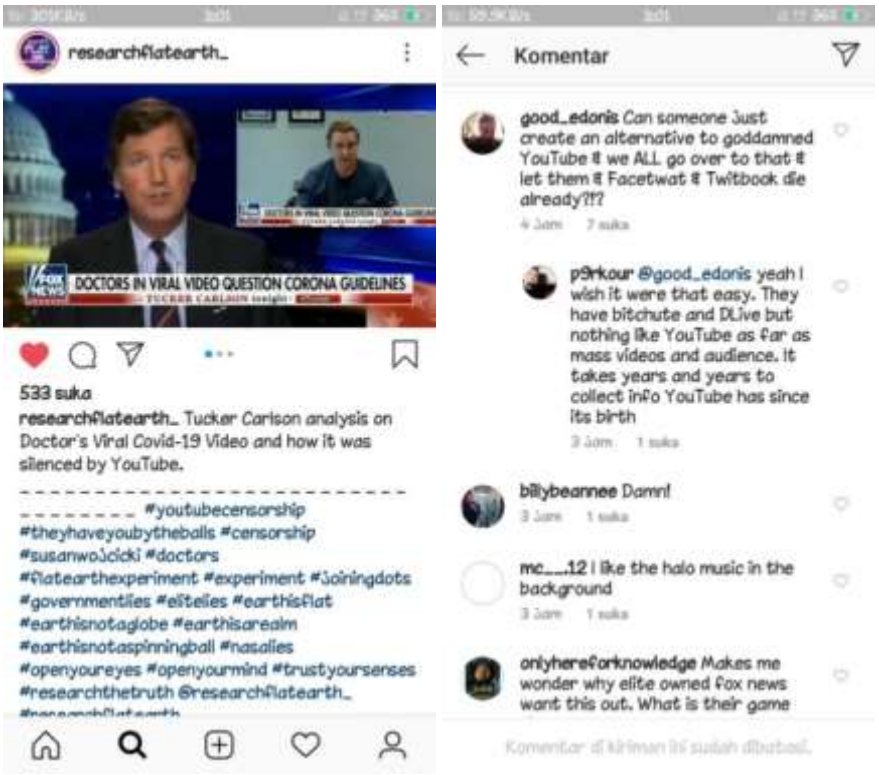

Figure 3. Two Examples of Phone-view of Instagram Posts

However, on smartphones, the post and description take up much of the screen. A common Instagram post can include significant texts and hashtags (Figure 3). In viewing the comments of a post, Instagram automatically directs online users to a different screen that contains only the comments. Individual comments from different users are displayed individually as a list. Comments that are replies to another comment is indented, creating a comment thread. On Instagram, if there is too many comments in one thread, the entire conversation of replies is hidden as numbers of replies.

Figure 3 is an excellent example that showcases the typical online discourse on Instagram. Individual comments from different users are displayed individually as a list. Comments that are replies to another comment is indented, creating a comment thread. On Instagram, if there are too many comments in one thread, the entire conversation of replies is hidden as numbers of replies.

4.2 How Instagram Features Affect Online 'Talk'

Figure 4. Excerpt 1, SS PI4.7

This study observed that on Instagram online discourse, a prevalent type of comment is tagging other users' Instagram handlers. Unlike YouTube, majority of the comments contain taggings that are not actually directed to the content post's user, but to pull other users into the discourse. However, as Excerpt 1 captures, these taggings are not necessarily meant to select the 'next speakers' for an online conversation. These taggings are often merely done to alert other users, usually the user's friends rather than strangers, of an Instagram post or a particular Instagram comment.

Figure 5. Excerpt 2, SS LI4.13

Repair is rarely found on Instagram online discourse because majority of the comments are individual comments with few replies. The closest example is Excerpt 2, in which the repair is made with the intention to emphasise watsoncubes' reason over complaint, and to point out user *rosi230373*'s presumable stereotyping.

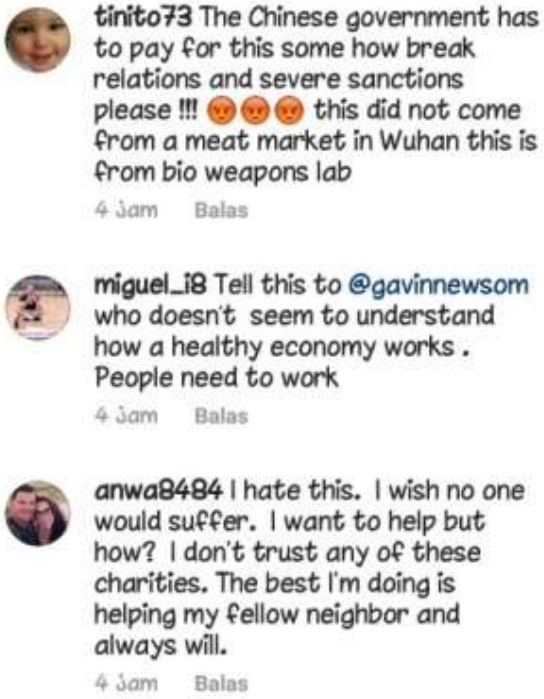

Figure 6. Excerpt 3, SS PI8.13

The comment thread displayed in Excerpt 3 shows three different users expressing their shock and disappointment. The action of claiming or accusing by user *tinito73* is encouraged to be forwarded by user *miquel_i8*, while user *anwa8484* already answered themselves in the same comment. Despite the seeming lack of obvious transition-relevance-points, the data shows that multiple users often engage in back-and-forth agreements, disagreements, and arguments.

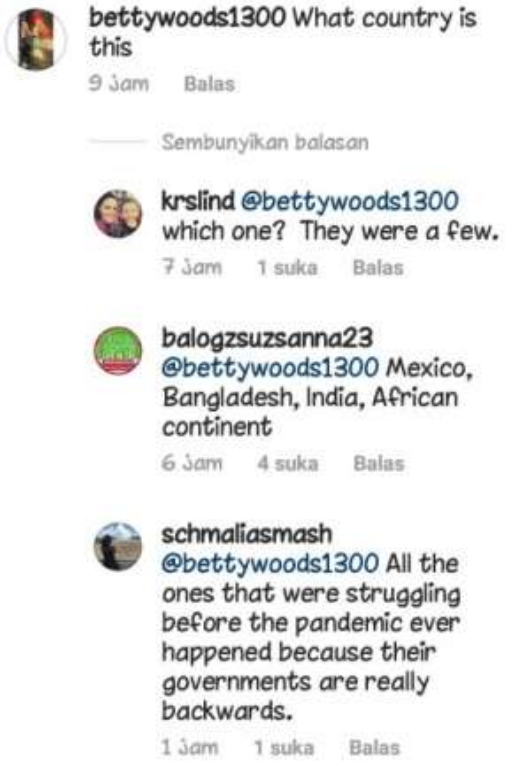

Figure 7. Excerpt 4, SS PI6.5

Analysing the conversational action sequence on Excerpt 4 reveals that online users do not participate in a thread linearly. Rather, a whole thread could consist with multiple individual replies solely directed towards the original comment despite seeing that other users have already answered the question. In this case, adjacency pair of question–answer occurs multiple times, even though there is only one question in the online conversation.

5. Discussion

In line with Meredith (2017), the results of this study show that screen-capture data has enabled easier way to conduct digital conversation analysis research than by using the traditional transcription data. Screen-capture data provides authentic evidence on how online users take turns in their online conversations, conduct repairs, form actions and organise actions.

In general, people do not all talk at once; they signal that they are done by using certain phrase, thus creating transition-relevance points (TRPs). Sacks et al.(1978) is the most cited study when it comes to understanding turn-taking in conversation, which is used for the ordering of moves in speech exchange systems. According to the study, people locally manage who should talk and when to talk in any given conversation. In formal ones such as debate, turn-taking is pre-allocated to give every potential participant to talk for a given number of times. This speech exchange system is not the norm for ordinary conversations, where TRPs are much more situationally distributed with linguistic clues, e.g. intonational phrase, slower speaking rate, drop in pitch, loudness, gestures, and pauses. According to a more recent study that reviews conversation analysis, Sidnell (2020) calls these linguistic clues as turn constructional units (TCUs) and describes their function of determining possible turns with sequence-initiating actions such as address term and gaze.

On Instagram online discourse, online users also frequently tag usernames, as seen in Excerpt 1. The difference lies in that most of these taggings are not actually to reply to the content of a comment or address the user of the directed comment, but to bring in people who are not part of the post's conversations to see the post and possibly enter the conversation. Engagement is easier on smartphones because laptop-version of Instagram displays fewer Instagram posts and makes users navigate two different areas to scroll. Viewing hidden replies to read the entire online conversation thread is also harder on laptop because online users have to repeatedly click the 'view reply' option if there are more than five replies, and the box to read the conversation and the box to type their own comment or reply are small on the laptop screen. This finding indicates that the transition-relevance points (TRPs) are fewer in online conversations. The only TRP found is when it is used when a current speaker selects the next speaker. Although, online users actually use tagging for two purposes, one as a TRP where they select another user to reply, and two as a way to bring in an outside user to be part of the online conversation of a particular post. This finding confirms Sacks and colleagues' (1978) model of conversation aspect in that number of parties can change, more so in online discourse. Meanwhile, the latter two functions of TRPs are harder to analyse because of the asynchronous nature of online conversations on Instagram.

It is common in spoken conversations for speakers to encounter one or more problems during their talk, and to address these troubles of speaking, hearing, or understanding, they conduct corrections which are more formally termed as repairs in CA research. "The various organisations that are operative in conversation are susceptible to errors, violations, troubles, and for them repair devices are available," (Sacks et al., 1978, p. 39), such as question word 'what?', rising tone 'huh?', or a partial repeat. Sidnell (2020) describes other than focusing on a problem to address it, repairs can also be done by stopping the conversation, abandoning the trouble and resuming the conversation. Repair can be done by either speakers or an outsider, i.e. self-initiated repair or other-initiated repair (Sacks et al., 1977).

There are no distinguishable repair occurrences from the four SNSs observed in this study. Unlike turn-taking, Excerpt 2 indicates that Instagram's features do not significantly influence how online users address problems. Whether online users chat on their laptops or smartphones also do not seem to influence the way they conduct repairs. This study observed various types of repairs in spoken conversations are also found in online conversations. Some of them include correcting a misleading assumption, restating or reiteration, pointing out a misunderstanding, and offering a truce. Additionally, there is one type of repair that is exclusive in online discourse, which is reporting a comment that is judged by one user or agreed by multiple users to be intolerable. Results of this study indicate that repairs may also function as a tool to deescalate a conversation that has turned aggressive.

The domain of actions in conversations often draw on John Searle's speech act theory, which understands that saying something counts as doing something (Searle, 1965). Utterances are understood as discrete, thus they can be identified as a particular act, such as greeting, arguing, or flirting, based on a delimited range of linguistic devices, e.g. sounds, letters, words, or syntax (Sidnell, 2020). CA uses speech act theory to understand how speakers in a conversation can recognise an action with almost no time spent to comprehend the uttered speech and almost no gap to plan their response (Magyari, Bastiaansen, de Ruiter, & Levinson, 2014). In the context of online conversations, digital conversation analysis then should investigate people's online speech comprehension (Gisladottir, Chwilla, Schriefers, & Levinson, 2012). Analysis on spoken conversations are easier as researchers can obtain front-loaded information such as pitch reset or eye contact in addition to richly informative linguistic formulations such as '*you know*' that tip off a speaker to process the occurring speech act.

This study found that online conversations on SNS' comment boxes not only lack the first, but also present their linguistic formulations differently than spoken conversations (Excerpt 3). The media of laptop and smartphone do not influence the type of act people perform, although SNS' features can influence the way online users perform an action in interaction. However, this method of data collection does not allow in-depth investigation on how online users actually understand what they see on the screen. Conversations are made up organised utterances and additional elements that make up actions. Actions in interaction naturally fall into pairs because when one action is performed, another action is relevant and expected to be formed as a response. Sacks et al.(1978) explain that conversations tend to occur in responsive pairs that are split over a sequence of turns, and these pairs are known as adjacency pairs. These adjacency pairs of first pair part (FPP) and second pair part (SPP) have multiple functions. One, they can be pre-sequences that function as preliminary actions, such as 'guess what!'+'what?'. Two, they can be insertion sequences that

comes after an FPP to delay the expected SPP, such as 'black or white?' to an FPP 'coffee, please', in which case the SPP would usually be 'alright'. Three, they can be post-sequences that function as conversation closing, such as 'I see' or 'okay'. Four, they can be the ones that function as the base FPP and SPP. The adjacency pairs of base-sequences include greeting+greeting, call+response, question+answer, etc.

Excerpt 4 shows that an entire conversation thread can consist of one FPP and multiple SPPs, and from the results this study found that the first three functions are conspicuously absent in online conversations. They are not normally present on comment threads because the conversations are not synchronous and online users normally do not use any customary preliminary small talk to introduce or greet another, purposefully delay a response to a speech act, or even feel obliged to explicitly end a particular conversation. Rather, online users simply get straight to the point. Moreover, laptops and smartphones also seem to bear no influence to the type of adjacency pairs occurring on SNSs. It seems that the adjacency pair that digital conversation analysis can identify on online discourses would be the base sequences, and these actually make up the bulk of the content of online discourses.

It is clear that digital conversation analysis still needs further refinement as a methodology to understand the underlying organisation and mechanism of online discourse. In conducting this study, researchers came to a couple of realisations on the difference between spoken conversation and online conversation. Sequentiality and turn-taking in digital conversation analysis also need to be intricately understood due to their impact on the structure of conversations in digitally mediated communication. Furthermore, the recontextualization of existing resources for new functions in new contexts is a central issue encountered in digital discourse. This study adds two more points of distinction to Giles et al.'s (2015) five distinctions. One, disruptions in online conversations are much more tolerated and even desirable compared to face-to-face conversations, at least for mass text-based online discourse if not a video call between two people (Stommel et al., 2019). Two, the use of spoken CA approaches to online talk fails to consider the perspectives of the online users, because people in online discourse are likely also involved in activities that are going on in their physical world. These significant differences between spoken conversation and online conversation are what motivated the study to analyse the digital data by using the developing digital conversation analysis. Although, the scope of the current study is focused on Instagram.

6. Conclusion

The implications of applying CA to digital discourse involve the need to analyse the persistent, asynchronous, and quasi-synchronous nature of digital conversations, which present distinct features compared to traditional spoken interactions. These digital characteristics pose several challenges and require significant adaptations of the methodological tools historically employed in CA. In order to understand the methodological challenges and adaptations required for digital conversation analysis, this study delved into the need for altered sequentiality of conversational contributions, adjustments in turn-taking mechanisms due to the asynchronous nature of digital discourse, and the repurposing and recontextualization of existing resources for new functions within these digital contexts. After analysing 186 screen-captured data of Instagram, researchers proved that the use of screen-captured data is beneficial for future studies that uses online data. This type of data collection provides authentic evidence on how online users take turns in their online conversations, conduct repairs, form actions and organise actions.

In online discourse on Instagram' comment threads, the turn construction unit (TCU) is the tagging system, which are used in two ways—to select the next participant in the online conversation or to bring another and to bring in an outside user to be part of the online conversation of a particular post. Reporting a comment is a type of repair that may be exclusive to online conversations. The communicative features of an SNS can influence the type of action online users perform, whether they'd dominantly use text, typographic emoticons, or multimedia content. Moreover, the action sequence is predominantly base adjacency pairs. The novelty of this research is the comparison of influence on the production of online discourse between the laptop- and smartphone-versions of Instagram, which is found to be significant only for the turn-taking mechanism.

This study justifies the use of screen-captured data over transcribed data for reasons related to better efficiency and insight, but future digital conversation analysis studies are recommended to test and appraise the results of this research with more comprehensive corpora of data. They should also look into how to measure the way online users understand the actions performed even though the linguistic information is not substantial. Developing terms that are tailored for digital conversation analysis may be needed to

eliminate confusion with whether to use 'speakers', 'next speaker', 'online user', 'next commenter', etc. Finally, as a study that investigates the tangible consequence of ICT to online discourse, this study recommends the exploration of how cyber interaction influences people's language use with text, typographic emoticon, multimedia content, literary or linguistic devices.

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