RUNNING HEAD: COVID-19, Conversational Remembering and WhatsApp

Supplementary Information 2 for

A Longitudinal Study of Conversational Remembering in WhatsApp Group Messages before, during and after COVID-19 Lockdown

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**Illustrative example**

Here we present a qualitative analysis of longest CRS we found in the dataset. This CRS started on August 2nd at 23:28:16 (GMT-3) and ended on August 3rd at 12:28:14 and had 182 messages (M) (See Table 1, CRS 5.10). The CRS occurred in the middle of the lockdown period and it illustrates the conversational dynamics observed in the CRSs. Names and phone numbers were replaced with U1, U2, U3, respectively. Names of people mentioned in the group chat who were not part of the community were replaced with E1, E2, E3, respectively (The original version of the CRS was in Spanish). The CRS began with WhatsApp group member (U16) who is an historian, expressed his intention to write the history of how they began gathering and playing soccer in Forests of Palermo in Buenos Aires every Saturday afternoon (M1). Here we observed an explicit attempt to forge a collective memory of the group of friends. The CRS ended (M182) with U16’s request to group members to put together photographs and other written documents about those events. U16’s request was followed by greetings (M183), words of encouragement (M184) and an image posted (M185). More than seven hours later, U19 expressed his regrets for had not being able to read and contribute to the processes of collective remembering (M186). The CRS contains unique (M6, 11, 13, 17, 19, 38, 46-52, 54, 61, 63, 65, 69-77, 134-137, 141, 152-156, 161-170) and recurrent events (M3, 19, 38, 57, 59, 78, 84-85, 89, 109-113, 127-140, 157, 163). Unique events also referred episodes that occurred for the first time and kept occurring over time (e.g., “the first day that U13 went”, M6). Unique and recurrent events were introduced with declarative utterances in the past tense (e.g., “@U11 hit against the light pole, very hard”, M161; and “And a classic before we started…We had to clear the field that was taken by the Ingalls families…and well, we started to shoot the ball until they moved to the side or ran out”, M85), and questions (e.g., “Do you remember?”, M55) that sometimes also contained verbs in the past tense (e.g., “Do you remember a Peruvian who always came??, M38). We did not find images (e.g., photographs) acting as reminders in the CRS, which may have been associated with the unplanned nature of the conversation and the rapid exchange of conversational turns among participants. These may not have enabled participants to search for photographs, which if they were taken, would most probably be in a physical format as the events that they remembered collaboratively occurred in the late 1990s and early 2000s.

Eight friends participated in the CRS. The distribution of messages was the following: U2 (30.4%), U13 (26.5%), U16 (23.7%), U4 (10.5%), U1 (6.1%), U5 (1.7%), U3 (0.5%) and U8 (0.5%). This showed a clear concentration of messages in three participants (U2, U13, and U16). After removing non-verbal messages (e.g., photos) we calculated the percentage of text (in number of words) produced by each participant: U13 (36.9%), U16 (33%), U2 (14.7&), U4 (8%), U1 (5.5%) and U5 (1%). U2, U3 and U16 did concentrate most messages (80.6%) but also produced the largest amount of text (84.7%). However, this analysis shows that the main contributors of text were U13 and U16. U13 and U16 took the conversational roles of dominant narrators and mentor taking the lead in the conversation and supporting each other with memory cues in the CRSs (e.g., M70). Although U2 was responsible for 30% of conversational turns he only contributed with less than 15% of text, which indicates that U2’s messages were shorter than those produced by U13 and U16.

Example: Longest CRS found in the dataset

**1. [23:28:16] U16: I'm going to write how that story of going to the forests of Palermo to play soccer began, the first who came were the kids of my school, can it be? @U2 do you remember? Those kids who lived there in Colegiales closed to Cabildo avenue.**

**2. [23:28:38]**

**3. [23:28:51] U2: We went with the schoolboys**

**4. [23:29:22] U2: And little by little U13 and people from Saavedra joined us**

**5. [23:29:44] U16: Yes, I was writing about that**

**6. [23:30:18] U16: I think I still remember the first day that U13 went, you remember U13? I think you caught only**

**7. [23:30:40]**

**8. [23:30:50] U13: With glasses and a total star**

**9. [23:31:09] U16: Yeaaah! That was in 96**

**10. [23:31:10]**

**11. [23:31:20] U13: E1 came once…I remember that he almost broke my nose…**

**12. [23:31:23] U1: The field on the side the first**

**13. [23:31:33] U13: Yes, I broke my nose there but some years later**

**14. [23:31:34]**

**15. [23:31:36] U13: Right…**

**16. [23:31:43] U1: You rock U16!! I admire people with memory!!**

**17. [23:32:01] U13: I was catching, I left the goal and he gave it to me… I think it was him**

**18. [23:32:06] U16: Hahaha! It was possible him**

**19. [23:32:54] U16: Yes yes, it seems to me that E1 came more than once, E2 invited him**

**20. [23:33:05] U13: Right**

**21. [23:33:11] U1: Nooo E1 playing soccer?? How I missed it!!**

**22. [23:33:12] U16: E3 also came**

**23. [23:33:23] U13: A separate chapter for E4**

**24. [23:33:30] U16: Yeees!**

**25. [23:33:31] U2: He came once**

**26. [23:34:13] U13: I love the writing U16… only if you want to… I wouldn’t get into the work of a historian without permission**

**27. [23:34:27] U13: Many times**

**28. [23:34:36] U13: E5 the friend of E6**

**29. [23:35:09] U16: Noooo! If we do it among several better!!!**

**30. [23:35:17]**

**31. [23:35:43] U16: I’m swamped until September… but send me and we put magic into it**

**32. [23:36:21] U13: 😳 What do you have to do?**

**33. [23:36:55] U16: I’ve several things in hand…conferences and**

**34. [23:37:00] U16: I put together a document and we write there**

**35. [23:37:12] U13: But I can start filling it out**

**36. [23:37:16] U16: Yeah**

**37. [23:37:17] U13: Yeah**

**38. [23:37:46] U1: Do you remember a Peruvian who always came?? I ran into him on the street several times until a few years ago... You U13 have to remember**

**39. [23:37:57] U13: The mate of the English**

**40. [23:38:06] U13: Half morphine in the double sense**

**41. [23:38:23]**

**42. [23:38:27] U13: He was skilled**

**43. [23:38:31]**

**44. [23:38:38] U16: Well, we have to write it down**

**45. [23:38:44] U1: Yeeees, right!!! You see, I don’t remember anything FML!!**

**46. [23:38:51] U13: There’s to be another chapter for the kid who left with his mouth broken**

**47. [23:38:54]**

**48. [23:38:58] U16: 💉**

**49. [23:39:03]**

**50. [23:39.34] U13: I even remember the shit he threw and that was the justification for the beating**

**51. [23:39:49]**

**52. [23:38:54] U2: On the floor**

**53. [23:40:04] U13: What must be rescued from these characters is that they saw the mystique**

**54. [23:40:17]**

**55. [23:40:21] U2: Do you remember?**

**56. [23:40:26] U2: What madness!**

**57. [23:40:41] U13: There was also a Boca Juniors fan, always drunk, that gave me some nickname, I think**

**58. [23:41:08] U3: He came a few times… very dark-haired… bus driver haircut of the 90s**

**59. [23:42:06] U13: I don’t remember how he named me… Maybe @U4 remembers**

**60. [23:42:17] U13: Very**

**61. [23:43:04] U16: I don't know if it was the same day that U11 turned around with the bike**

**in slow motion…against the little tree trunks**

**62. [23:43:17] U13: The beer is never free**

**63. [23:43:48] U16: @U13 The ball shot to the girl that was sunbathing?**

**64. [23:44:06] U1: Well, but that's what friends are for!! 😅**

**65. [23:44:07] U16: The ball shot to the eggs of E2?**

**66. [23:44:08] U13: I don't know if he wasn't the one that started with the nickname**

**67. [23:44:23]**

**68. [23:44:25] U2: Hahaha**

**69. [23:45:26] U2: He got very angry**

**70. [23:45:26] U13: I’ve another one. When they were filming a movie and they told us that they had permission for that and that we won't play there... They wanted to buy us with two cokes**

**71. [23:45:29] U16: Yes, it was the persuasive maneuvers to clear the field of the intruders**

**72. [23:45:45]**

**73. [23:45:50] U16: I didn’t remember**

**74. [23:45:52]**

**75. [23:46:12] U13: We drank the cokes and they were almost hit for fools…And they couldn't film shit**

**76. [23:46:44] U16: I think he went after you**

**77. [23:46:47] U13: I took the piss out of them I recall… we don’t need permission I said him**

**78. [23:47:02] U16: There were some with kind of epic rain too**

**79. [23:47:09]**

**80. [23:47:12] U13: In the mud**

**81. [23:47:49] U16: Yes, but later, in the moment he was bent over, of course!**

**82. [23:48:17]**

**83. [23:48:21] U2: He\***

**84. [23:48:31] U16: Yes, I remember that I played with the white toppers (sneakers) and with the rain it was a skating rink**

**85. [23:48:33] U13: And a classic before we started…We had to clear the field that was taken by the Ingalls families…and well, we started to shoot the ball until they moved to 100. the side or ran out**

**86. [23:48:42]**

**87. [23:48:55] U2: Hahahaha**

**88. [23:49:17] U16: Right!**

**89. [23:50:02] U13: And a fact. The gang lost to the gang…Never against third parties**

**90. [23:50:36] U16: I’ve already written something down, with the memorious that are missing several chapters can be written! @U5!!! And the reports! But that was how it began, the first times, because there, then yes, everyone can add stuff**

**91. [23:51:15] U13: @U5 must share data… he came less though?**

**92. [23:51:19]**

**93. [23:51:31] U13: Glory days.**

**94. [23:51:38] U13: Pre-tournament**

**95. [23:51:43] U16: U4 brought them in the car!**

**96. [23:51:52]**

**97. [23:52:21] U2: Especially U5 that when it was cloudy asked if we were playing?**

**98. [23:52:23] U2: MOFO**

**99. [23:52:25] U2: Hahahahaha**

**100. [23:52:34] U13: Or sometimes we carried them over the shoulder by bike…We had divided them in two. Then sometimes a part was missing 🤷‍♂**

**101. [23:52:34] U13: Hahaha…a classic**

**102. [23:52:49] U2: It can happen**

**103. [23:52:55] U2: Hahahaha**

**104. [23:53:03] U2: They only throw stones**

**105. [23:53:04] U2: Hahahaha**

**106. [23:53:06] U13: If it rains we play faster…It's the only thing that changed**

**107. [23:53:13]**

**108. [23:53:19] U2: sticker omitted**

**109. [23:53:30] U13: Haha**

**‎110. [23:53:30] U13: E9 didn’t ever come**

**111. [23:53:42] U13: ?**

**112. [23:53:49]**

**113. [23:53:53] U2: Many**

**114. [23:54:15] U2: Even E10 of Carmen came once!!!**

**115. [23:54:24] U13: Yes. And E11**

**116. [23:54:29] U16: Yeaah, I remember!**

**117. [23:54:35] U13: And the fox**

**118. [23:54:43] U2: Nooooo**

**119. [23:54:47]**

**120. [23:54:53]**

**121. [23:54:54] U2: Yes**

**122. [23:54:57] U2: Great goalie**

**123. [23:55:05] U16: E12 that played with U8, E7’s friend too, I think, was bad compared us, imagine**

**124. [23:55:06]**

**125. [23:55:07]**

**126. [23:55:07] U13: And one that sold hotdogs… E13… and the brother who was a fatty**

**127. [23:55:27]**

**128. [23:55:33] U2: He never played**

**129. [23:55:35] U2: Hahahaha**

**130. [23:55:41] U4‬: Yees hahahaha**

**131. [23:55:43] U1: Hahaha**

**132. [23:55:02] U1: But he came!!**

**133. [23:56:04]**

**134. [23:56:06] U2: Hahahaha**

**135. [23:56:09] U13: He played five minutes and almost died. We took it out so that the substance is not endangered.**

**136. [23:56:17]**

**137. [23:56:19] U13: But he gave us magic**

**138. [23:56:20] U1: 🤣🤣**

**139. [23:56:20]**

**140. [23:56:22] U2: Haha**

**141. [23:56:25]**

**142. [23:56:39]**

**143. [23:56:55] U16: I don’t remember either! FML! You burned me U1!**

**144. [23:57:52] U1: Because you drink a lot of beer U16!! 🤣🤣**

**145. [23:58:11] U16: I don’t have any left!**

**146. [23:58:21]**

**147. [23:58:36] U16: Israel Square**

**148. [23:58:43] U2: The jewish square**

**149. [23:59:06] U2: When I don’t remember who stuffed the ball with stones**

**150. [23:59:10] U2: To be shot**

**151. [23:59:12] U2: Hahahaha**

**152. [23:59:13] U13: That was in the university campus. He slammed it against the goal**

**153. [23:59:29] U13: Don't ask me to head the ball**

**154. [23:59:41]**

**155. [03/08/2020, 00:00:06] U4: It wasn’t in Lermo**

**156. [00:00:45] U13: Maybe… he always was a bit unfocussed**

**157. [00:00:51] U16: At first, we gathered in the libertador square before**

**158. [00:00:57] U13: I remember very well the one in the university campus**

**159. [00:01:08] U13: Yeaaaah**

**160. [00:02:16]**

**161. [00:03:12] U13: Shooting star**

**162. [00:03:50] U13: It’s important to recall the beginnings of U14 too**

**163. [00:05:14] U16: Yes, I’m gonna tell him later! But I remember that both went by bike!**

**164. [00:05:43] U16: The story about the “little joint”**

**165. [00:06:12]**

**166. [00:07:07]**

**167. [00:08:03] U13: This is poorly told. There was a gratuitous aggression that was not allowed to pass**

**168. [00:08:12]**

**169. [00:08:42] U4: Correct**

**170. [00:09:17] U4: We didn't let it PASS**

**171. [00:10:04] U4: U14 has a very good MEMORY**

**172. [00:13:13] U16: Speaking of heat, we went some new year or Christmas too!**

**173. [00:15:16] U13: E15 also came a few times too? Anyone helps**

**174. [00:16:25] U5: Come on boys!**

**175. [00:16:42] U5: Yeees E15 came for sure** **👏🏻👏🏻🤡**

**176. [00:17:07] U5: The spider hahahaha**

**177. [00:17:07] U4: Come on NOW YEEES**

**178. [00:20:09] U16: Well, I'm going to put E16 to bed cos tomorrow starts back classes x zoom. If I let him he stays up until any time! Keep squeezing the memory that I write everything down tomorrow, put together the reports you have U5, U5 and everyone looking for photos if we can! I don’t know if they’re from Lermo, all was kept in our memories!**

**179. [00:21:14]**

**180. [00:22:07] U4: Come on The Gang**

**‎181. [00:23:14] U1: ‎image omitted**

**182. [07:37:13] U19: Oops… WTF…I missed all this, and I woke up half hangover…I can't read it in this condition…**

U2 took the role of mentor in several moments of the conversation (e.g., M7-8) and the seven friends who contributed with text assumed the role monitors at different moments of the interaction by assessing whether the stories being told were accurate (see acknowledgements, M2, 5, 9, 13, 15, 19, 24, 45, 67, 71, 80, 88, 109, 112, 115, 121, 125, 130, 159, 165, 168, and 175).

There was only one instance in which a participant acting as monitor refused to the version of the story being told by another participant by expressing that an important element in the narrative was missing (“This is poorly told”, M167).

The illustrative example we presented enabled us to have a better insight into the kind of autobiographical events participants shared with each other in the WhatsApp group messages we collected for the study. It revealed how the participants collaborated in the retrieval of individual and collective memories about how they began playing soccer together. It showed the important role of reminders in the form of questions and verbs in the past tense in the unplanned reconstruction of such shared experiences. The analysis also showed the conversational roles (i.e., narrator, mentor and monitor) that participants adopted during the interaction and how these changed over time. The alternation of roles occurred spontaneously possibly reflecting the strong ties that the members of the large group have as well as the fact that those ties are regulated by symmetric relationships, as there seemed to be no hierarchies in the WhatsApp group conversations. In addition, the unplanned alternation of conversational roles manifested the social and cognitive distribution of memories about those shared experiences. A by-product of the increased number of CRSs found during the COVID-19 lockdown period was that the social and cognitive system scaffolding the distribution of collective memories incorporated a technological component (i.e., WhatsApp group messages) that members of the community could use as archive in the future (e.g., in planned collective remembering activities).