

Social Aspects of Memory

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Abstract

No one doubts that memories are shaped by the social context in which they are formed or later remembered. In this essay we focus on how the social context of remembering and memorizing with others shapes the way both the speaker and listener remember the past, what we refer to as collaborative remembering. In addressing the mnemonic consequences of collaborative remembering, we discuss 1) how it shapes what is occurrently remembered in the group and 2) how it affects both what the speaker and listener subsequently remember. In terms of the former, we discuss the robust collaborative inhibition literature; in terms of the latter, we discuss the social contagion, retrieval induced-forgetting and socially shared retrieval-induced forgetting literature. In conclusion, we highlight areas in need of future research within the area of “social aspects of memory”: 1) whether the mnemonic effects of collaborative remember propagate across a group, that is, to move beyond dyadic interactions and examine larger groups; 2) examining the evolutionary advantages of human memory being susceptible to the influence of others; and, in turn, 3) how this mnemonic susceptibility may help foster social bonds.

SOCIAL ASPECTS OF MEMORY

No one doubts that memories are shaped by the social context in which they are formed or later remembered. Some psychologists have tried to control for these social effects, in the belief that, by doing so, they may better understand the universal principles governing memory, whereas others have insisted that the study of social aspects of memory is central to the study of memory. This latter group has taken a wide range of approaches to the topic. Some have investigated the way individuals remember social objects, for instance, by studying memory for people, with the assumption being that memory for social objects differs from memory for nonsocial objects (Srull & Wyer, 1989). Others have explored how culturally derived schemata affect how and what individuals both learn and remember (Bartlett, 1932; Wertsch, 2002). In a similar vein, some researchers have probed the ways institutions foster rituals and practices that, in turn, shape memory (Olick & Robbins, 1998; Zerubavel, 2002). Although psychologists have given some attention to this last issue,

the study of memory practices has mainly occupied the efforts of social scientists outside the field of psychology (but see Hirst *et al.*, 2009).

We want to consider here the collaborative nature of memorizing and remembering. Society's use of commemorations and memorials, as well as other social artifacts and practices, could be viewed as a collaborative effort at remembering, that is, a collaboration between social institutions and the general public. Our interest, however, rests more at the interpersonal level, that is, collaborative memorizing and remembering within small groups of individuals, or between one person and his/her audience. One might think of this interest as concerning communicative influences on memory. A great example of this is when remembering occurs within a conversation, as when a family gets together and reminisces about past Christmases. Three issues dominate current concerns about collaborative remembering, which we frame in terms of group recounting. First, how does the occurrent act of remembering in a group shape what is remembered by the group? This issue fits squarely within the much larger literature on group processes (Levine, 2013). Second, how does what one person remembers in a group discussion, the speaker, affect her own subsequent memory? Finally, again, to put the question in terms of a conversation, how does what speakers say shape the subsequent memory of their listeners, the other group members?

There are at least four reasons why collaborative remembering deserves attention. First, sharing a jointly experienced event with others may be a uniquely human endeavor. Although some nonhuman species communicate information to each other, as honey bees do when they signal the location of a food source (Gould, 1974), it is not clear that any species other than humans intentionally communicates to one another information already known to the recipient. Humans not only do so, but also do so routinely.

Second, group discussions about the past can serve both epistemic and relational functions (Echterhoff, Higgins, & Levine, 2009). When serving their epistemic function, group discussions seek to achieve a valid and reliable understanding of the world. This understanding need not be arrived at by simply transmitting new information, although that sometimes occurs. Rather, in many instances, it occurs by increasing or decreasing the accessibility of already established memories or altering the content of established memories—either intentionally or unintentionally. Sometimes, one person in a group recounting might intentionally try to persuade others of a particular rendering of the past. The large literature on persuasion is relevant here (Perloff, 2010; Petty & Cacioppo, 1996). However, in many acts of collective remembering, group members are not trying to persuade one another, but simply trying to remember the past together. In such instances, the issue is less about what makes a message persuasive and more about how a

message reshapes the memories of the discussants, even when there is no conscious intention to do so. As to its relational function, group recountings can build social bonds. For example, a fireside chat of a couple about their early relationship will often serve as a vehicle for further intimacy.

Third, to follow up on the comments about function, collaborative remembering can also serve as a means of building a mnemonic consensus and, through this consensus, a collective memory (Hirst & Manier, 2008). When people experience an event, they do not always remember it in the same way. Rather Rashomon-like, people bring to an experience their own perspectives, and, as a result, remember the incident in their own peculiar manner (e.g., Hastorf & Cantril, 1954; Talarico & Moore, 2012). To the extent that the influence speakers have on both their own memory and the memories of their audience are similar, then discussing the past with others should lead to shared representations of the past, what have often been called *collective memories*. Just as the degree to which people can readily access autobiographical memories is thought to affect self-identity, attitudes, beliefs, and actions, so also might a collective memory influence collective identity, attitudes, beliefs, and actions (Olick, Vinitzky-Seroussi, & Levy, 2011). Part of the reason why discussions about the past may create a sense of intimacy among participants is because they help the discussants form a collective identity.

Fourth, and finally, the study of group recounting fits well with recent philosophical efforts to extend the mind beyond the surface of the skin (Clark & Chalmers, 1998; Robbins & Aydede, 2009). According to this philosophical argument, social artifacts, institutions, and tools are not external to the mind, but become an integral aspect of the mind, needed for the mind to achieve its full capacity. One does not have to accept the argument for an extended mind in full to agree with a basic lesson it imparts: That human behavior is a consequence of a tight, inseparable interaction between external influences and internal mechanisms (Sutton, Harris, Keil, & Barnier, 2010) and that the study of cognition should focus on this interaction rather than exclusively on internal mechanisms.

COLLABORATIVE REMEMBERING AND SELECTIVITY

Let us turn to the first issue dominating discussions of collaborative remembering: What does the collaborating group remember? People rarely remember all that they are capable of remembering when remembering in a group (Rajaram & Pereira-Pasarin, 2010). Although a group might remember more than any one individual remembering alone, the group does not remember as much as the sum of what each group member is capable of recollecting on her own, a phenomenon known as *collaborative*

inhibition (Weldon, 2001). This selective remembering can occur for a variety of reasons. First, people might tune what they say to their audience, recalling some memories, presumably because they believe that these are the ones their audience wants to hear, while remaining silent about others (Echterhoff *et al.*, 2009). Second, in some instances, conversational participants may be part of a transactive memory system, which consists of a group of individuals in which its members specialize in memorizing and remembering different types of material (Wegner, Erber, & Raymond, 1991). For example, a couple might constitute a transactive memory system, with one member specializing in remembering the financial details, while the other remembers social details. Third, people have a tendency to remember what others already know rather than their uniquely held memories (Wittenbaum & Park, 2001). The reason for this *information sampling bias* is statistical rather than profoundly psychological: If all memories can be recalled equally, then there is a greater probability for a shared rather than an unshared memory to be recalled by at least one group member (Stasser & Titus, 1987). Fourth, there may be social loafing, that is, some group members may remain silent, while others carry the burden of remembering. Finally, and importantly, the way one group member retrieves the to-be-remembered material may be effective for that group member but not for other group members. Consequently, the retrieval strategy pursued by one group member may block the most effective means of retrieval for the other group members (Rajaram & Pereira-Pasarin, 2010). Collaborative inhibition may then be an inevitable consequence of joint remembering when people have differing perspectives on the past.

EFFECTS OF SELECTIVE GROUP RECOUNTINGS ON SUBSEQUENT REMEMBERING

As to the second and third issues dominating discussions of collaboration, obviously, the selectivity of group recountings can reshape the subsequent memories of both speakers and listeners in the group discussion by reinforcing selected memories (Roediger, Zaromb, & Butler, 2009). However, as Hirst and Echterhoff (2012) have argued, group discussions about the past can reshape the memories of their participants in other ways as well, specifically, through social contagion and induced forgetting.

SOCIAL CONTAGION

Since the groundbreaking work by Loftus (2005), psychologists have known that exposure to misleading material can implant memories. In the earliest experiments, the misinformation was presented without, in most cases, mentioning a social source. For instance, participants saw a traffic accident

depicted in a sequence of slides and then read a narrative account of the slide show. In the slide show, there might be a stop sign at the intersection where the accident occurred; the narrative would mention a yield sign. About 30% of the time, participants in such experiments falsely recognized the misleading information, recalling, following up on our example, that there was a yield sign instead of a stop sign (see also Lindsay, Hagen, Read, Wade, & Garry, 2004).

More recent research has examined situations that clearly involve a social source, including a speaker in a conversation (Meade & Roediger, 2002). In recognition of this social character, researchers often refer to the implantation of memories as *social contagion* (Meade & Roediger, 2002). Critically for the purposes here, social contagion is greater when the source imparting the misinformation is a person as opposed to a written document, even if the participant in the experiment is told the document reflects what another person recalled (Meade & Roediger, 2002). Moreover, the social relationship between the source of the misinformation and the audience matters: For instance, the more the listener trusts the speaker, the greater the level of social contagion; and, in reverse, the less the listener trusts the speaker, the lower the level of social contagion (Dodd & Bradshaw, 1980; Echterhoff, Hirst, & Hussy, 2005).

INDUCED FORGETTING

While our understanding of social contagion rests on almost four decades of research, we are only beginning to understand how group recountings, in particular, their selectivity, might induce forgetting. Remaining silent about a memory may lead to its decay overtime, but when silence occurs in the midst of acts of remembering, selective retrieval can induce forgetting for these silent but related memories (see Anderson, Bjork, & Bjork, 1994; Stone, Coman, Brown, Koppel, & Hirst, 2012). Critically, this retrieval-induced forgetting (RIF) holds for those selectively communicating the past to others (a speaker in a conversation, for instance) and for those attending to the selective remembering (the listener), with the latter referred to as *socially shared retrieval-induced forgetting* (SS-RIF).

For instance, Cuc, Koppel, and Hirst (2007) asked participants to read a story about a day in the life of John, who went to Coney Island (one episode), where he swam, rode a roller coaster, and ate a hot dog, and then went to a dinner party (a different episode), where he watched football, among other things. In a joint recollection of the story with another participant, the event of eating a hot dog might be remembered, for instance, but not the event of riding a roller coaster or any event associated with the dinner party. Cuc *et al.* found that in a final individual recall test, participants were more likely to

forget unmentioned items from the original story when they were related to what was remembered in the group recounting (e.g., riding the roller coaster) compared to unmentioned, unrelated items (e.g., watching football), even when the items were equated for memorability. That is, they observed similar RIF in both speakers and listeners.

Hirst & Echterhoff (2012) have argued that SS-RIF occurs because listeners concurrently, albeit covertly, retrieve with the speaker. With this concurrent, covert retrieval, the listener will be in a situation similar to that of the speaker. SS-RIF differs from the retrieval-induced forgetting observed in a speaker or an individual remembering on his own in that SS-RIF is optional. Listeners do not have to concurrently retrieve along with a speaker, whereas speakers are, by definition, retrieving. Inasmuch as retrieval is an effortful activity, the findings that listeners do, in many instances, concurrently retrieve is noteworthy.

SS-RIF has also been observed outside the laboratory. For instance, Stone, Luminet, Klein, Licata, and Hirst (2014) examined the memories of French-speaking Belgians' (some Belgians speak Dutch rather than French) of critical aspects of currently politically charged, nationally relevant issues. They found SS-RIF for these critical details for those participants who listened to a televised broadcast of a speech by the Belgian King. Those participants who attended to the speech had more trouble remembering details related to those raised by the King than details about undiscussed topical issues. Alternatively, those who did not attend to the speech showed no difference in accessing details about both the discussed and undiscussed issues.

What are the next steps in the study of communicative influences on subsequent memory, particularly the relatively unexplored socially shared retrieval-induced forgetting? Researchers might investigate in more detail how these communicative influences differ for speakers and listeners. For instance, although induced forgetting occurs for both speakers and listeners when they concurrently retrieve, the retrieval conditions differ. Speakers must freely recall a memory, whereas listeners need only recognize it. The implication of this difference is not fully understood, but it no doubt has consequences. Researchers might also try to better understand the conditions under which listeners make the effort to concurrently retrieve. Koppel, Wohl, Meksin, and Hirst (2014) suggested that such retrieval may occur when there is, if even at a minimal level, mistrust between speaker and listener. Echterhoff *et al.*'s (2009) work on the saying-is-believing effect suggests that the need to create a shared reality with each other might be relevant. At present, though, not enough is known about the communicative influences on memory to offer a general model of the phenomena.

MOVING BEYOND DYADIC INTERACTIONS

Most of the research to date has examined collaborative remembering in dyads, that is, two people. But what about larger groups? As noted earlier, one reason for studying communicative influences on memory is that they may have the potential to promote the formation of a collective memory. Rehearsal, social contagion, and induced forgetting will, respectively, reinforce, mislead, and lower mnemonic accessibility in both speaker and listener, thereby increasing mnemonic consensus between the two. However, how do communicative influences on memory reach beyond their immediate effects on the participants in a conversation? Such influences would be more pertinent to the study of collective memory if they propagated across a large social network. Work on obesity and social networks, for instance, has shown that it is not just that an obese friend can influence your weight, but also your obese friend can influence friends of yours with whom he has no connection (Christakis & Fowler, 2007). The influence propagates. Coman and Hirst (2012) recently studied the propagation of rehearsal and SS-RIF effects on memory across a sequence of two social interactions, showing propagation in some, but not all situations. Coman, Kolling, Lewis, and Hirst (2012) explored larger networks using agent-based modeling, which assumes that emergent properties of a network can be traced to “local” influences (Epstein, 2006). As these “local” influences propagate through the network, the assumption is, they can begin to affect the network as a whole. Coman *et al.*'s model suggested that communicative influences do propagate, at least to some extent, and can promote mnemonic consensus across a network. Researchers are only beginning to examine the extent to which communicative influences propagate across a network, the degree to which any limit on propagation might affect mnemonic convergence, and finally, how answers to these issues might vary with network topology. Both experimental work and agent-based modeling might prove useful in addressing these issues.

FINAL CONSIDERATIONS

Why is human memory susceptible to the influences of others? Why can't it be more like a computer's memory, in which memories are left unaltered once encoded? To some extent, the answer lies in the fact that humans are seemingly designed to communicate their memories to others, whereas computers are not. However, this is only a partial answer. A fuller answer rests with the possibility that human memory takes advantage of its communicative function. Several evolutionary psychologists have stressed that human intelligence is a direct result of humanity's need to live in increasingly complex social settings (e.g., Humphrey, 1976). The malleability of memory—that is,

the ability of a speaker to reshape the memory of the listener—may have been another adaptation to the social environment humans increasingly found themselves occupying. With their capacity to promote the formation of a collective memory, communicative influences on memory seem ideally suited as a means to bring, at least, small groups closer together. Of course, at times, a shared memory of the past can lead to animosity among groups. Our point is that it may also play a critical role in cementing the social bonds within a group. Although these speculations seem reasonable, we know surprisingly little about the role rehearsal, social contagion, and induced forgetting play when nonhuman species interact socially. Moreover, although the fostering of social bonds has received considerable attention from psychologists (e.g., Castano, Yzerbyt, Paladino, & Sacchi, 2002), the role of memory, and, in particular, the relation among communicative influence, memory, and sociality has remained heretofore unexplored. Finally, if communicative influences on memory represent distinctively human phenomena, we know little about the way in which the human brain mediates these effects (but see Edelson, Sharot, Dolan, & Dudai, 2011). These topics should receive greater prominence in future memory research than they have in the past.

REFERENCES

- Anderson, M. C., Bjork, R. A., & Bjork, E. L. (1994). Remembering can cause forgetting: Retrieval dynamics in long-term memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *20*, 1063–1087. doi:10.1037/0278-7393.20.5.1063
- Bartlett, F. (1932). *Remembering*. New York, NY: Cambridge University Press.
- Castano, E., Yzerbyt, V., Paladino, M.-P., & Sacchi, S. (2002). I belong, therefore, I exist: Ingroup identification, ingroup entitativity, and ingroup bias. *Personality and Social Psychology Bulletin*, *28*, 135–143. doi:10.1177/0146167202282001
- Christakis, N. A., & Fowler, J. H. (2007). The spread of obesity in a large social network over 32 years. *New England Journal of Medicine*, *357*, 370–379. doi:10.1056/NEJMsa066082
- Clark, A., & Chalmers, D. (1998). The extended mind. *Analysis*, *58*, 7–19.
- Coman, A., & Hirst, W. (2012). Cognition through a social network: The propagation of induced forgetting and practice effects. *Journal of Experimental Psychology: General*, *141*, 321–336. doi:10.1037/a0025247
- Coman, A., Kolling, A., Lewis, M., & Hirst, W. (2012). Mnemonic convergence: From empirical data to large-scale dynamics. In S. J. Yan, A. M. Greenberg & M. Endele (Eds.), *Social computing, behavioral-cultural modeling and prediction* (pp. 256–265). Berlin, Germany: Springer-Verlag.
- Cuc, A., Koppel, J., & Hirst, W. (2007). Silence is not golden: A case for socially shared retrieval-induced forgetting. *Psychological Science*, *18*, 727–733. doi:10.1111/j.1467-9280.2007.01967.x

- Dodd, D. H., & Bradshaw, J. M. (1980). Leading questions and memory: Pragmatic constraints. *Journal of Verbal Learning and Verbal Behavior*, *19*, 695–704. doi:10.1016/S0022-5371(80)90379-5
- Echterhoff, G., Higgins, E. T., & Levine, J. M. (2009). Shared reality: Experiencing commonality with others' inner states about the world. *Perspectives on Psychological Science*, *4*, 496–521. doi:10.1111/j.1745-6924.2009.01161.x
- Echterhoff, G., Hirst, W., & Hussy, W. (2005). How eyewitnesses resist misinformation influence: Social postwarnings and the monitoring of memory characteristics. *Memory and Cognition*, *33*, 770–782. doi:10.3758/BF03193073
- Edelson, M., Sharot, T., Dolan, R. J., & Dudai, Y. (2011). Following the crowd: Brain substrates of long-term memory conformity. *Science*, *333*, 108–111. doi:10.1126/science.1203557
- Epstein, J. (2006). *Generative social science: Studies in agent-based computational modeling*. Princeton, NJ: Princeton University Press.
- Gould, J. L. (1974). Honey bee communication. *Nature*, *252*, 300–301. doi:10.1038/252300a0
- Hastorf, A. H., & Cantril, H. (1954). They saw a game: A case study. *The Journal of Abnormal and Social Psychology*, *49*, 129–134. doi:10.1037/h0057880
- Hirst, W., & Echterhoff, G. (2012). Remembering in conversations: The social sharing and reshaping of memories. *Annual Review of Psychology*, *63*, 55–79. doi:10.1146/annurev-psych-120710-100340
- Hirst, W., & Manier, D. (2008). Towards a psychology of collective memory. *Memory*, *17*, 183–200. doi:10.1080/09658210701811912
- Hirst, W., Phelps, E. A., Buckner, R. L., Budson, A. E., Cuc, A., Gabrieli, J. D. E., . . . , Vaidya, C. J. (2009). Long-term retention of the terrorist attack of September 11: Flashbulb memories, event memories, and the factors that influence their retention. *Journal of Experimental Psychology: General*, *138*, 161–176. doi:10.1111/j.1467-9280.2009.02343.x
- Humphrey, N. K. (1976). The social function of intellect. In P. P. B. Bateson & R. A. Hinde (Eds.), *Growing point in ethology* (pp. 303–317). New York, NY: Cambridge University Press.
- Koppel, J., Wohl, D., Meksin, R., & Hirst, W. (2014). The effect of listening to others remember on subsequent memory: The roles of expertise and trust in socially shared retrieval-induced forgetting and social contagion. *Social Cognition*, *32*, 148–180. doi:10.1521/soco.2014.32.2.148
- Levine, J. M. (Ed.) (2013). *Group processes*. New York, NY: Psychological Press.
- Lindsay, D. S., Hagen, L., Read, J. D., Wade, K. A., & Garry, M. (2004). True photographs and false memories. *Psychological Science*, *15*, 149–154. doi:10.1111/j.0956-7976.2004.01503002.x
- Loftus, E. F. (2005). A 30-year investigation of the malleability of memory. *Learning & Memory*, *12*, 361–366. doi:10.1101/lm.94705
- Meade, M. L., & Roediger, H. L. (2002). Explorations in the social contagion of memory. *Memory & Cognition*, *30*, 995–1009.

- Olick, J. K., & Robbins, J. (1998). Social memory studies: From “collective memory” to the historical sociology of mnemonic practices. *Annual Review of Sociology*, 24, 105–140. doi:10.1146/annurev.soc.24.1.105
- Olick, J. K., Vinitzky-Seroussi, V., & Levy, D. (Eds.) (2011). *The collective memory reader*. New York, NY: Oxford University Press.
- Perloff, R. M. (2010). *The dynamics of persuasion: Communication and attitudes in the twenty-first century*. New York, NY: Routledge.
- Petty, R. E., & Cacioppo, J. T. (1996). *Attitudes and persuasion: Classic and contemporary approaches*. Boulder, CO: Westview Press.
- Rajaram, S., & Pereira-Pasarin, L. P. (2010). Collaborative memory: Cognitive research and theory. *Perspectives on Psychological Science*, 5, 649–663. doi:10.1177/1745691610388763
- Robbins, P., & Aydede, M. (Eds.) (2009). *The Cambridge handbook of situated cognition*. New York, NY: Cambridge University Press.
- Roediger, H. L., III, Zaromb, F. M., & Butler, A. C. (2009). The role of repeated retrieval in shaping collective memory. In P. Boyer & J. V. Wertsch (Eds.), *Memory in mind and culture* (pp. 29–58). Cambridge, England: Cambridge University Press.
- Strull, T. K., & Wyer, R. S. (1989). Person memory and judgment. *Psychological Review*, 96, 58–83. doi:10.1037/0033-295X.96.1.58
- Stasser, G., & Titus, W. (1987). Effects of information load and percentage of shared information on the dissemination of unshared information during group discussion. *Journal of Personality and Social Psychology*, 53, 81–93. doi:10.1037/0022-3514.53.1.81
- Stone, C. B., Coman, A., Brown, A. D., Koppel, J., & Hirst, W. (2012). Toward a science of silence: The consequences of leaving a memory unsaid. *Perspectives on Psychological Science*, 7, 39–53. doi:10.1177/1745691611427303
- Stone, C. B., Luminet, O., Klein, O., Licata, L., & Hirst, W. (2014). Socially shared retrieval-induced forgetting of “collective” memories: The mnemonic consequences of attending to the Belgian King’s 2012 summer speech. Manuscript in preparation.
- Sutton, J., Harris, C. B., Keil, P. G., & Barnier, A. J. (2010). The psychology of memory, extended cognition, and socially distributed remembering. *Phenomenology and the Cognitive Science*, 9, 521–560. doi:10.1007/s11097-010-9182-y
- Talarico, J. M., & Moore, K. M. (2012). Memories of ‘The Rivalry’: Differences in how fans of the winning and losing teams remember the same game. *Applied Cognitive Psychology*, 26, 746–756. doi:10.1002/acp.2855
- Wegner, D., Erber, R., & Raymond, P. (1991). Transactive memory in close relationships. *Journal of Personality and Social Psychology*, 61, 923–929. doi:10.1037//0022-3514.61.6.923
- Weldon, M. S. (2001). Remembering as a social process. In D. L. Medin (Ed.), *The psychology of learning and motivation: Advances in research and theory* (pp. 67–120). San Diego, CA: Academic Press.
- Wertsch, J. V. (2002). *Voices of collective remembering*. Cambridge, England: Cambridge University Press.

- Wittenbaum, G. M., & Park, E. S. (2001). The collective preference for shared information. *Current Directions in Psychological Science*, 10, 70–73. doi:10.1111/1467-8721.00118
- Zerubavel, D. (2002). *Time maps: Collective memory and the social shape of the past*. Chicago, IL: The University of Chicago Press.

FURTHER READING

- Echterhoff, G., Higgins, E. T., & Levine, J. M. (2009). Shared reality: Experiencing commonality with others' inner states about the world. *Perspectives on Psychological Science*, 4, 496–521. doi:10.1111/j.1745-6924.2009.01161.x
- Hirst, W., & Echterhoff, G. (2012). Remembering in conversations: The social sharing and reshaping of memories. *Annual Review of Psychology*, 63, 55–79. doi:10.1146/annurev-psych-120710-100340
- Hirst, W., & Manier, D. (2008). Towards a psychology of collective memory. *Memory*, 17, 183–200. doi:10.1080/09658210701811912
- Rajaram, S., & Pereira-Pasarin, L. P. (2010). Collaborative memory: Cognitive research and theory. *Perspectives on Psychological Science*, 5, 649–663. doi:10.1177/1745691610388763

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