Introduction

Toward a social turn in memory: An introduction to a special issue on social memory☆

Anyone who has seriously thought about memory recognizes that the act of remembering is influenced, in part, by the social dynamics governing this activity. Jane will recount her date differently when telling her mother, her girlfriend, or certainly her soon-to-be ex-boyfriend about it. The supportive exchanges characteristic of the conversational interactions between long-term couples recollecting a previous vacation will differ from the recollections of a couple that, let's say, only met during the vacation (Harris, Keil, Sutton, Barnier, & McIlwain, 2011). And the dialog between a teacher and a student in the midst of a lecture about previously studied material may be shaped by the power relationship between them in a way that a conversation between peers in a colloquium may not be. In each case, the social interaction constrains what is eventually remembered.

Given the ubiquity of such mnemonic exchanges, it is surprising how little research existed until recently on the way social interactions affect remembering. The reasons for this neglect may reflect, in part, psychology's emphasis on the individual. When Ebbinghaus (1964/1883) first began to develop a scientific study of memory, he tried to produce "the conditions for psychological experimentation," while acknowledging that "he who considers the complicated process of higher mental life or who is occupied with the still more complicated phenomena of the state and of society" will find such an attempt at control daunting (p. 11). His well-known solution was to focus on what he considered nonsense material, thereby eliminating the need to consider the complexity, meaning, associations, and elaborations may bring to the table. Probably less well appreciated, perhaps because it is rarely questioned, was his decision to study an individual memorizing and remembering in isolation. Ebbinghaus may have acknowledged that scholars can be interested in society, and he no doubt was aware, though he does not write of it, that people often remember in concert with others. Yet, for him, memory was an individual capacity and hence was something that needed to be studied as such.

Ebbinghaus (1964/1883) was not alone in this emphasis on the individual remembering in isolation. Even Bartlett (1932), a strong proponent of studying how social factors shape remembering, still focused on individuals. He asked individuals, not groups, to recall *The War of the Ghosts*. The social factors he studied were not social

interactions, as might be found in a group recounting, but cultural influences, as was the case when he examined how Swazi cattlemen individually remember cattle auctions.

The one exception to this early emphasis on individuals remembering in isolation was Vygotsky (1980), who emphasized the mediated nature of cognition. Development occurred by internalizing externally assisted cognitive acts. But even in adults, cognition depends on scaffolds or cognitive tools supplied by the external environment. Especially in his discussion of development, Vygotsky recognized the powerful role social interactions can play in scaffolding memory (see also Nelson & Fivush, 2004).

Of course, 19th and early 20th century scholars outside of what might be narrowly circumscribed as the experimental psychology of memory were interested in group processes. The study of group processes was first conducted chiefly by sociologists, with the pioneering work done by LeBon (1897), and, to an extent, Durkheim (2012/1912), McDougall (1973/1920), and Simmel (1950). With respect to memory, Halbwachs (1992/1925), a student of Durkheim, introduced the study of "collective memory" to the field of sociology. These sociologists provided the foundation for Kurt Lewin's (1947) early work on the social psychological, and hence, experimental, study of group dynamics, which was built, in part, on the foundation established by the sociological efforts.

Interestingly, although some scholars have argued that the principles governing group processes can be understood as emerging from interactions at the dyadic level, as well as from the psychological properties of individual members of the group (e.g., Epstein, 2006), in the main, students of group dynamics seek to demonstrate that the group is greater than the sum of its parts. That is, the crowd takes on a "psychology" all its own, one different from what one would predict if examining each member of the group on his or her own. Interest in the individual becomes subservient to concerns about the group. As a result, work on memory from a group process perspective tends to focus on two phenomena that show that group recounting differs from individual recounting. We have in mind here research on (1) transactive memory (Wegner, 1987) and (2) the sampling bias effect (Wittenbaum & Stasser, 1996). The first refers to the distribution of effort among members of established groups, such as a couple, when memorizing and remembering, often according to perceived expertise. One member of a couple might be responsible for remembering financial dealing, whereas the other might remember social engagements, for instance. Thus, members of a group memorize and remember differently than they

would if they were memorizing and remembering in isolation. The sampling bias effect refers to the tendency of members of a group to recount shared information rather than uniquely held information. Now, because of group dynamics, members of the group fail to bring to mind memories that they might remember, again, if alone.

Because of their field's distinctive historical origins and their different emphases – one on individuals, the other on groups – it is not surprising that students of memory and students of group processes have struggled to find common ground. Graduate students specializing in memory are usually not expected to know the literature on group processes, nor are students of group dynamics usually tutored in the literature on memory. To the extent that students of memory recognize the importance of studying social interactions, it is because memory is generally recognized as being malleable. As Loftus (2013) dramatically demonstrated, one person can implant a memory into another person. Whereas this "postevent misinformation effect" no doubt creates a path for studying social interactions' effect on memory, little work along these lines followed Loftus's original publications. Rather her findings were applied to pressing social problems – from issues surrounding the reliability of eyewitness testimony to those resulting from an explosion of reports of recovery of memories of childhood sexual abuse (Loftus, 2013).

As to the influence that Loftus had on those scholars working on group processing, as suggested, it was limited. In many textbooks on group processes, Loftus is not cited. For instance, in the *Blackwell Handbook of Social Psychology: Group Processes* (Hogg & Tindale, 2008), Loftus is only mentioned twice in its 696 pages, and then only in a chapter on jury deliberation. Moreover, to underscore the disconnect between work on memory and work on group processes, it is worth noting that the topic of memory does not warrant a separate entry in the *Encyclopedia of Group Processes and Intergroup Relations* (Levine & Hogg, 2010), though "transactive memory systems" does. We suspect this neglect arises because much of the work on memory from a social perspective, such as Loftus's, is viewed as being more about the consequences on individual memory subsequent to a social interaction rather than about the emergent properties of the interaction itself.

The last few years have seen a substantial change in this landscape. The present collection of papers reflects a "social turn" in the study of memory in the last decade or so. A growing number of students of memory are now studying the effect of social interactions on memory. Their interest is not simply in how social factors, such as culture, affects memory. Since Bartlett, and perhaps before, there has been an enduring concern in what might be viewed as the cross-cultural study of memory (e.g., Cole & Scribner, 1974). The present "social turn" differs from that endeavor, in that it focuses on the social interactions that give shape to collective acts of remembering. The reasons for this "social turn" are many.

1. Since Neisser's (2000) delivered his clarion call for more ecologically valid research in the field of memory, many students have begun to consider with great care how memory is used in everyday life. Among their many astute observations is the recognition that people often remember collaboratively and through communicative acts. Following the reasoning advanced by Neisser, this observation makes the study of collaborative remembering and conversational remembering not only something that should be examined after researchers understand the principles of memory, but something to investigate in order to understand principles of memory.

2. Along with Neisser's (2000) concern for ecological validity, at least a few of those who were instrumental in developing a cognitive psychological approach to the mind argued that the endeavor had lost its way (e.g., Billig et al., 1988; Bruner, 1990; Cole, 1998). Bruner, for instance, argued that the shift away from the study of behavior to the exploration of mental life should

have been about the way people give meaning to their lives. Echoing Bartlett (1932), he averred that cognitions were "acts of meaning." From this perspective, a central task of cognitive psychologists was to understand how people gave meaning to their life. For Bruner, much of what passed for cognitive psychology seemed as removed from this endeavor as he could possibly imagine. As part of his call for a psychology built around "acts of meaning," Bruner emphasized the collaborative nature of such acts.

3. In concert with Bruner's (1990) revisionism, many students of memory shifted their attention away from technical topics arising from the study of the information processing involved in encoding and retrieval toward a clearly meaning-laden form of memory, autobiographical memory (e.g. Rubin, 1999). The resulting work on autobiographical memory underscored the close relation between memory and self-identity (Conway & Pleydell-Pearce, 2000). This connection was, in fact, a primary reason for studying autobiographical memory, as opposed to, for instance, episodic memory. Although the study of autobiographical memory still focused on the individual, the emerging interest in the connection between memory and identity opened the door for a study of a much more socially based form of memory, collective memory (Hirst & Manier, 2008). Since Halbwachs's (1992/1925) work on collective memory, scholars recognized that autobiographical and collective memory had many features in common, chiefly, that they both help give shape to identity, in one case, self-identity, in the other, collective identity. Although psychologists have generally not joined into what is now an army of scholars studying collective memory, their new-found interest in the relation between memory and identity provided an opportunity for at least a small cadre of psychologists to join in the effort (see Hirst & Echterhoff, 2012, for a review).

4. The implication of Loftus's (2013) work on the malleability of memory began to be cast in more social terms. As noted, Loftus, and those following her lead, framed the research on the postevent misinformation effect in terms of eyewitness testimony and later the effects of therapeutic interactions on memory. Loftus did not consider in any depth the way memory's malleability might play out in ordinary everyday social, or more precisely, conversational interactions. Other researchers, such as Gabbert, Memon, and Allan (2003), Meade and Roediger (2002), and Wright, Self, and Justice (2000), did make this leap, though many of them were still working within the domain of psychology and the law. As a result of their efforts, the implantation of memories was reframed in terms of *social contagion*, in order to underscore the role social interactions might play in remembering, or *memory conformity*, to emphasize the convergence of mnemonic representations occurring as speakers implant memories into listeners.

5. Philosophers re-conceptualized the mind, arguing that it extends beyond the surface of the skin (Clark & Chalmers, 1998; Sutton, 2010). According to this position, the act of remembering is neither something happening in the head or in the world, but in the interaction between the two. Students of memory should focus on understanding this interaction. For many researchers adopting this perspective, a perfect situation for studying this interaction is in the conversational exchanges typical of many acts of remembering.

6. In a less philosophically driven, but still forceful manner, many evolutionary psychologists noted that human cognition was only possible in large part because people had learned to build a complex external world through which they could scaffold their cognition (e.g., Donald, 1991). Writing systems, computer databases, simple and elaborate drawings all provided means of externalizing memories that extended human mnemonic capacity. The ability of people to aid each other's acts of remembering

through conversational interaction is one of the earliest and most pervasive scaffolds.

7. Psychologists were moving away from simply studying the architecture of the mind and were beginning to consider memory's functions (Bluck, Alea, & Habermas, & Rubin, 2005). That is, why do people bother to remember? People do not simply remember to inform themselves or others, or direct their activities. They also remember to form social bonds with others. Remembering together can foster intimacy. Many students of memory wanted to explore remembering as it accomplishes this function.

8. Finally, a serious move emerged in the late 1990s toward constructing experimental paradigms that leveraged decades of individual memory research conducted in the Ebbinghausian tradition and aimed at identifying the nature of group memory and the influence of group interaction on the memory of the each group member (Basden, Basden, Bryner, & Thomas, 1997; Weldon & Bellinger, 1997). This transition was among the key developments that led the way to the experimental investigation of what Weldon (2000) called "remembering as a social process".

The papers in this Special Issues reflect this emerging interest in the way social interactions shape memory. One theme in this group of papers is a topic that has periodically been of interest to psychologists, but has only recently become a vibrant area of study, that is, how collaborative remembering differs from individual acts of remembering (Rajaram & Pereira-Pasarin, 2010). This work has generally emphasized the cost of collaborative remembering: Participants in collaborative remembering often fail to remember some of what they might remember if they recollect individually and in isolation. The notion is that the retrieval strategies pursued during the collaboration by one member of the group may not be an effective strategy for another member and, as a result, has the potential to "block" retrieval. The present set of papers focus on the strengths of collaborative remembering. Blumen, Young, and Rajaram (2014) examine the effects of a single or repeated act(s) of collaboration on subsequent individual memory. Subsequent individual memory is much better if it is preceded by collaborative remembering, as opposed to individual remembering. Additionally, repeated collaboration is more effective than a single act of collaboration. Moreover, even a single act of collaboration can reap equivalent benefits in the long run if collaborative remembering gains are consolidated through an immediate, follow-up act of individual remembering.

Pociask and Rajaram (2014) adopt a different approach and examine the way previously studied material is incorporated into tasks that involve much more than remembering the previously studied material. Their participants listened to a lecture on statistics and then solved statistical problems – either individually or collaboratively. The degree to which this problem solving affected subsequent performance was then assessed. Participants were more likely to solve the assigned problem when doing so collaboratively than individually, but this benefit did not transfer to the final assessment, with one exception. Female participants show a benefit from collaboration in the final assessment, especially for "conceptual" problems. Both papers underscore the usefulness of this line of research when assessing the benefits of collaboration in educational settings.

Continuing the work on collaborative remembering, Barnier et al. (2014) explore whether it can aid the elderly in overcoming the difficulties they experience recalling autobiographical memories. They are particularly interested in whether collaborative remembering with a long-term partner might be useful, a possibility consistent with Wegner's (1987) work on transactive memory systems. They find that collaboration with intimates did indeed aid the elderly's recall of the episodic features, but not their recollection

of the semantic features. In contrast, collaboration did not appear to benefit a cohort of young participants. Again, the applied aspects of this research are underscored.

Another theme in the papers in this Special Issue engages a long-standing interest to memory psychologists but with relatively little empirical work, namely the transmission of memory across people. Bartlett wrote extensively about this phenomenon in his book as early as in 1932. A concerted reappearance of this theme has finally emerged in modern experimental work. Research by Pennebaker (1997) has discussed the phenomenon of social sharing in large groups that captures the idea of information transmission. Choi, Blumen, Congleton, and Rajaram (2014) have recently reported laboratory data on mnemonic transmission of information across collaborating partners and across even partners' partners who did not actually collaborate but had one collaborating partner in common.

In this Special Issue, Roediger, Meade, Gallo, and Olson (2014) revisit Bartlett by contrasting for the first time repeated reproduction (the same person repeatedly recalling information) with serial reproduction (people transmitting information from one person to another). Using Deese-Roediger-McDermott word lists (Roediger & McDermott, 1995), they establish that serial reproduction is much more likely to lead to memory distortions than repeated reproduction. Their results suggest that the fidelity of mnemonic transmission is low.

Yamashiro and Hirst (2014) also examine mnemonic transmission, but now in a naturalistic setting. They employed a story vignette and asked 17 participants to converse freely about the previously studied story over a period of two weeks. Tracing the contact points among these group members for conversational recall and the contents of their story recall, the authors construct the network of social transmission of memory. The emergence of collective memory in this network occurred not only between directly conversing members but also across indirectly connected members.

Pursuing the theme of transmission in another direction, Stone, van der Haegen, Luminet, and Hirst (2014) investigate the phenomenon of memory transmission across generations within families. Drawing upon Assmann's (2011) distinction between cultural and communicative memory, the authors compared the transmission of nationally relevant versus personally relevant memories related to World War II and found that transmission of memories was limited. Further, to the extent memories were reported by all three generations (older, middle, and younger), these were mainly nationally relevant memories.

Yet another theme in this Special Issue – captured in papers by McNabb and Meade (2014), by Hyman, Roundhill, Werner, and Rabiroff (2014), and by Pierucci, Echterhoff, Marchal, and Klein (2014) – focuses on the social influences on the malleability of memory. McNabb and Meade examine the malleability of memory in two layers – in creating memory errors through collaborative activity and in overcoming these errors through re-studying the original events. Their findings show, in the first layer of malleability, incorporation of the confederate's memory errors in recalling previously studied, everyday household scenes and, in the second layer, a correction of these errors through a re-study of the scenes.

Along similar lines, Hyman et al. (2014) examined the effect of collaborative remembering on subsequent memory test, now focusing on source monitoring. Hyman et al. asked pairs of participants to study partially overlapping word lists and then either to recall all the words, regardless of who had studied them, or recall only the words studied by both individuals. A final source monitoring task then followed. Hyman et al. found that source monitoring improved if the collaborative remembering task focused participants' attention on the source of the original material. Moreover, when source monitoring errors occurred in the final memory test,

people were more likely to claim that they had originally studied the item than that their partner had studied it. This egocentric bias suggests that when collaborative remembering, the group works to construct an agreed upon version of the past that quickly becomes each individual's memory.

Following along this theme Pierucci et al. now use the audience-tuning effect (Higgins, 1992) to examine social influences on the malleability of the memory valence. These authors provide participants with a description of a supervisor's sexual harassment behavior and ask the participants to describe (re-write) this vignette to an audience (a confederate) who they believe has either a positive or a negative opinion of the supervisor. When the participants do not know the outcome of the supervisor's ambiguous behavior, the shift in the evaluative tone (positive or negative) in the recall of this behavior depended on whether they believed their audience (the confederate) to have a positive or negative opinion of the supervisor. Thus, participants 'tuned' recall valence to the attitude of their audience, exhibiting memory malleability not so much in the quantity of recall but in the tone of recall.

Finally, in yet another thematic line of investigation, Shteynberg (2014) examines another social phenomenon – group attention – and its effect on myriad cognitive processes, including memorizing and remembering. Shteynberg argues forcefully that, just as the mind-body dualism is open to criticism, so also is the social-mental dualism. In making this argument, he echoes many of the concerns of philosophers espousing an extended mind, but he grounds his discussion by reviewing his own empirical research on group attention. This work established that co-attention changes the way people process the attended-to material, especially in contrast to what one observes when attention is directed outside of a group setting. As Shteynberg avers, one cannot understand something as seemingly basic as the effect of attention on cognition without considering its social dimension.

The papers in this Special Issue offer a window into the rich possibility offered by the study of social aspects of memory. They raise deep theoretically challenging issues about the nature of the mind, and they address pressing practical concerns, as, for instance, the role collaboration can play in educational settings and in ameliorating the memory problems the elderly confront daily. But perhaps more critically, they establish that good, rigorous empirical research can be undertaken about the complex interactions between the social environment and internal processing. More, of course, will hopefully follow.

References

Assmann, J. (2011). Communicative and cultural memory (15–27). In P. Meusburger, M. Heffernan, & E. Wunder (Eds.), Cultural memories: The geographical point of view (pp. 15–27). Dortdrecht, NL: Springer.

Barnier, A. J., Priddis, A. C., Broekhuijse, J. M., Harris, C. B., Cox, R. E., Addis, D. R., et al. (2014). Reaping what they sow: Benefits of remembering together in intimate couples. Journal of Applied Research in Memory and Cognition, 3, 261–265.

Bartlett, F. (1932). Remembering. New York: Cambridge University Press.

Basden, B. H., Basden, D. R., Bryner, S., & Thomas, R. L., III. (1997). A comparison of group and individual remembering: Does collaboration disrupt retrieval strategies? Journal of Experimental Psychology: Learning, Memory, and Cognition, 23, 1176–1189.

Billig, M., Condor, S., Edwards, D., Gane, M., Middleton, D., & Radley, A. (1988). Ideological dilemmas: A social psychology of everyday thinking. Thousand Oaks, CA: Sage.

Bluck, S., Alea, N., Habermas, T., & Rubin, D. C. (2005). A tale of three functions: The self-reported uses of autobiographical memory. Social Cognition, 23, 91–117.

Blumen, H. M. (2014). Optimizing group collaboration to improve later retention. Journal of Applied Research in Memory and Cognition, 3, 244–251.

Bruner, J. S. (1990). Acts of meaning. Cambridge, MA: Harvard University Press.

Choi, H.-Y., Blumen, H. M., Congleton, A. R., & Rajaram, S. (2014). The role of group configuration in the social transmission of memory: Evidence from identical and reconfigured groups. Journal of Cognitive Psychology, 26, 65–80.

Clark, A., & Chalmers, D. (1998). The extended mind. Analysis, 58, 10–23.

Durkheim, E. (2012). The elementary forms of the religious life. New York: Courier Dover Publications.

Cole, M. (1998). Cultural psychology: A once and future discipline. Harvard University Press.

Cole, M., & Scribner, S. (1974). Culture & thought: A psychological introduction. New York: John Wiley & Sons.

Conway, M. A., & Pleydell-Pearce, C. W. (2000). The construction of autobiographical memories in the self-memory system. Psychological Review, 107, 261–288.

Donald, M. (1991). Origins of the modern mind: Three stages in the evolution of culture and cognition. Cambridge, MA: Harvard University Press.

Ebbinghaus, H. (1964). Memory: A contribution to experimental psychology. New York: Dover.

Epstein, J. M. (2006). Generative social science: Studies in agent-based computational modeling. Princeton, NJ: Princeton University Press.

Gabbert, F., Memon, A., & Allan, K. (2003). Memory conformity: Can eyewitnesses influence each other's memories for an event? Applied Cognitive Psychology, 17, 533–543.

Halbwachs, M. (1992). On collective memory. Chicago: University of Chicago Press.

Harris, C. B., Keil, P. G., Sutton, J., Barnier, A. J., & McIlwain, D. J. (2011). We remember, we forget: Collaborative remembering in older couples. Discourse Processes, 48, 267–303.

Higgins, E. T. (1992). Achieving 'shared reality' in the communication game: A social action that creates meaning. Journal of Language and Social Psychology, 11, 107–131.

Hirst, W., & Echterhoff, G. (2012). Remembering in conversations: The social sharing and reshaping of memories. Annual Review of Psychology, 63, 5–79.

Hirst, W., & Manier, D. (2008). Towards a psychology of collective memory. Memory, 16, 183–200.

Hogg, M. A., & Tindale, S. (Eds.). (2008). Blackwell handbook of social psychology: Group processes. New York: John Wiley & Sons.

Hyman, I. E., Roundhill, R. F., Werner, K. M., & Rabiroff, C. A. (2014). Collaboration inflation: Egocentric source monitoring errors following collaborative remembering. Journal of Applied Research in Memory and Cognition, 3, 293–299.

Le Bon, G. (1897). The crowd: A study of the popular mind. New York: Macmillian.

Levine, J. M., & Hogg, M. A. (Eds.). (2010). Encyclopedia of group processes and intergroup relations. Thousand Oaks, CA: Sage.

Lewin, K. (1947). Group decision and social change. Readings in Social Psychology, 3, 197–211.

Loftus, E. F. (2013). 25 Years of eyewitness science…finally pays off. Perspectives on Psychological Science, 8, 556–557.

McDougall, W. (1973). The group mind. New York: Arno Press.

McNabb, J. C., & Meade, M. L. (2014). Correcting socially introduced false memories: The effect of re-study. Journal of Applied Research in Memory and Cognition, 3, 287–292.

Meade, M. L., & Roediger, H. L. (2002). Explorations in the social contagion of memory. Memory & Cognition, 30, 995–1009.

Neisser, U. (2000). Memory: What are the important questions. In U. Neisser, & I. Hyman (Eds.), Memory observed: Remembering in natural contexts (pp. 3–19). New York: Worth.

Nelson, K., & Fivush, R. (2004). The emergence of autobiographical memory: A social cultural developmental theory. Psychological Review, 111, 486–511.

Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. Psychological Science, 8, 162–166.

Pierucci, S., Echterhoff, G., Marchal, C., & Klein, O. (2014). Creating shared reality about ambiguous sexual harassment: The role of stimulus ambiguity in audience-tuning effects on memory. Journal of Applied Research in Memory and Cognition, 3, 300–306.

Pociask, S., & Rajaram, S. (2014). The effects of collaborative practice on statistical problem solving: Benefits and boundaries. Journal of Applied Research in Memory and Cognition, 3, 252–260.

Rajaram, S., & Pereira-Pasarin, L. P. (2010). Collaborative memory: Cognitive research and theory. Perspectives on Psychological Science, 5, 649–663.

Roediger, H. L., & McDermott, K. B. (1995). Creating false memories: Remembering words not presented in lists. Journal of Experimental Psychology: Learning, Memory, and Cognition, 21, 803–814.

Roediger, H. L., Meade, M. L., Gallo, D. A., & Olson, K. R. (2014). Bartlett revisited: Direct comparison of repeated reproduction and serial reproduction techniques. Journal of Applied Research in Memory and Cognition, 3, 266–271.

Rubin, D. C. (Ed.). (1999). Remembering our past: Studies in autobiographical memory. New York: Cambridge University Press.

Shteynberg, G. (2014). A social host in the machine? The case of group attention. Journal of Applied Research in Memory and Cognition, 3, 307–311.

Simmel, G. (1950). The sociology of Georg Simmel. New York: Simon and Schuster.

Stone, C. B., van der Haegen, A., Luminet, O., & Hirst, W. (2014). Personally relevant vs. nationally relevant memories: An intergenerational examination of World War II memories across and within Belgian French-speaking families. Journal of Applied Research in Memory and Cognition, 3, 280–286.

Sutton, J. (2010). Exograms and interdisciplinarity: History, the extended mind, and the civilizing process. In R. Menary (Ed.), The extended mind (pp. 189–225). Cambridge, MA: MIT Press.

Vygotsky, L. S. (1980). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.

Wegner, D. M. (1987). Transactive memory: A contemporary analysis of the group mind. In B. Mullen, & G. R. Goethals (Eds.), Theories of group behavior (pp. 185–208). New York: Springer.

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.

Weldon, M. S., & Bellinger, K. D. (1997). Collective memory: Collaborative and individual processes in remembering. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 23,* 1160–1175.

Wittenbaum, G. M., & Stasser, G. (1996). Management of information in small groups. In J. L. Nye, & A. M. Brower (Eds.), *What's social about social cognition? Research on socially shared cognition in small groups* (pp. 3–28). Thousand Oaks, CA: Sage.

Wright, D. B., Self, G., & Justice, C. (2000). Memory conformity: Exploring misinformation effects when presented by another person. *British Journal of Psychology, 91,* 189–202.

Yamashiro, J. K., & Hirst, W. (2014). Mnemonic convergence in a social network: Collective memory and extended influence. *Journal of Applied Research in Memory and Cognition, 3,* 272–279.

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