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Collective Memory from a Psychological Perspective

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Abstract The study of collective memory has burgeoned in the last 20 years, so much so that one can even detect a growing resistance to what some view as the imperialistic march of memory studies across the social sciences (e.g., Berliner 2005; Fabian 1999). Yet despite its clear advance, one area that has remained on the sidelines is psychology. On the one hand, this disinterest is surprising, since memory is of central concern to psychologists. On the other hand, the relative absence of the study of collective memory within the discipline of psychology seems to suit both psychology and other disciplines of the social sciences, for reasons that will be made clear. This paper explores how psychology might step from the sidelines and contribute meaningfully to discussions of collective memory. It reviews aspects of the small literature on the psychology of collective memory and connects this work to the larger scholarly community's interest in collective memory.

Keywords Social contagion · Memory restructuring · Collective memory ·
Collective forgetting

General Comments

Contextualizing the Study of Collective Memory

Why not has psychology figured prominently in discussions of collective memory? For those in social science fields other than psychology, the methodological individualism of

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psychology threatens to reduce the phenomenon of collective memories to simply "shared individual memories." Although there are intense debates about the meaning of the term *collective memory*, almost every social scientist agrees that collective memories are NOT just shared individual memories. Indeed, scholars often warn about the danger of borrowing psychological concepts when discussing something as obviously social in nature as collective memory (e.g., Kansteiner 2002). For these social scientists, collective memories are not "shared individual memories", but, as Olick (1999) stated it, "publicly available symbols maintained by society." When viewing the study of collective memory from this perspective, scholars see commemorations and memorials as the sine qua non of the field, in that they are no doubt publicly available symbols that exist in large part to preserve the past. For them, a central, if not *the* central question for students of collective memory is: how does society construct and maintain these symbols? They study the politics of memory, the memory practices of a community, and the resistance a community might raise to what is often the efforts of authority figures to shape a community's memory. Discussion focuses on the actions of institutions, social groups, and communities to maintain public symbols such as memorials. The individual simply does not figure directly in these societal efforts. To be sure, individuals make up communities, and the communities act through individuals, but in the end, it is the actions and dynamics of a community that matter, making it almost beside the point to discuss collective memories as "shared individual memories" or to treat the formation and maintenance of a collective memory as a psychological phenomenon.

As for psychology, it also is burdened by its methodological individualism. For most psychologists, the social nature of collective memories and the critical role society plays in forming and maintaining them puts their study beyond the purview of their field of study. To quote William James, psychology is the "science of mental life," and, as such, it focuses on what happens in the head, not what occurs in the world, or even on the interaction between what is in the head and in the world. There are a few mavericks willing to treat collective memory as a critical area of psychological study (e.g., Aydede and Robbins 2008; Fiore and Sales 2007; Lea and Nicoll 2002; Middleton and Edwards 1990). In many cases, they do so by adopting an approach to psychology that is far removed from the mainstream information-processing or cognitive approach (Middleton and Edwards 1990). Moreover, a few psychologists insist that the study of memory should focus not simply on the individual, but also on the collective (see Hirst and Manier 2008). They would accept that the formation of a collective memory is as much a consequence of what society does as what the mind does. They insist, however, that one cannot just focus on society. The mind must be folded into the story.

These renegades have been substantially encouraged by recent work of philosophers on what has come to be called the *extended mind* (Clark and Chalmers 1998; Wilson 2005). The argument of these philosophers is that the age-old notion that the mind is what happens in the head is misconceived. All cognitions and actions arise out of an interaction between the world and what lies beneath the surface of the skin, which we might generally refer to as neuronal processing. As a result, for these philosophers, it seems arbitrary to draw a line in the middle and confine psychological study to what is happening in the head and leave the study of what is happening in the world to other disciplines. Cognitions and actions would never occur without both, so why separate the two? In order to understand, for instance, the navigation of a blind man, a researcher must consider not only the mechanisms in the brain and the distribution of nerve ending on the finger tips, a usual focus of psychologists, but also the nature of the cane—its length, rigidity, graspability, and so on (Bateson 1979). The navigation of the blind man is a consequence of all these factors, with none of them privileged in any way.

Within psychology, this social-interactionist approach can be traced back at least to Vygotsky and has found expression in studies of situated cognition (Ayede and Robbins 2008), distributed learning (Lea and Nicoll 2002), and socio-historical approaches (Fivush and Nelson 2004), as well as those adopting the philosophical label of extended mind (Clark and Chalmers 1998; Wilson and Clark 2008). To be sure, you could study what happens in the head without considering what is happening in the world, as neuroscientists do when studying the ways neurotransmitters interact with their receptors. You could also describe the world, something that social scientists studying collective memory could be said to be doing. Yet the claim of psychologists endorsing variations on an extended mind approach is that one would never fully understand human actions and cognitions without considering the internal and external factors together, often as components within a complex system.

When it comes to the study of memory, the claim would be that, in order to understand how a person remembers what he ate last night, a researcher needs to consider not only the neural mechanisms underlying memory, but also, for instance, the visual cues in the environment, such as the pile of dishes in the sink. A pioneer of the psychological study of memory, Fredrick Bartlett, captured well this interactionist approach when he likened the act of remembering to the action of swinging a tennis racket (Bartlett 1993). Most would agree that this action is not the reappearance of a previous tennis stroke stored away in a repository of past tennis strokes, but the construction of a tennis stroke out of previous experience with tennis, as well as current situational factors, such as the position of the sun, the opponent's posture, the conditions of the court, etc. For Bartlett, remembering a past event is similar to the act of swinging a tennis racket, in that, for him, remembering is the act of reconstructing the past out of both what is in the head and what is outside in the world. It is not the retrieval of stored replicas of the past.

Bartlett entitled his work on memory "Remembering." Although he was not explicit, it would appear that Bartlett felt that memories were not in the head in any specific way, but rather in the interaction between what is in the head, the schemata formed of past experience with tennis, and what is in the world. If you like, memories are products of remembering, not stored representations of the past. They are not retrieved, as a memory might be in a computer, but built out of the interaction between what is beneath the surface of the skin and the world beyond this surface.

In order to illuminate how this social-interactional approach applies to memory, we can examine chess masters remembering chess positions and bartenders remembering drink orders (Beach 1993; Chase and Simon 1973; Chase and Ericsson 1982). Psychologists have long known that the more one knows about something, the better one remembers new material that builds on this knowledge (Ericsson and Kintsch 1995). Chess masters, for instance, will remember a chess position better than a novice, not because they have a better memory than a novice, but because they use their knowledge of chess to guide their remembering. They know that certain pieces are positioned according to attack or defense strategies and then use this knowledge when memorizing and remembering the position. Their excellent performance could not be obtained if they cannot use their knowledge. When asked to reproduce a chess position consisting of randomly placed pieces, their performance is no better than that of novices (Chase and Simon 1973).

Expert bartenders are, in many ways, similar to chess masters (Beach 1993). Their memory for drink orders is markedly better than the memory of novice bartenders. But unlike chess masters, to effect their extraordinary performance, they do not rely solely on their knowledge of drinks, rather they reach beyond what is "in their heads" and turn to the outside world, restructuring it so that the world "remembers" the drinks for them, at least in

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part. When novice bartenders are asked to remember a list of drinks, they merely repeat the drink order to themselves. If the order is long and complicated, they quickly forget the order. On the other hand, expert bartenders use the distinctive shape of many drinking glasses to aid their memory. When they receive a drink order, they place the appropriate glass onto the bar as the order is given. The physical presence of the glasses as they subsequently fill the orders effectively guides their memory. To be sure, the correspondence between glass shapes and drinks is not one-to-one, but the presence of different shapes delimits the range of what needs to be remembered, and, as a result, expert bartenders find it easier to remember even a complicated drink order. Their memory per se has not gotten better; rather the restructured world makes it easier for them to remember successfully.

Where is expert bartenders' memory of the drinks? In their heads? In the world? Or in the interaction between what is in the head and what is in the world? If it were merely in the bartenders' head, then a differently constructed world would not matter. But it does. If expert bartenders are forced to put only tumblers on the bar, they have altered their world, but they do not remember the order any better than the novices did with oral rehearsal (Beach 1993). The use of specific glass shapes is much more effective because it serves as a "memory cue" and these cues are more mnemonically salient than are the memory cues provided by a row of tumblers. This fact has nothing to do with the way the world is constructed; it has to do with the structure of human memory and the manner by which cues guide remembering. Some cues are more effective than others, and they are effective because memory is built in a way that makes them effective.

When memories are viewed in this way, as a product of the interaction between what is in the head and what is in the world, then the notion of collective memories as "shared individual memories" might seem less wrong-headed, even to those that treat collective memories as "publicly available symbols." In the bartender example, an individual restructures the world so that the individual can better remember. When it comes to collective memory, society (even if society is represented by an authority figure) restructures the world so that society better remembers. In the form of its institutional surrogates, America built the Lincoln Memorial so that it would never forget Lincoln, and, more specifically, that it would remember Lincoln as a god-like figure. The politics surrounding the design of the Lincoln Memorial, and the way in which society ensures that tourists routinely visit the Lincoln Memorial, clearly tells part of the story of how the Lincoln Memorial shapes the American collective memory. But this account does not specify why the Lincoln Memorial is particularly effective in reshaping society's memory. The world is replete with memorials, and commemorations are held with great frequency. Some of these memorials and commemorations effectively shape the collective memory of a mnemonic community, whereas others remain ineffective. Scholars of collective memory need to know why some mnemonic resources effectively promote the formation and alteration of collective memories and others do not. Is the Lincoln Memorial, and its image of Lincoln, more powerful and mnemonically salient than the Jefferson Memorial, and its image of Jefferson? And if so, why?

The answer to these questions lies in part in recognizing that memorials can potentially change the memories of visitors one at a time, and thereby collectively all those who visit. If the change in individual memory is substantial, and similar across visitors, a memorial can effectively shape the collective memory. On the other hand, if the change is minimal, or different across individuals, the effect on collective memory will be minimal. The memory a person has of Jefferson is probably not changed dramatically by a visit to the Jefferson Memorial, but the image of Lincoln sitting Zeus-like in a building constructed in the style of a Greek temple is likely to remain with even the most casual tourist for years afterwards. This lasting image,

replicated in the mind of each new tourist, may well serve as an anchor for the collective memory that these visitors have not only of the Lincoln Memorial, but of Lincoln himself.

When viewed this way, it seems appropriate to treat collective memories as "shared individual memories" that arise, at least in part, from the artifacts that society creates and maintains, including the creation and maintenance of memorials. The memories are only available to members of a community because of interactions members of community have with social artifacts. Moreover, they are shared because the social artifacts guide the remembering of not just one, but most, if not all members of the community. At least some point in time, members of a community may have had individually distinctive memories, but social artifacts, such as memorials and commemorations, reshape these memories in a manner that leads to community-wide shared memories.

This perspective offers only a partial take on collective memories. One cannot treat collective memories simply as shared individual memories. Olick (1999) began his definition with the phrase "publicly available symbols." In using the term *symbol*, Olick is stressing that the meaning the memory has for society is important. Aleida Assmann (1995a) made a similar point, when she argued that collective memories must have a function for society. We want to emphasize here the function of guiding the construction of a collective identity. It is easy to incorporate this observation into a social-interactional perspective by defining collective memories as individual memories shared across a community that bear on the community's identity. This identity-shaping function is critical to the definition of collective memories because not all shared memories are collective memories. Most Spaniards, for instance, know the value of *pi*, but the value of *pi* is not a Spanish collective memory. On the other hand, most Spaniards also remember the Madrid bombing of March 11, 2004, but unlike the value of *pi*, this memory clearly bears on Spanish collective identity. It can properly be called a Spanish collective memory.

Specifying the Psychological Role

When viewed in this manner, psychology has a critical role to play in the study of collective memory. According to a social-interactionist approach, the study of collective memory should address at least three issues.

Issue # 1: Students of collective memory need to study what Hirst and Manier (2008) have referred to as the design of the social artifacts that can shape a community's memory. That is, they need to know how society constructs and maintains these social artifacts. As we have noted, this effort has been the traditional domain of the social sciences of collective memory. Studies of the politics of memory and the evolution of community memory practices are at its core. The literature on this issue is substantial.

Issue # 2: Students of collective memory also need to explore how these social artifacts can transform distinct individual memories into shared individual memories. This effort could be viewed as a kind of market research, in which each new memorial, commemoration, or other means of shaping memory is evaluated for its effectiveness, just as a new cereal would be evaluated by marketers for its sales potential. We, however, have something deeper in mind. That is, we are interested in understanding the psychological mechanisms and processes by which distinct individual memories can be transformed into shared individual memories. Researchers could presumably use these general principles to predict the effectiveness of specific memorial or commemoration, but our interest, at least

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initially, is in establishing the principles, not applying them. Although psychologists have not routinely viewed what they do in terms of collective memory, as we shall see, there is a surprisingly large body of literature relevant to the issue of how distinctive individual memories are transformed into shared individual memories.

Issue # 3: Students of collective memory need to understand how it is that shared individual memories can shape collective identities. Here both work in the social sciences and psychology are relevant.

In the rest of the paper, we will focus on Issue #2. As we have been emphasizing, this issue is only part of the story of collective memory. But as we have also stressed, it is an essential part. What can psychology contribute to an answer to Issue #2?

Conversations and Collective Memory

According to a social-interactionist approach to collective memory, it is important to study how collective memories are formed and maintained within a social context. Critically, it is important to choose a social context that has general applicability to the phenomenon of collective memory. Although many scholars have focused on memorials and commemorations with this in mind, we want to focus here on conversations. People often talk to others in their community about past events of consequence to their community (Miller 1994; Mehl and Pennebaker 2003). In many instances, conversations can serve as a decisive mnemonic resource for the spread of a memory across a group, even a group as large as a nation (Fentress and Wickham 1992; Wertsch 2002). Granted, they do not have the materiality and certainly not the permanence of social artifacts such as memorials or even commemorations, as Jan Assmann (1995b) underscored when he distinguished *communicative* from *cultural memories*. Nevertheless, conversations may promote the formation of a collective memory as much as, if not more than, a textbook, a memorial, or a commemoration. Indeed, they seem to be a critical means for forming what has variously been called informal, vernacular, or counter-memories (Bodnar 1992; Foucault 1977). For instance, Lithuanians of Lithuanian descent know their nation's history not through the Russian textbook they use in school, but through the many informal conversations they have with acquaintances, friends, and relatives (Schuman et al. 1994).

Those concerned with Issue #1, the design side of the study of collective memory, can investigate conversations in a manner not dissimilar from the one they use to study memorials or commemorations. They might, for instance, examine the way that conversations unfold between experts and novices, teachers and students, or between friends (e.g., Andersson and Rönnberg 1995; Dudukovic et al. 2004; Pasupathi et al. 1998). In doing so, they might articulate the rules governing turn-taking in these situations or the conventions governing when conversational participants may or may not object to what is said (Sachs et al. 1974). Much of this might fall under what might be viewed as the study of the "rituals" or social conventions of conversations (Givón 2005; Levinson 1983). No single individual may have decided that students should not interrupt a teacher in a classroom exchange, but the social convention is well established and has mnemonic consequences. Similarly, social conventions exist that require people to tell the "whole truth and nothing but the truth" in some instances, but, in other instances, to remain silent (Zerubavel 2006). When these social conversations are viewed as "design" decisions, even if the decision is more a historical process than the decision of an individual or a single organization, as far as Issue #1 is concerned, conversations share much in common with traditions, rituals, commemorations, memorials, or textbooks. The designing may not

always be done to intentionally shape collective memory, as is the case in the design of a memorial. But intentional or not, the "design" decisions can have substantial consequences for the formation of a collective (Hirst and Manier 2008).

As we stated, our concern here is mainly with Issue #2, which, stated in terms of conversation, asks how conversations can transform discrete individual memories into shared individual memories. We can ask this question more precisely and more particularly: How does a speaker reshape his own and his listeners' memories so that their memories overlap more following a conversation than they did before the conversation? We need to be clear about the distinction between Issue #1 and Issue #2. For instance, consider the role of expertise in the formation of a collective memory. Issue #1 might focus on how a person in a group comes to be viewed by others as an expert: how, for instance, does a person become designated as an expert? What social conventions must be reached? Moreover, what social processes promote the training necessary for one member of the group to achieve expertise over another group member? What social restrictions exist in access to this training?

Issue #2 is evoked once a particular situation exists, that is, a group in conversation has an expert. Here the concern is how expertise affects the degree to which a conversation changes memories. Does, for instance, the presence of expertise promote the transmission of memory? Thus, in pursuing Issue #2, social factors such as expertise, power, distrust, and so on are taken as given. The issue is not particular about these social factors came into being, rather we are interested in what is the effect of their presence on the formation of collective memories.

Our focus on speaker and listener within a single conversation should not be viewed as limiting. It is a first step toward a fuller understanding of the relation between conversation and the formation of collective memories. The elemental influence of a speaker on a listener could extend to larger communities. The influence of speakers can become widespread if they address a large number of people. Moreover, a chain of influences can also be set up, with one speaker reshaping the memory of a listener, who, in turn, becomes a speaker who can influence another listener. This sequence of conversational interactions can multiply in complex ways and may, after numerous conversations, lead to a convergence onto a shared community-held rendering. Studies of the epidemiology of beliefs and the spread of information across a network suggest that this posited convergence is not only a realistic possibility, but may be quite frequent (Sperber 1996; Watts 2004). What we want to emphasize here is that, if individuals begin with distinct renderings of the past, mnemonic convergence is only possible because of memory's malleability.

In what follows we will consider two paths for the formation of collective memories through conversations. In one section, our research group is interested in empirically investigating instances in which remembering in a social context allows the speaker to implant new memories or alter existing ones and in doing so, makes individual memories more consensual. The malleability of individual memory will be used as a premise as we discuss conversational dynamics in dyads and groups. The effect of conversational dynamics on subsequent remembering and on the formation of collective memory will be discussed. In another section, we will draw attention to the phenomenon of aggregated forgetting as another path that one might use to explain the formation of collective memories.

Remembering Together: Altering Existing Memories and Implanting New Ones

Conversations Promote Social Contagion and Memory Implantation

Social contagion refers to the spread of a memory—either true or false—from one person to another through social interaction (Roediger et al. 2001). In a representative study of social

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contagion, Wright et al. (2000) examined, in a naturalistic context, how members of conversational dyads can shape each other's memory for material they each viewed. Participants were randomly assigned to complete the task individually or as a pair. In the dyad condition, both members of a pair studied a picture. The pictures they saw differed slightly, though the pair was led to believe they were studying the same picture. The pair was asked to individually study the pictures, jointly recall them, and then subsequently recall what they remembered from the original image. In the individual condition, an individual, rather than pairs, was asked to separately study and then recall the image. Wright et al. revealed that false recognitions for the critical items (the items in the pictures that differed across versions) were more prevalent in the dyad condition than the individual condition. Their findings testify to the ability of conversations to facilitate the formation of collective memory; the false recognitions in the joint recall condition, after all, represented shared renderings of the pictures. Absent the joint recall task, each member of the dyad would have merely held   the individual memory for the pictures they established during study.

A particularly dramatic form of social contagion is seen in studies of memory implantation. In these studies, rather than conversation shaping memory for incidents that actually happened, individuals are induced into taking on rich, vivid memories for spurious autobiographical events. In a typical and oft-cited paradigm, researchers ask an individual to describe several specific events from his or her childhood. Although most of the probe events actually occurred, one of them did not. For instance, a participant would be asked to recount the occasion he or she got lost in a mall, when, in fact, such an incident never happened. In some cases, the individual eventually takes on "memories" for the fictional episode (Loftus 1993). Psychologists have planted false memories even for implausible or impossible events, such as the sighting of Bugs Bunny—a Warner Brothers character—at Disney World (Braun et al. 2002) and demonic possession (Mazzoni et al. 2001). To be sure, such attempts at memory implantation are not invariably successful. One study estimated that, across the literature, memory implantation has been successful in about 30% of participants (Lindsay et al. 2004). Still, when one considers the many opportunities of memory implantation that arise, this is hardly a small figure.

The Effects of Conversational Dynamics and the Characteristics of Conversational Participants

A social-interactionist approach stresses that researchers must consider not just the cognitive consequences of a social interaction, but the nature of the social interaction itself. We have reviewed studies that show that social contagion can occur in a conversation, with, for instance, a speaker implanting a memory into a listener. We have as yet said little about how the characteristics of this interaction may mediate the extent to which social contagion might occur. Not all conversations are equally effective in reshaping the memories of their participants. Nor, for that matter, are all conversational participants equally likely to induce social contagion in their listeners. In the following section, we review several variables bearing on the degree to which a given conversation serves as a means of social contagion. In particular, we will focus on the qualities of the speaker.

The Role of the Dominant Narrator A series of studies by Hirst, Manier, and their colleagues have identified the disparate conversational roles taken by individual inter-locutors in social interaction and the implications of these roles in shaping subsequent collective memory (e.g., Hirst and Manier 1996; Hirst et al. 1997). These studies have

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focused on conversations of families of four (including a mother, father, and two children) about shared family experiences. They have found that conversational participants tend to naturally take on contrasting and complementary roles, identifying three roles in particular: *Narrators, Mentors*, and *Monitors*. Narrators further the narrative of the episode at issue; mentors aid narrators by prompting them to further their narratives and provide more details; and monitors evaluate whether the narrative, as told by the narrator, was accurate and complete.

The specific roles performed by different group members help determine the content of the conversation. Most critically, Narrators control, to varying degrees, the discussion on any given topic. It is, thus, their version of events that emerges most prominently in conversational remembering. For instance, one of the conversations in Hirst and Manier (1996) involved the son's high school graduation present. The son felt aggrieved because he believed he had been promised a stereo. In this conversation, he took on the Narrator role, because he was intent on getting his account of the episode through.

Narrators also introduced *unshared* memories, as opposed to *shared* memories, into conversational remembering more frequently than did non-narrators. Unshared memories are memories held by only one member of a group, while shared memories are those held by two or more members. Consistent with an information sampling bias (Stasser and Titus 1985), Hirst and Manier (1996) found a clear preference for individuals to refer to shared memories, while avoiding those that only they held. Narrators were the exception to this rule.

Hirst and Manier (1996) did not, however, assess the effect the family's conversational remembering had on their post-conversation memories. Cuc et al. (2006) pursued this issue by collecting both pre-conversation individual memories and post-conversation individual memories of families engaged in collaborative remembering about a story they had just read. They found that individuals' memories for the story were initially fairly individuated. Pre-conversation, there was relatively little overlap between story details recalled by respective group members. However, after the group recounting, group members' memories for the story became considerably more similar to each other; recall had converged around the story details mentioned in the group recounting. Story details alluded to during collaborative recall were disproportionately included in the final individual recall tasks, relative to those that were left unmentioned in collaborative recall. Consistent with work on social contagion, then, a collective memory for the story had formed through conversational remembering, where previously there were only four relatively individuated memories.

More critically for our present purposes, this effect was shaped by the specific roles taken by conversational participants. Specifically, Cuc et al. (2006) found that the presence of a *dominant Narrator* (essentially, a more extreme version of the *Narrator* in Hirst and Manier 1996) facilitated the formation of a collective memory. Of the 24 families in their study, a dominant Narrator emerged in 17. Those conversations containing a dominant Narrator were more effective in shaping collective memory, as these individuals were particularly successful in transmitting their contributions to the conversation into the group's subsequent collective memory.

The presence of a dominant Narrator also influenced not just whether a collective memory formed, but the content of that collective memory. As in Hirst and Manier (1996), the dominant Narrator was uniquely likely to introduce his or her unshared, rather than shared, memories into the collaborative remembering. In the absence of a dominant Narrator, then, both collaborative remembering and subsequent collective memory converged around previously shared memories—in practice, the core and central details of the story. As dominant Narrators were more liable to discuss their unshared memories,

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however, in the event of such an individual, both collaborative remembering and eventual collective memory converged around the dominant Narrator's particular rendering of the story. This was true whether the dominant Narrator's version of the story emphasized its core details or represented a more idiosyncratic representation.

The Role of Expertise To the extent that much of the work on collective memory is concerned with the use or abuse of power, it is reasonable to ask how the dynamics of power play out in the formation of a collective memory through conversation. Questions pertaining to German's addressing the Holocaust, South Africans facing a history of apartheid, and citizens in former communist countries collaborating with former regimes all bear on this question of how power and abuse subsequently shape the formation of collective memory. As Hirst and Manier (2008) suggest, the resolution to these tensions is not simple, but the questions are clear: in particular, how do issues pertaining to power and abuse contribute to the development, maintenance, and spreading of collective memories? Thus, a second characteristic of the speaker that can promote the spread of memories among a group is expertise.

Although expertise does not always confer power, it can serve as a proxy for methodological purposes of investigating speaker characteristics (for a review of this approach, see Hirst and Manier 2008). Just as dominant Narrators are particularly influential in spreading memories across a group during conversational remembering, the same is true of those possessing (or perceived as possessing) expertise on the issue at hand. A small, but burgeoning body of empirical literature among psychologists has started to explore this effect. The research has focused mainly on the role of an expert in influencing post-conversation recall amongst a group of participants. In these paradigms, the expert is created through experimental manipulation. Typically, the experimenter provides the group with instructions that leads them to falsely believe that one of the group members has had an advantage in studying the to-be-remembered material. For example, if each participant was told that they were going to have to memorize, and later discuss, a list of words or a story, the experimenter may randomly select one of the group members to be the group expert. Group members would then be informed that this one individual would have more time to study the story.

Studies to date examining the contribution of expertise to social contagion have largely confined their analyses to pairs (Gabbert et al. 2003; Meade and Roediger 2002; Wright et al. 2000), where the influence of one member of the pair on the other is assessed. The influencing member is defined as either an expert or a non-expert, with the relevant experiments establishing that the unshared contributions of one member of a pair in a postevent recounting are more likely to be falsely remembered by the other member if the contributor is perceived as an expert than if there is no such perception.

One potential confound of most expertise studies, however, is that they risk conflating the influence of expertise with that of Narratorship: since experts often talk a lot, they serve not just as experts, but also as Narrators. It is not necessarily obvious, then, whether these individuals' disproportionate influence over the group's collective memory should be attributed to their capacity as experts, or to their capacity as Narrators.

To address this limitation, Brown et al. (2009) set out to disentangle the respective weight of expertise and Narratorship in imbuing an individual with particular sway over a group's collective memory. They looked at the distinctive effects of expertise and Narratorship in groups of three and four individuals, rather than the dyads more typically employed in expertise studies. In their study, individuals participating as members of a

hypothetical hiring committee individually studied, jointly recalled, and then individually recalled slightly different versions of a fictitious job candidate's CV. Each group was falsely led to believe that one member possessed expertise, and Narratorship was defined in terms of the amount of information that individuals recalled in the group recounting. The findings revealed that both expertise and Narratorship play an important role in the spreading of collective memory as both were significantly more likely to influence what non-experts remembered on a post-conversational remembering task.

In parsing our results further, however two main findings emerged: (1) expertise is independent from Narratorship, that is, even if dominant Narrators were not experts, they still influenced the other group members to a great extent and (2) Narratorship had stronger predictive value than the perceived status of expertise in how much the other group members were contaminated with false memories. In addition, Narrators' influence was not simply based on how much they spoke, but how much they spoke in relation to how much others were speaking. Therefore, by speaking a disproportionate amount, the Narrator was able to call attention to what she says and had an advantage in crafting the narrative. If she merely spoke a lot, with other conversational participants speaking almost as much, then neither of these outcomes would be likely. Our finding that expertise was not as effective as Narratorship does not suggest that expertise does not have an influence. Rather, it suggests that, relative to pairs, the influence of expertise may be diminished in groups.

Our findings on expertise underscore the powerful influence a Narrator can have on the formation of a collective memory. Moreover, our results suggest that this effect can occur independent of whether the Narrator is viewed as an expert. One can imagine a variety of circumstances in which one person dominates a discussion, even though the group does not view the individuals as possessing any special knowledge or expertise. Although we found the mnemonic effect of such conversational dominance to hold in small groups of three or four, it presumably applies in larger groups as well.

In sum, conversations are an effective and influential means of spreading memories within groups. Through conversation, group members come to a shared rendering of the past, where otherwise members would possess their own individual rendering. That said, the conversational roles group members take have significant consequences in terms of the content of the collective memories that are formed. Conversations containing dominant Narrrators and/or experts hold greater mnemonic influence than do groups not containing such individuals. Moreover, where Narrators or experts are present, ensuing collective memory will coalesce around their specific version of events, rather than representing a more heterogeneous account.

Forgetting Together: Induced Forgetting as a Means of Forming a Collective Memory

In the previous section we described one path to the formation of shared memories. We presented empirical research looking at both the nature of social interaction among individuals and the cognitive consequences of this social dynamic. When people remember the past in a social context, what they remember within the conversation has the potential, through social contagion, to influence each individual's subsequent memories and thus increase the cohesiveness of these initially disparate memories. We have also established that social dynamics, such as narrative roles and expertise, play a consequential role in individuals coming to share similar versions of the past. As there is a growing body of research revealing that social remembering has the power to implant new memories, could the converse be true as well? Could conversations about the past serve as vehicles

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promoting forgetting as well as remembering? Could the selective nature of an act of remembering shape memories that reflect both what is left unmentioned by the conversation, as well as what is said in it? Given the implications that answers to these questions might have for individuals, communities, and nations, it is puzzling that psychologists have largely ignored them.

In addition to social contagion, then, another path that might lead to a more shared rendering of the past is when groups forget the same memories because individuals fail to mention aspects of events or neglect events altogether. The reasons why people might not mention all that they know in a conversation are multifold: from deceiving the audience to avoiding something stressful and socially taboo (see Zerubavel 2006). They could also simply fail to access memories in the context of specific conversations (Pasupathi et al. 1998, Weldon 2001). Psychological studies of forgetting focus almost exclusively on mechanisms at work in individual minds when people forget information and on the adaptive nature of forgetting from an individual perspective (Schacter 2001). The implications of this type of research, as important as they might be, are restricted to how memory functions in isolation from social influence, an approach consistent with the individual focus of psychology. In what follows, we will describe a phenomenon of forgetting that received extensive experimental validation at the level of the individual and then present several studies extending this phenomenon to social contexts.

The Effect of Selective Remembering on Subsequent Forgetting in Individuals

One mechanism that might underlie the formation of collective memories through forgetting is retrieval-induced forgetting (RIF). Retrieval-induced forgetting is a memory phenomenon that can reliably be found when a person retrieves information in a selective manner (Anderson and Levy 2002). According to the RIF framework, when people retrieve memories, other related memories automatically come to mind. In order for the retrieval to be successful, the rememberer must inhibit these related, competing memories. As this inhibition can linger over time, the rememberer will have difficulty recalling the related, competing memories in subsequent tests of memory.

In the standard RIF experiment, participants go through three phases: a study phase, a practice phase and a test phase. In the *study phase*, participants study category-exemplar pairs such as *animal—cat, animal—dog, vegetable—broccoli, vegetable—pea*. They then receive *retrieval practice* by completing stems (e.g., *animal—d___*). Practice is selectively focused on some pairs (e.g., *animal—dog*), but not other related pairs (e.g., *animal—cat*) and does not involve whole sets of pairs (e.g., all the *vegetable* pairs). This procedure establishes three types of retrieval practice conditions: practiced items (Rp+, e.g. *animal— dog*), unpracticed items related to practiced items (Rp−, e.g. *animal—cat*), and unpracticed items unrelated to practiced items (Nrp, e.g. *vegetable—broccoli, vegetable—pea*). A final *test phase* follows the selective retrieval practice in which participants are given the category cues (e.g., *animal*) and are asked to remember all the exemplars from within the category that they studied initially. Numerous studies (Ciranni and Shimamura 1999; Anderson et al. 1994; Saunders and MacLeod 2002; Barnier et al. 2004) involving various stimulus materials (e.g., visuo-spatial, paired associates, stories, autobiographical memo- ries) have found the same forgetting effect: Rp+ items are remembered better than Nrp items, which in turn are remembered better than Rp− items (in short, Rp+ > Nrp > Rp−). Of notice, inasmuch as neither Nrp items nor Rp− items are retrieved in the practice phase, the only difference between these two types of items is that Rp− items are categorically related to the practice items (Rp+). Because of this arrangement, retrieval-induced forgetting

appears to be a consequence of: (1) the categorical relation to the practiced material and (2) the selective nature of remembering.

Social Dynamics and Retrieval-Induced Forgetting

Based on the original work of Anderson and colleagues, Cuc et al. (2007) modified the RIF paradigm to investigate how this phenomenon might bear on remembering in a social context. Specifically, they observed RIF in a free-flowing conversations for both those listening to others remember, as well as for the person undertaking the remembering. Unlike most RIF experiments, Cuc et al. used stories as stimulus material, creating paired associates similar to those used in the standard RIF paradigm by structuring the stories around episode–event pairs. For instance, the episode *going to Coney Island* might contain the events *eating hot dogs* and *riding the roller coaster.* In this modified paradigm, participants studied a story, then, in a free-flowing conversation two unrelated individuals jointly recalled the previously studied story and finally, after a delay, the two participants remember once again the story individually. The selective nature of conversational remembering allowed the original story to be divided into Rp+, Rp−, and Nrp items, with items associated with either a speaker or a listener (Marsh 2007). In the final recall following the conversation, Cuc et al. found what they referred to as *Within-Individual RIF* (WI-RIF) for the speaker in the conversation. That is, in the final recall phase, the Speaker remembered the Rp+ items (the events that she remembered in the joint recall) better than Nrp items (the events of episodes un-retrieved in the joint recall), which were in turn better remembered than Rp− items (the events that were un-retrieved in the joint recall, but the episode of which they were part of was remembered). This result would be expected, given the prior work by Anderson and his colleagues (Anderson et al. 1994).

More surprising is the finding of similar RIF for listeners. That is, the listener may not overtly and selectively recount a memory in a conversation: the speaker does. But the listener nevertheless demonstrates RIF, or what Cuc et al. (2007) called *Socially-Shared RIF* (SS-RIF). Cuc et al. reasoned that listeners demonstrate SS-RIF because they retrieve concurrently with the speaker, even if covertly. This putative covert retrieval should elicit the same inhibition and subsequently reduced remembering. Their findings suggest that even something as mundane as a conversation can reshape a memory by inducing speakers and listeners alike to forget in similar ways and in doing so, promote the formation of a collective memory.

In sum, Cuc and colleagues found that listening to a speaker not only enhances their memory for the information introduced by the speaker, but it also leads to increased probability of forgetting for information related to what the speaker mentions. Clearly, these results demonstrate the importance that silences within a conversation can have on collective memory, or perhaps more accurately, collective forgetting.

Although Cuc et al. (2007) only examined WI-RIF and SS-RIF in conversations between two individuals, there is no reason why the same mechanisms might not promote the formation of a collective memory in larger groups. Silences in public discourse could have profound effects on the way in which nations, for instance, recall public events. Cuc and colleagues articulate this point when they posited the question: if George W. Bush wanted to induce forgetting about Weapons of Mass Destruction (WMD's), would it be better for him to avoid speaking about the build up to the War in Iraq or just mention those details about the War, but remain silent about the WMD's? Their work indicates that George W. Bush would be better off listing all the justifications (the democratization of the country, the petty dictator) except the presence of WMDs.

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Cuc et al. (2007) focused on instances when both speaker and listener held a memory for the same event (they were exposed to the same story). However, a speaker can also provoke a listener to remember, overtly or covertly, even if the two do not share the same memories. For instance, a speaker could recall a traffic accident and her selective recollection could evoke in a listener his own memories of a different traffic accident. Moreover, how a speaker recalls her traffic accident might shape how and what the listener covertly remembers. If a speaker recollects the courtesy of the ambulance personnel, but fails to recollect the helpfulness of the passers-by, a listener might concurrently, but covertly, retrieve the attitude of the ambulance personnel in his own accident, but may fail, even covertly, how the passers-by reacted. If RIF is a consequence of selective remembering, then both speaker and listener should have more difficulty subsequently recollecting the role passers-by played in their distinct accidents than they do recalling the courtesy of the ambulance personnel.

A conversation, then, may induce participants to forget in similar ways even when memories differ. To test this significant extension of Cuc et al. (2007), Coman et al. (2009) asked pairs of unrelated individuals to recount to each other their memories of the circumstances in which they learned of the terrorist attacks of September 11 (flashbulb memories of 9/11), identifying Speaker and Listener instances, Rp+, Rp−, and Nrp memories (Coman et al. 2009). Importantly, prior to the joint recollection, the memories of each individual were assessed by a 9/11 Memory Questionnaire. The questions were grouped in eight categories, for example, a *location* category set might include questions such as: "Where were you when you woke up?" "Where were you when you learned of the attack?" while a *time* category set might include questions such as: "What time did you wake up on 9/11?" "What time did you go to sleep on 9/11?" Coman et al. wanted to determine whether conversations about 9/11 would reshape in similar ways its participants' respective flashbulb memories, even though the participants never met before the study.

Their results conformed with their expectations. Listening to somebody remembering how she experienced 9/11 induces one to forget their own personal memories in a manner consist with the forgetting observed in the speaker. That is, when a speaker selectively remembers that she woke up at 9:00, but not that she learned of the attack at 9:10, according to the principles of RIF, she should have trouble subsequently remembering the time she learned of the attack. This is what Coman et al. found. More surprisingly, they also found that same difficulty for listeners. For instance, a listener may have learned of the attack, not at 9:10, but at 9:30. What Coman et al. found was that, after hearing the speaker recall that she awoke at 9:00, the listener had difficulty recalling on the final recall test that he learned of the attack at 9:30.

What makes this extension of SS-RIF of particular interest to students of collective memory is that certain topics are taboo (Zerubavel 2006). For instance, at a societal level, it is generally deemed unacceptable to talk about the actual sexual act involved in a rape. As a result, to the extent that rape victims would concurrently remember their own rape while listening to another person's account, the social taboo of what can or cannot be said will lead to similarly structured, albeit individually personalized memories for both the person recounting her rape, as well as listeners of the account. In the same way, a community member's restraint in discussing or depicting the gruesome aspect of personal encounters with war might lead to a dynamics in which all those who encounter this story would end up remembering sanitized memories of the war. If such exchanges become part of a larger social network of exchanges (Watts 2004), then collective forgetting across a network of individuals could emerge and reshape the collective memory of a community. Community members will come to remember—and forget—the world in comparable ways, even if what

they individually remember involved different experiences. Their personal memories of war, albeit by necessity, different memories, will come to resemble each other.

Conclusion

In the present paper we offered a psychological perspective on how conversations transform individual isolated memories into more consensual ones. We argued in favor of a social-interactional lens through which we can investigate the formation of collective memories. A thread of the article was to connect cognitive processes within individual minds to social contexts that influence these processes. In doing so, we hoped to better understand how groups and individuals come to share the same renderings of the past. Our paradigms focused on conversations as "environments" in which memories are introduced, negotiated, and reframed as a function of both individual recountings and social dynamics. In this "remembering together" pathway, narrators' and experts' renderings of the past become scaffolds for collective remembering, but at the same time, as a result of the selective nature of remembering, they create a setting for collective forgetting. This forgetting can occur for events that individuals experienced together, but also for events that are just similar in some respects among two or more individuals.

We want to stress here that conversations that people have amongst themselves is not the only factor determining the consensus emerging within communities. Media, texts, public officials, museums, and monuments are but a few of such sources that foster consensus. We do want to claim though that conversations constitute an important medium for the creation of collective memories. Although our empirical studies focused on conversations within small groups, we believe that we can extend these small-groups findings to larger communities. As we have alluded to in our discussion of the transmission of memories across a network, the tools for such a transition could be offered by various theories such as agent-based modeling (Epstein 2006), constructuralism (Carley 1995), structuration theory (Giddens 1984), social information-processing theory (Salancik and Pfeffer 1978), network theory (Newman et al. 1996), and social influence theory (Friedkin 1998). It is reasonable to believe that the paradigms that we used could be adjusted and applied to larger communities of individuals and could extend from conversations to other social artifact relevant to the formation of collective memories.

References

Andersson, J., & Rönnberg, J. (1995). Recall suffers from collaboration: Joint recall effects of friendship and task complexity. *Applied Cognitive Psychology, 9*, 199–211.

Anderson, M. C. & Levy, B. J. (2002). Inhibitory processes and the control of memory retrieval. *Trends in Cognitive Science, 6*, 299–305.

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, & Cognition, 20*, 1063–1087.

Assmann, A. (1995a). *Errinnerungsrdume. Formen und Wandlungen des kulturen Geddchtnisses.* Munich, Germany: Beck.

Assmann, J. (1995b). Collective memory and cultural identity. *New German Critique, 65*, 125–133.

Aydede, M., & Robbins, P. (Eds.). (2008). *Cambridge handbook of situated cognition.* New York: Cambridge University Press.

Barnier, A. J., Hung, L., & Conway, M. A. (2004). Retrieval-induced forgetting of emotional and unemotional autobiographical memories. *Cognition & Emotion, 18*, 457–477.

Bartlett, F. (1993). *Remembering: A study in experimental and social psychology*. New York: Cambridge University Press.

Bateson, G. (1979). *Mind and nature: A necessary unity (Advances in systems theory, complexity, and the human sciences)*. New Jersey: Hampton Press.

Beach, K. (1993). Becoming a bartender: the role of external memory cues in a work-directed educational activity. *Journal of Applied Cognitive Psychology, 7*(3), 191–204.

Berliner, H. (2005). The abuses of memory: reflections on the memory boom in anthropology. *Anthropology Quarterly, 78*, 197–211.

Bodnar, J. (1992). *Remaking America: Public memory, commemoration, and patriotism in the twentieth century*. Princeton, NJ: Princeton University Press.

Braun, K. A., Ellis, R., & Loftus, E. F. (2002). Make my memory: how advertising can change our memories of the past. *Psychology and Marketing, 19*, 1–23.

Brown, A., Coman, A. & Hirst, W. (2009). Expertise and the formation of collective memory. *Social Psychology, 40*, 118–128.

Carley, K. M. (1995). Communication technologies and their effect on cultural homogeneity, consensus, and the diffusion of new ideas. *Sociological Perspectives, 38*(4), 547–571.

Chase, W. G., & Ericsson, K. A. (1982). Skill and working memory. In G. H. Bower (Ed.), *The psychology of learning and motivation*, (Vol. 16, pp. 1–58). New York: Academic Press.

Chase, W. G., & Simon, H. A. (1973). The mind's eye in chess. In W. G. Chase (Ed.), *Visual information processing* (pp. 215–281). New York: Academic Press.

Ciranni, M. A., & Shimamura, A. P. (1999). Retrieval-induced forgetting in episodic memory. *Journal of Experimental Psychology: Learning, Memory, & Cognition, 25*, 1403–1414.

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

Coman, A, Manier, D. & Hirst, W. (2009). Forgetting the unforgettable: socially shared retrieval induced forgetting of September 11 memories. *Psychological Science*.

Cuc, A., Ozuru, Y., Manier, D., & Hirst, W. (2006). The transformation of collective memories: studies of family recounting. *Memory & Cognition, 34*, 752–762.

Cuc, A., Koppel, J., & Hirst, W. (2007). Silence is not golden: a case for socially-shared retrieval-induced forgetting. *Psychological Science, 18*(2007), 727–737.

Dudukovic, N. M., Marsh, E. J., & Tversky, B. (2004). Telling a story or telling it straight: The effects of entertaining versus accurate retellings on memory. *Applied Cognitive Psychology, 18*, 125–143.

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

Ericsson, K. A., & Kintsch, W. (1995). Long-term working memory. *Psychological Review, 102*, 211–245.

Fabian, J. (1999). Remembering the other: knowledge and recognition in the exploration of Central Africa. *Critical Inquiry, 26*, 49–69.

Fentress, J., & Wickham, C. (1992). *Social memory*. Oxford: Blackwell.

Fiore, S. M., & Sales, E. (Eds.). (2007). *Toward a science of distributed learning*. Washington, DC: American Psychological Association.

Fivush, R., & Nelson, K. (2004). Culture and language in the emergence of autobiographical memory. *Psychological Science, 15*, 573–577.

Foucault, M. (1977). Nietzsche, genealogy, history. In D. Bouchard (Ed.), *Language, counter-memory, practice: Selected essays and interviews*. D. Bouchard, & S. Simon trans. New York: Cornell University Press.

Friedkin, N. (1998). *A structural theory of social influence*. Cambridge: Cambridge University Press.

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

Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley, CA: University of California Press.

Givón, T. (2005). *Context as other minds. The pragmatics of sociality, cognition and communication*. Amsterdam: John Benjamins.

Hirst, W., & Manier, D. (1996). Social influences on remembering. In D. Rubin (Ed.), *Remembering the past* (pp. 271–290). New York: Cambridge University Press.

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

Hirst, W., Manier, D., & Apetroaia, I. (1997). The social construction of the remembered self: Family recounting. In J. G. Snodgras & R. L. Thompson (Eds.), *The self across psychology*. New York: The New York Academy of Sciences.

Kansteiner, W. (2002). Finding meaning in memory: a methodological critique of collective memory studies. *History and Theory, 41*, 179–197.

Lea, M. R., & Nicoll, K. (Eds.), (2002). *Distributed learning: Social and cultural approaches to practice.* New York: Routledge.

Levinson, S. (1983). *Pragmatics.* Cambridge: Cambridge University 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.

Loftus, E. F. (1993). The reality of repressed memories. *American Psychologist, 48,* 518–537.

Marsh, E. J. (2007). Retelling is not the same as recalling: implications for memory. *Current Directions in Psychological Science, 16,* 16–20.

Mazzoni, G. A. L., Loftus, E. F., & Kirsch, I. (2001). Changing beliefs about implausible autobiographical events: a little plausibility goes a long way. *Journal of Experimental Psychology: Applied, 7,* 51–59.

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

Mehl, M. R., & Pennebaker, J. W. (2003). The social dynamics of a cultural upheaval: Social interactions surrounding September 11, 2001. *Psychological Science, 14,* 579–585.

Middleton, D., & Edwards, D. (Eds.), (1990). *Collective remembering.* London: Sage.

Miller, P. J. (1994). Narrative practices: Their role in socialization and self-construction. In U. Neisser & R. Fivush (Eds.), *The remembering self: Construction and accuracy in the self-narrative* (pp. 158–179). Cambridge: Cambridge University Press.

Newman, M. E. J, Barabasi, A. L., & Watts, D. J. (Eds.), (1996). *The structure and dynamics of complex networks.* Princeton University Press, Princeton.

Olick, J. K. (1999). Collective memory: the two cultures. *Sociological Theory, 7,* 333–348.

Pasupathi, M., Stallworth, L. M., & Murdoch, K. (1998). How what we tell becomes what we know: listener effects on memory for narratives. *Discourse Processes, 26,* 1–25.

Roediger, H. L, III, Meade, M. L., & Bergman, E. T. (2001). Social contagion of memory. *Psychonomic Bulletin and Review, 8,* 365–371.

Sacks, H. & Shegloff, E. A. & Jefferson, G. (1974). A simplest systematic for the organization of turn-taking for conversation. *Language, 50,* 696–735.

Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly, 23,* 224–253.

Saunders, J., & MacLeod, M. D. (2002). New evidence on the suggestibility of memory: the role of retrieval-induced forgetting in misinformation effects. *Journal of Experimental Psychology: Applied, 8,* 127–142.

Schacter, D. L. (2001). *The seven sins of memory: How the mind forgets and remembers.* NY: Houghton Mifflin.

Schuman, H., Rieger, C., & Gaidys, V. (1994). Collective memories in the United States and Lithuania. In N. Schwarz & S. Sudman (Eds.), *Autobiographical memory and the validity of retrospective reports* (pp. 313–333). New York: Springer.

Sperber, D. (1996). *Explaining culture: A naturalistic approach.* Cambridge: Blackwell.

Stasser, G., & Titus, W. (1985). Pooling of unshared information in group decision making: biased information sampling during discussion. *Journal of Personality and Social Psychology, 53,* 81–93.

Watts, D. J. (2004). *Six degrees: The science of a connected age.* NY: Norton.

Weldon, M. S. (2001) Remembering as a social process. In G. H. Bower (Ed.), *The psychology of learning and motivation* (Vol. 10). New York: Academic Press.

Wertsch, J. (2002). *Voices of collective remembering.* New York: Cambridge University Press.

Wilson, R. A. (2005). Collective memory, group minds, and the extended mind thesis. *Cognitive Processing, 6,* 227–236.

Wilson, R. A., & Clark, A. (2008). How to situate cognition: Letting nature takes its course. In P. Robin & M. Aydede (Eds.), *The Cambridge handbook of situated cognition.* Cambridge: Cambridge University Press.

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

Zerubavel, E. (2006). *The elephant in the room: Silence and denial in everyday life.* New York: Oxford University Press.