Building a collective memory: the case for collective forgetting

William Hirst[1] and Alin Coman[2]

The shared reality of a community rests in part on the collective memories held by members of that community. Surprisingly, psychologists have only recently begun to study collective memories, an area of interest in the social sciences for several decades. The present paper adopts the perspective that remembering is often an act of communication. One consequence of communicative acts of remembering is that speaker and listeners can come to share the same memories, thereby providing a foundation on which to build a collective memory. Another consequence is that the selectivity of communicative acts of remembering can induce collective selective forgetting, clearly one component of any collective memory. The phenomenon of retrieval-induced forgetting is discussed in the context of dyadic conversational exchanges of unrelated individuals and conversational exchanges between ingroup and outgroup members. In addition, the paper reviews work demonstrating that what occurs at the dyadic level can shape global outcomes of complex social networks, including convergence of memories across a network. The bottom-up approach described in this paper can help us understand how individual memories can come to be shared across a community.

Addresses
[1] New School for Social Research, USA
[2] Princeton University, USA

Corresponding author: Hirst, William (hirst@newschool.edu)

The shared reality of a community rests in part on the collective memories held by members of that community. The community may be as small as a couple or as large as a nation, but the reality its members share will be grounded in part by memories held across the community. The standard experimental analysis of shared reality, the saying-is-believing paradigm, acknowledges the close connection between shared reality and shared memories [1].

Studying collective memory from a psychological perspective

Since Halbwachs's [2] groundbreaking work from the early 20th century, social scientists have studied collective memory by examining the role society plays in their formation and maintenance. For instance, scholars have examined the political context in which monuments are built and the way in which these monuments are reassessed as the political climate of a community changes (e. g., [3,4]). Psychologists have largely approached the topic differently. Given their disciplinary inclinations, they have focused on the way individual memories change in response to societal efforts to shape collective memories [5–7]. To do so, they treat collective memories as individual memories shared across a community, albeit ones that bear on a community's identity. Their emphasis on individual memories is not a radical departure from Halbwachs, in as much as even he averred that, in the end, it is individuals who remember memories of importance to a community. Nevertheless, it has led to a distinctive set of questions: Why do some individual memories, and not others, become shared across a community? When might one expect a collective memory to form? What cognitive mechanisms are involved, and how do these mechanisms interact with the social relationships within a community?

One way to begin addressing these questions is to make the straightforward observation that acts of remembering often involve communicating [8•]. Jane tells John about what happened to her at the party; a reporter informs the public about an ISIS attack in Syria. As Halbwachs [2] noted, even when one is remembering in isolation, one is communicating, now to a virtual audience.

A challenge for psychologists, then, is to not only account for why such acts of communicative remembering lead to shared memories, but also explain how these memories might be specific to members of one's community and not another. Collective memories need to be community-specific if they are to have a particular, community-distinctive effect on community identity and action. Community-specific collective memories can be formed in many instances because of the herculean efforts of a community, for instance, through building monuments, establishing practices of commemoration, and governing the dissemination of information. What we want to argue is that what is often viewed as 'sins' of individual human memory [9] — its unreliability and malleability — allows even quotidian communicative acts of remembering to perform in a way that promotes collective memory formation, often without any intention on the part of

the speaker or listener. From this perspective, individual memory might best be viewed as a social organ designed, in part, to promote the formation of collective memories.

A distinctively human way of remembering the past

We want to focus here on a distinctively human way of communicating about the past. Rather than just conveying new information to others, people will often talk to each other about things they already know. Just as Echterhoff *et al.* [1] underscored that people are motivated to create a shared reality for both epistemic and relational reasons, so also are people inclined to talk about a shared past to others for similar reasons. Faculty members jointly try to remember what was said at the last faculty meeting in order to get the facts right, an epistemic motive. A couple reminisces about their first date to create a feeling of intimacy, a relational motive.

There is ample evidence that conversational acts of remembering such as these can promote mnemonic convergence (see [6,10] for reviews). Participants in a conversation might enter the conversation with divergent recollections. After all, even as members of the same community, people have different attitudes, which in turn may lead to distinctive recollections. Faculty members may initially disagree on what they discussed at the last faculty meeting, and a couple may initially disagree about what occurred on the first date. Nevertheless, after discussion, they may come to share similar recollections. The claim here is not simply that they settle on a representation of the past, but they actually remember it this way. That is, the overlap of individual memories is greater *after* conversational acts of remembering than before [11].

Collective forgetting

Why does conversational remembering increase mnemonic convergence? (See [8•] for an extensive discussion of this question.) One possible mechanism is reinforcement: because conversational remembering is inevitably selective [12,13], what is mentioned will be reinforced, for both speaker and listeners, making it more accessible in the future [14–16]. Another possibility is that the selectivity of conversational remembering will selectively induce forgetting in speakers and listeners. This selective forgetting will be greater for unmentioned memories related to what was talked about than unrelated, unmentioned memories. Silences in acts of remembering are common, as when the Turkish government restricts discussion of the Armenian genocide [17]. By forgetting, we do not mean complete erasure, but rather a decrease in accessibility. Turks may know about the Armenian genocide; it simply does not readily come to mind when they think about their country.

A substantial body of literature establishes that retrieval-induced forgetting does occur and plays a role in promoting the formation of collective memories. In early work on *within-individual retrieval-induced forgetting* (WIRIF), participants first studied material, then, in a practice phase, selectively recalled it along the lines specified by the experimenter. That is, some aspects of the originally studies material are intentionally recalled, while others are left unmentioned. A final recall of the original material follows [18]. Participants are more likely to forget unpracticed memories related to what they had selectively retrieved than unrelated, unpracticed memories, an indicator of RIF. Anderson and his colleagues argue that WIRIF occurs because rememberers inhibit related competing memories when trying to remember a particular item (see [19] for a review). Consequently, in the final memory test, participants have more difficulty recalling the unpracticed, related memories than the unpracticed, unrelated memories.

Of course, there is no social interaction in the WIRIF paradigm. Hirst and his colleagues sought to inject a social dimension by, for instance, asking two people to participate simultaneously in the just described experiment (e.g., [20,21•,22]). Now, during the selective retrieval phase, only one of the participants overtly practiced the material while the other participant listened. The final memory test revealed retrieval-induced forgetting in both speaker and listener, with the listener's RIF coined as *socially shared retrieval-induced forgetting* (SSRIF). SSRIF can be found when the selective retrieval of a speaker occurs within a free-flowing conversation or in a one-way conversation, as when one person 'lectures' to another (see [11,23]). Hirst and colleagues argued that it emerges because listeners concurrently, albeit covertly, retrieve with the speaker, thereby inhibiting unmentioned, related memories just as the speaker does. Moreover, in as much as similar selective forgetting occurs for all participants in the conversation, the overlap of memories across conversational participants is greater after the conversation than before it [11]. Critically, RIF might be viewed as means of promoting collective forgetting because it can have long-lasting effects. Although early reports suggests that RIF is limited to less than a day [24], recent work has found it after a week and even a month if sufficient selective practice is undertaken, especially if this practice is distributed [25–29].

Community-specificity of SSRIF

As we noted, collective memories are community-specific. Consequently, the cognitive mechanisms that govern their formation should be constrained in such a way that they promote the formation of a collective memory within a community as opposed to across communities. This appears to be the case for RIF, in that SSRIF is more robust when speaker and listener are members of the same group. This within-group bias occurs, presumably,

because listeners are more motivated to concurrently retrieve if they want to form or enhance a social relationship with the speaker ([30•]; for similar reasoning in saying-is-believing studies, see [1]). In order to test this claim, Coman and Hirst asked participants to read about a study abroad program and then listen to a podcast that selectively recounted aspects of the original reading. SSRIF was found when the podcast listeners were students from Princeton and the person on the podcast was a within-group fellow Princetonian. It was absent when the Princetonians listened to a podcast featuring an out-group Yalie. Interestingly, SSRIF was found when the speaker was a Yalie if the Princtetonian listeners were primed to think of themselves as students, not Princetonians. A within-group bias can also be found in SSRIF with respect to gender [31].

Interestingly, the robustness of SSRIF also varies when social identity is threatened [32]. The claim is that when people feel their social identity threatened, they will be motived to recall information that diminishes this threat. Coman et al. [33] tested this claim by asking American participants to learn about four different incidents of atrocities committed by soldiers in Iraq and justifications for these atrocities. Participants then listened to an account of the atrocities that were part of only 2 of the initially presented incidents, but without the justifications. As an assessment of SSRIF, they compared the participants' memory for the justifications associated with the talked-about incidents (unmentioned, related justifications) with those associated with the non-discussed incidents (unmentioned, unrelated justifications). The critical between-subjects manipulation was the nationality of the soldiers, with the perpetrator of the atrocity identified as either Iraqi or American. SSRIF occurred when the soldiers were Iraqis, but not when they were Americans. Rather than suppressing the unmentioned justifications when listening to an account of a soldier's atrocities, American participants were motivated to remember the unmentioned justifications, presumably because they felt that their identity was threatened by their fellow American's actions. They did not feel similarly threatened when an Iraqi committed the atrocities.

Beyond the dyad

The just discussed research focuses almost exclusively on dyadic communicative interactions. Will the dynamics occurring at the dyadic level shape what occurs at a community level? (See [34] for a general discussion of a generative social science approach to community-wide behavior.) Several lines of research have explored this question as applied to collective memory. Using an innovative methodology that allowed them to examine experimentally established larger social networks, Coman et al. [35] traced the emergent mnemonic convergence across a network to both practice effects and retrieval-induced forgetting triggered during conversational

interactions. Moreover, they found that network structure mattered, with mnemonic convergence greater in unclustered as opposed to clustered networks. Yamashiro and Hirst [36] demonstrated increased mnemonic convergence after conversational interaction among classmates over a two-week period. The social network structure of the class did not break into obvious clusters. In another study, Yamashiro and Hirst [37] showed that a single 'central' speaker can induce forgetting through selective remembering when addressing a cluster of four, thereby promoting mnemonic convergence on her rendering of the past for this cluster. The mnemonic convergence fostered by this 'central' speaker was greater when members of a cluster could subsequently talked to each other. Moreover, this enhancement only occurred when the central speaker and the cluster belonged to the same social group, again emphasizing the bias toward in-group collective memory formation. In an agent-based model, Coman et al. [38] also found that RIF and practice effects could drive mnemonic convergence in large networks of 30 or more. Finally, moving into the 'real world,' Stone et al. [39] found that the selective remembering in a speech given by the King of Belgium could induce selective forgetting in its listeners. Interestingly, this effect was only found in French-speaking Belgians, the native language of the King. RIF was not observed in Dutch-speaking Belgians, presumably because they viewed the King as an out-group member. Clearly, local communicative influences on memory can impact global outcomes.

Conclusion

In the beginning of this paper, we presented a challenge: to account for why communicative remembering among individuals would lead to shared memories specific to members of one community and not necessarily another. We addressed this issue by examining how selective remembering might lead to collective selective forgetting. Not only do speaker and listeners experience similar induced forgetting following selective remembering, this selective retrieval-induced forgetting is more robust when speakers and listeners are from the same social group and less robust when listeners feel their social identity threatened. Moreover, although SSRIF, as well as practice effects, have an impact at a local, dyadic level, it can still have large-scale social effects, shaping collective memories in communities large and small. We do not know, as yet, whether, as conversational influences on memory promote mnemonic convergence, they also increase confidence in the emergent collective memory, a kind of group polarization effect [40] or lead to closer connection among community members, something one might expect if community members are motived relationally to concurrently retrieve. What is clear, however, is that they build collective memories that reinforce existing boundaries of social groups rather than facilitate the emergence of between-group collective memories.

Such an outcome might not be something that advances liberal cosmopolitan ideals, but it is the way in which humans come to understand their past and build a shared reality.

Conflict of interest statement

Nothing declared.

Acknowledgements

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