

# **Distributed remembering in a social context: Effects of communicating a shared past on what is remembered**

**Alin I. Coman (acoman@princeton.edu)**

Department of Psychology, Princeton University  
Princeton, New Jersey 08544 USA

**Gerald Echterhoff (g.echterhoff@uni-muenster.de)**

Department of Psychology, University of Münster  
Fliednerstr. 21, 48149, Münster, Germany

**Micah Edelson (micah.edelson@weizmann.ac.il)**

Department of Neurobiology, The Weizmann Institute of Science, Rehovot, 76100, Israel

**William Hirst (hirst@newschool.edu)**

Department of Psychology, New School for Social Research, 80 Fifth Avenue, NY, NY 10003 USA

**Kourken Michaelian (kmichaelian@bilkent.edu.tr)**

Department of Philosophy, Bilkent University, Ankara, 06800, Turkey

**Charles B. Stone (charlie.stone@gmail.com)**

Psychological Sciences Research InstituteDepartment of Psychology, Université catholique de LouvainCatholic University of Louvain, Place du Cardinal Mercier 10, B-13248, Louvain-la-Neuve, Belgium

**Keywords:** Distributed cognition, memory, conversations, agent-based modeling, collective memory

## **Challenging Issue**

Remembering frequently involves collaboration among two or more individuals, often taking the form of a conversation. In some conversations, one person conveys new information to another, as when a daughter announces to her mother that she is engaged. In other conversations, two people talk to each other about a shared past, as when a couple reminisce about the evening on which they became engaged. When the conversation is about a mutually experienced event or a shared body of knowledge, it has the potential to shape both what emerges in the discussion, as, for instance, when one participant scaffolds the remembering of the other. It also has the potential to reshape how participants might subsequently remember the material, with the possibility that the memories of the participants will be more similar after the conversation than before it. In other words, what people remember is, in part, the result of how they jointly recount the past with others. Yet, despite the critical contribution of joint conversational remembering to memory, detailed study of this phenomenon is only beginning to be undertaken. The objective of this symposium is to bring together several strands of research that explores conversational, or, more generally, communicative influences on memory. The speakers

offer a range of different approaches. Dr. Stone explores how public speeches can induce forgetting as well as reinforce memories across a large population and thereby promote a mnemonic convergence through a single social interaction. Dr. Echterhoff considers the role of motivation in moderating conversational influences. Dr. Coman investigates whether these conversational influences propagate across large networks of individuals and can thereby promote a mnemonic convergence. Dr. Edelson examines the neuroscience underlying memory conformity. And Dr. Michaelian engages the philosophical underpinning of the concept of collective memory. In a short summation, Dr. Hirst places these papers in the larger context of social aspects of memory and moderates further discussion.

## **Charles B. Stone**

A conversation can not only reinforce already existing memories and implant misleading ones, but also induce forgetting for unmentioned, but related memories material. Dr. Stone discusses how this selective remembering can induce forgetting not only in speakers, but also in listeners. In his talk, he extends the laboratory finding on induced forgetting to the effects of political speeches on public memories, showing that listening to a recent speech by the King of Belgium induced forgetting for unmentioned, but related political material, but not unmentioned, unrelated material for French-speaking

Belgians. Similar induced forgetting was not observed in French-speaking Belgians who did not listen to the speech or Dutch-speaking Belgians more generally. The finding underscores the importance of communicative influences on everyday memories.

### **Gerald Echterhoff**

After tuning their message to their audience's attitude during an initial retelling, communicators' subsequent memory for the topic often reflects the audience-tuned view expressed in the message. Dr. Echterhoff presents research investigating the motivational underpinnings of such audience-congruent memory alignment, specifically, speakers' motives to create a "shared reality" with their audience. Shared-reality creation, in turn, satisfies epistemic needs, that is, needs for a valid and confidently held understanding of the world. When speakers are epistemically uncertain, they should be more likely to incorporate the audience-tuned view into their mnemonic representation. Dr. Echterhoff discusses recent work that demonstrates the importance of epistemic motives in creating a "shared reality" and explores the implications for the social sharing of memories.

### **Alin Coman**

Do the conversational influence observed by Drs. Stone and Echterhoff, among others, propagate across a network of individuals? Are there limits to the extent of this propagation? How do these limits shape the formation of collective memories within the network? Dr. Coman addresses these questions using agent-based modeling techniques in order to investigate how macro-level social phenomena, such as mnemonic convergence, can emerge out of psychologically informed micro-level local dynamics. The findings show that communicative influences at the dyadic level, as well as network factors (network size, network topology, number of conversations) interact to drive mnemonic convergence in communities.

### **Micah Edelson**

The underlying brain mechanisms through which the social environment influences human memory are unknown. Dr. Edelson reports on studies of memory in individuals exposed to contradictory recollections of others. Using fMRI, the research finds that social milieu influences memory through evolutionary conserved medial temporal circuits, whereas the ability to overcome social influence is mediated by newer prefrontal circuits. The interplay between these systems determines the balance of personal memory versus conformity to the group.

### **Kourken Michaelian**

Much of the psychological work on communication and memory evokes the concept of collective memory, in that conversations are considered one critical means for forming a collective memory. Dr. Michaelian explores the philosophical underpinnings of the concept of collective memory. Although some scholars treat the concept as more than a metaphor that likens collective memory to individual memory, Dr. Michaelian argues that, when the process of consolidation is considered, critical differences exist between individual and collective memory that suggests that the concept of collective memory is metaphorical at best.

### **William Hirst**

Building on his extensive work on conversational remembering and the formation of collective memory, Hirst relates these different approaches to the study of communication and memory and articulates how they provide a foundation for understanding how conversations can influence individual and collective memory.

### **Acknowledgements**

Dr. Echterhoff would like to acknowledge the contributions of Drs. Olivier Klein (Free University of Brussels) and René Kopietz (University of Münster), and Sabrina Pierucci (Free University of Brussels); Dr. Stone would like to acknowledge the contributions of Drs. Olivier Luminet, (Université catholique de Louvain) Catholic University of Louvain), Olivier Klein (Free University of Brussels) and Laurent Licata (Free University of Brussels).