REVIEW

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Collective memory, group minds, and the extended mind thesis

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Abstract While memory is conceptualized predominantly as an individual capacity in the cognitive and biological sciences, the social sciences have most commonly construed memory as a collective phenomenon. Collective memory has been put to diverse uses, ranging from accounts of nationalism in history and political science to views of ritualization and commemoration in anthropology and sociology. These appeals to collective memory share the idea that memory "goes beyond the individual" but often run together quite different claims in spelling out that idea. This paper reviews a sampling of recent work on collective memory in the light of emerging externalist views within the cognitive sciences, and through some reflection on broader traditions of thought in the biological and social sciences that have appealed to the idea that groups have minds. The paper concludes with some thoughts about the relationship between these kinds of cognitive metaphors in the social sciences and our notion of agency.

Introduction

At the outset of the "Principles of Psychology", William James famously characterized psychology as the science of the mind, a characterization that many today would take to express a truism (James 1950). For most of not only its short history but its long past, the science of the mind has been the science of the individual mind, with human beings serving as our paradigm example of agents with minds, cognitive agents. Yet the attribution

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of psychological traits is not exclusively the domain of psychology and the cognitive sciences, with cognitive agents permeating both the biological and social sciences.

In the biological sciences, psychological traits are attributed to two kinds of entity, apart from our paradigm case of an agent. First, they are ascribed to parts of individuals, being used to describe the operation of physiological, genetic, and biochemical systems at various scales. Perhaps the best-known uses of such cognitive metaphors are those that describe the functioning (and malfunctioning) of the immune system. Second, psychological traits are ascribed to groups or collections of individual agents. A common example of such attributions are those made in characterizing the behavior of social insects, such as bees that live in communal hives or ants, all species of which live in nests containing large numbers of individuals.

The humanities and social sciences have also relied on the use of cognitive metaphors in characterizing and explaining a range of social phenomena, where these are phenomena that involve the actions either of more than one individual or of one individual acting in some kind of social context. A few contemporary examples will convey some of the flavor of these appeals to what is most usually referred to as collective psychology. The human rights activist Neier (1998) has appealed to principles of political regret in characterizing changing views of war and war crimes over the past 200 years, where these are principles that govern a society's views of the appropriateness of group-level remorse. The political philosopher Pettit (2003) has claimed that one needs to collectivize reason in order to resolve a series of paradoxes in the theory of decision-making, arguing further that this attribution of reason at the collective level makes certain groups of people institutional persons. And the historian Le Goff (1992) has provided a prolegomena for a history of collective memory, focused on the ways in which publicly shared memories have been shaped by technologies of memory, such as ceremonies, cemeteries, and museums. The sociologist Misztal (2003) and the cultural

psychologist Wertsch (see Chaps. 1–3 in Wertsch 2002) have both provided overviews of recent work in the cognitive and social sciences that appeals to collective memory.

The attribution of psychological traits to groups or collectives is of particular interest to me here, and I shall concentrate (almost exclusively so) on the case of collective memory. The question of why these cognitive metaphors are so pervasive across the social sciences is one that I shall return to at the end of the paper, but the paper's focus will be on clarifying what these appeals to collective memory amount to, what it is that those who make such appeals are claiming about particular social phenomena. Here I think it may be helpful to step back and consider other appeals to group-level cognition, particularly those that have been influential in the history of the social sciences, as well as the recent revival of the group mind hypothesis in the biological sciences. This hypothesis is one way to move beyond the kind of individualistic view of the mind that has dominated the history of thinking about cognition. But it is not the only way to do so, and, as I shall argue, it is perhaps not the way best suited to meeting the theoretical needs of those in the social sciences who have appealed to the notion of collective memory.

The group mind hypothesis in historical perspective

The idea that groups may have minds in much the way that individuals have minds has its origins in two distinct traditions, what I have called the collective psychology and the superorganism traditions (see Chap. 11 in Wilson 2004).

The collective psychology tradition, lasting from roughly 1870 until 1920, played a foundational role in the social sciences, though it developed not merely as a movement within the confines of academia but as a broader force of social influence. It has been the subject of a number of historical studies and analyses (e.g., Nye 1975, Barrows 1981, van Ginneken 1992). By contrast, the superorganism tradition developed as a marginal stream of thought in the biological sciences in the first half of the twentieth century, particularly within the nascent fields of ecology and entomology, and has received attention primarily from biologists seeking to round out their more general treatment of a given topic (e.g., Wilson 1971). While the collective psychology tradition is more directly relevant to the focus on collective memory studies, particularly in the social sciences, it will also serve us well to have at hand at least a short summary of the superorganism tradition.

The superorganism tradition has its origins in the study of communities of organisms, in particular in the work of the plant ecologist Frederic E. Clements and the entomologist William Morton Wheeler. Clements understood the process of ecological succession, whereby communities of plants and animals changed in their composition over time, through the notion of biomes,

plant-animal communities that had their own developmental regularities and that could be treated very much like individual organisms. Wheeler (1911) also adopted an organismic metaphor for characterizing insect societies in his essay "The Ant-Colony as an Organism", coining the term "superorganism" in a later essay "The Termitadoxa, or Biology and Society". Wheeler utilized the concept of a superorganism over the following 20 years in a series of influential books and popular essays (Wheeler 1923, 1928, 1939). Both Clements and Wheeler viewed the organismal metaphor as licensing the ascription of adaptive traits to groups of organisms, and so for viewing natural selection as operating directly on those groups. Thus, the superorganism tradition in biology was intertwined with group selection, with the operation of natural selection at the group level, and this aspect to the superorganism tradition became most closely associated with the Chicago school of ecology headed by Warder Clyde Allee.

While the evolutionary and functional motivations for viewing groups of living things as organisms led to an endorsement of group-level adaptations, the positing of distinctively psychological properties at the group level was a further step, though surely one facilitated by the superorganismic metaphor. The kinds of psychological capacities ascribed to superorganismic groups included the perceptual and communicative abilities needed to collect information to forage, the deliberative capacity to sum evidence and regulate hive thermodynamics in response to this evidence, and the capacity to detect damage to a nest and distribute resources necessary for its repair. Since these were particular psychological capacities—for perception, for decision-making, for planning—it perhaps makes more sense of the way in which psychology enters into the superorganism tradition to talk of the specific cognitive adaptations posited in particular cases, rather than of superorganisms as having "group minds".

The collective psychology tradition began in post-Commune European social thought in the last third of the nineteenth-century, and includes the work of the historians Hippolyte Taine and Henry Fournial, the sociologists Gabriel Tarde and Emile Durkheim, the criminologists Scipio Sighele and Pasquale Rossi, and the novelists Emile Zola and Thomas Hardy. It is motivated not so much by evolutionary and functional considerations as by the perception of a genuinely new kind of social entity, "the crowd", a term used broadly to include almost any group of people, from face-toface gatherings of people, to people in trade unions, to the electorate as a whole. Crowds were characterized by a psychology distinctive from that found in individuals, and this collective psychology was much more essential to the nature and identity of crowds than were particular cognitive adaptations to that of superorganisms. The most enduring publication in this tradition of thought is Gustav Le Bon's "The Crowd", first published in 1895 and translated and reprinted many times since then.

One can distinguish two strands of thought in the collective psychology tradition. The first, epitomized by Le Bon's "The Crowd", adopts a predominantly negative view of collective psychology, the psychology of the crowd. The psychology of a crowd was characterized in juxtaposition to that of the individual. While individual psychology was rational, conscious, and controlled, that of the crowd was emotional, unconscious, and potentially uncontrollable. Crowds had a psychology, but it was the psychology of an inferior and destructive type, described within the tradition as feminine (rather than masculine) and primitive (rather than civilized). The second strand to the collective psychology tradition was more sanguine about groups of people and the psychology that was associated with them, and arose in part as a counter to the pessimistic view just sketched. In this strand, groups of people are the agents whose actions are responsible for various cultural achievements, and those who conceptualize the psychology of the group in these terms include Wilhelm Wundt in his work on Völkerpsychologie (Wundt 1916), Emile Durkheim in his view of collective representations as the foundation for a sociology distinctive from individual psychology (Durkheim 1953), and William McDougall in delineating social psychology from both psychology and sociology (McDougall 1920). Rather than positing a psychology that is an inversion of the excellences of the psychology of the individual, here the group mind lies behind accomplishments that can only be achieved by groups of people functioning in unison.

Group-level cognition and the social manifestation thesis

There are two very different claims about cognition that are made in the collective psychology tradition, and an unacknowledged shift between them is pervasive within that tradition (see Chap. 11 in Wilson 2004). The first is the idea that groups can have or can be thought of as having minds in something like the sense in which individuals can have minds. Such group minds will lack some (if not many) of the features that individual minds have—consciousness, for example—but it will be nonetheless true that they perceive, reason, deliberate, and remember. These psychological traits are not simply properties of the individual members of the group, but features of the group itself. There is group-level cognition, in much the way that those within the superorganism tradition claimed that groups of social insects possessed group-level adaptations. In discussing the group mind hypothesis, the evolutionary biologist David Sloan Wilson has claimed that groups:

can also evolve into adaptive units with respect to cognitive activities such as decision making, memory, and learning. As one example, decision-making is a process that involves identifying a problem, imagining a number of alternative solutions, evaluating the alternatives, and making the final decision on how to

behave. Each of these activities can be performed by an individual as a self-contained cognitive unit but might be performed even better by groups of individuals interacting in a coordinated fashion. (Wilson 1997: S128)

Here Wilson expresses the idea of group-level cognition, and the examples he gives to illustrate the phenomenon are foraging and resource allocation strategies in bee colonies, human group decision making, and voting behavior in buffalo herds in deciding direction of movement for the herd.

This understanding of what embracing a collective psychology amounts to contrasts with another view, one that concerns individual cognition. This is the idea that individuals engage in some forms of cognition only insofar as they constitute part of a social group. Elsewhere (Wilson 2001, 2004), I have called this the social manifestation thesis, since it is a thesis about how some psychological capacities are manifested only in certain kinds of social circumstances. Many emotions, or the particular forms they take, are good candidate psychological capacities that satisfy the social manifestation thesis. Consider the feeling of personal love, or the shared joy of participating in a preferred activity with someone else. Both of these emotions, or certain forms they take, might be manifested only when one was (respectively) together with the person loved, or undertaking the joint activity, and thus require a certain social context in order to be realized.

To take an example pertinent to the literature on crowd psychology, perhaps heightened levels of emotion or irrationality of certain kinds are properties that individuals manifest only when they form part of a crowd. Heightened emotion or irrationality of certain kinds would be properties that individuals (rather than groups) possess, but individuals would manifest such properties only when they formed part of a crowd. Here "the crowd" serves as the social context in which individual cognition takes place, rather than as the subject of cognition itself.

The social manifestation thesis is perhaps most perspicuously seen as a particular version of a general cluster of views about cognition that goes under various names: cognition as situated, embedded, extended, or externalist. Although there are not only nuances but also significant differences between projects characterized under each of these labels, in this context it is what they share that is of more importance. They present a view of cognition as the property of individuals, but only insofar as those individuals are situated or embedded in certain physical environments and social milieus. Externalism (as I shall call it for ease of reference) began in the philosophy of mind and language as a view of how mental states, particularly intentional mental states (i.e., those with content or meaning) were individuated or taxonomized (e.g., Putnam 1975, Burge 1979), but more recently has been articulated in terms of what Clark and Chalmers (1998) call the extended mind thesis, the idea that the mind literally extends beyond the head into the world (see Chap. 3 in Wilson 1994, 1995; Rowlands 1999, 2003). For cognition to be situated, in this latter sense, is not simply for us to have to invoke the social context in order to specify just what psychological capacities and states the individual has, but for parts of the world to physically constitute those individual capacities. Accepting the extended mind thesis means holding that the mind is not physically bounded by the body but extends into the environment of the organism.

The extended mind thesis has also been called active externalism (Clark and Chalmers 1998), since it emphasizes the ways in which cognitive activity—cognitive processes in action—involve physical structures that are external to the individual agent. The social manifestation thesis, so understood, emphasizes the physically constitutive role that an individual's social milieu plays in her cognitive activity. In the case of memory, the social manifestation thesis implies that the embedding of the activity of remembering in social context is constitutive of those activities.

The extended mind version of externalism represents a stronger and more striking view of the mind than do earlier forms of externalism. It is a view that embraces the claim that technological and cultural artifacts may be physically constitutive of cognition (Goody 1977, Hutchins 1995, Clark 2003), and so suggests that the mind is encultured or technologically enhanced in a fairly deep sense (cf. Shore 1996). In the case of memory, the extended mind calls for us to take what are sometimes called external storage devices, such as sketchpads or notebooks, not simply as alternatives to or complements of our internal storage devices, but as integral to our capacities to remember (see also Sutton 2004, in press).

This brings me to a second dimension of strength to externalist views, including the extended mind thesis. This concerns whether externalism is a global doctrine, one that applies to the mind as a whole, or is a view that is true of just some cognitive capacities. Although I know of no defenses of global externalism, externalism has been defended as a global view of particular cognitive capacities and states, such as perception (see Chap. 5 in Rowlands 1999) and folk psychology (see Chaps. 7–9 in Wilson 1995). One question that we will address in the remainder of the paper is whether it might be true globally of memory.

With that much by way of conceptual and historical background, let us shift our attention to the literature specifically on collective memory. Before turning to the sorts of research surveyed by Wertsch (2002) and Misztal (2003), I shall briefly consider the work of the person credited with initiating studies of collective memory, the philosopher-cum-sociologist Maurice Halbwachs.

Halbwachs on collective memory

The phrase "collective memory" has its origins in the work of Maurice Halbwachs, in particular in his "The

Social Frameworks of Memory" (Halbwachs 1992) and in his posthumously published "The Collective Memory" (Halbwachs 1980). Halbwachs had been a lycée student of the philosopher Henri Bergson but came under the influence of Emile Durkheim as his work became more sociological in its orientation. He is plausibly seen as a part of the collective psychology tradition, particularly of its later, more optimistic strand. As I shall argue, we find in Halbwachs the same shift between an endorsement of group-level cognition and the recognition of the importance of socially manifested individual cognitive abilities that exists in the collective psychology tradition more generally. The legacy that has persisted, and that has been incorporated in contemporary work that stems from Halbwachs, builds primarily on a view of collective memory as a socially manifested, individual psychological capacity.

At the core of Halbwachs's conception of collective memory is the contrast between collective and individual memory. (Halbwachs also calls individual memory "personal" and "autobiographical" memory, and collective memory "social" and "historical" memory [see Halbwachs 1980, pp50–52].) Autobiographical memory is the memory of things that I have experienced myself, things that I can remember myself having been present for. Historical memory, by contrast, extends the scope of these memories by incorporating information about the world that goes beyond one's own experience. These are still things that "I remember", and they include facts about what happened on a certain date before one was born, about who has also been to places that you have been to (but not with you), and who said what when. While Halbwachs draws a contrast between the two in order to emphasize several ways in which historical memory claims priority over autobiographical memory, he also seeks to undermine the contrast by showing how completely historical memory pervades autobiographical memory. For example, in the first two chapters of "The Social Frameworks of Memory" Halbwachs takes dreams to be the epitome of "memory" occurring outside of a social framework, and he begins his conclusion to the book with a thought experiment centered on an individual detached from society. Social frameworks are crucial for the memory of an individual. Historical memory, in turn, constitutes a kind of social framework for the functioning of individual memory, creating a social context in which one remembers the things particular to oneself.

If that were all that the contrast between individual and collective memory amounted to, then Halbwachs could at most be advocating a form of the social manifestation thesis about memory. For the claim that (say) autobiographical memory is suffused with historical memory would simply be a claim about two kinds of memory that individuals possess, and the relationship between them. Yet Halbwachs is clear that he also means to encompass something more with the term "collective memory", with the core of the second half of "The Social Frameworks of Memory" devoted to

moving beyond individual-level cognition to group-level cognition. Halbwachs (1992) says, at the outset of Chapter 5, that he has thus far limited himself

to observing and pointing out all that is social in individual recollections—those recollections in which every person retrieves his own past, and often thinks that this is all that he can retrieve. Now that we have understood to what point the individual is in this respect—as in so many others—dependent on society, it is only natural that we consider the group in itself as having the capacity to remember, and that we can attribute memory to the family, for example, as much as to any other collective group (p 54).

He then proceeds to examine the collective memory of the family (Chap. 5), of religious groups (Chap. 6), and of social classes (Chap. 7). These discussions primarily consist, however, of an exploration of the ways in which each of these groups constructs traditions and conventions that, in turn, influence the memories of individuals. My hunch is that despite his own rhetoric, Halbwachs's real interest is in a version of the social manifestation thesis about memory (I defend this claim about major figures in the collective psychology tradition and about David Sloan Wilson's contemporary resuscitation of the superorganism tradition in the final section of my "Boundaries of the Mind").

If that hunch is correct—not something I have tried to argue for here, but merely suggest—then one question to ask concerns the strength of the version of the social manifestation thesis that Halbwachs seeks to defend. In the previous section, I distinguished two ways in which externalism could be articulated as quite a strong thesis—one concerning whether it embraced the idea of the extended mind, the other concerning whether it was held as a global view of cognition. Halbwachs often expresses himself in ways that suggest that he thinks that all memory is socially manifested in that what is left once one strips away the social context of autobiographical memory is nothing that is properly called memory at all. Although in the core four chapters of "The Collective Memory" Halbwachs does not seem to have explicitly considered the idea that individual cognition could be extended, he does anticipate something like an extended mind view of memory in his 1939 essay on the collective memory of musicians (appended as Chap. 5 of The Collective Memory), where he draws attention both to the totality of musician and score—which extends the performative musical memory of an individual musician—and that of musicians in an orchestral context (see especially pp161-166). More generally, Halbwachs's focus on the role of group traditions and conventions in individual memory might well be construed as an anticipation of something like an extended mind view of memory. On such a view, what it is for me to (say) remember the death of a close relative is for me to participate in the sorts of rituals and traditions—visiting a grave, toasting to the deceased, collectively observing a minute of silence—that are normatively acceptable in my family group. This participation is not a cause or an effect of my remembering, but a constituent part of it, the part that does not take place within the boundaries of my body.

This historical and conceptual framework sets the scene for our look at contemporary appeals to collective memory that percolate from within the disciplines of sociology, history, political science, and anthropology to interdisciplinary studies of social memory. I shall organize the discussion around four issues that have been topical in such studies, and for which our conceptual framework may prove particularly useful.

Collective Memory in the Contemporary Social Sciences

Reductionism in sociology

Olick (1999) has recently distinguished between "two cultures" within sociology that invoke the idea of a collective memory that are separated by their views of methodological individualism in the social sciences. The first of these approaches, what Olick thinks of as collected memory research, views memory simply as "the aggregated individual memories of the members of a group" (Olick 1999: p 338), and is typified by the work of Howard Schuman on the survey-based measurement of the effect of group membership (such as generation) on knowledge of historical events. Olick characterizes such work as individualistic in that its central posits are ultimately reducible to the activities of individuals, and "ultimately it is only individuals who do the remembering" (loc.cit.). The second of these approaches, by contrast, is more robustly collectivist and holistic about collective memory, viewing group memories both as the subjects of explanations (the dependent variable, in Olick's terms) and as what is invoked to explain behaviors or trends (the independent variable). Olick diagnoses "an unresolved tension between individualist and collectivist strains running through Halbwachs's work on collective memory" (Olick 1999: p 334) that parallels the difference between the two cultures that he identifies more generally in sociological appeals to collective memory.

The application of the social manifestation and extended mind theses to the case of collective memory, however, suggests that Olick (perhaps like Halbwachs himself) is operating with a dichotomy that is not exhaustive. For between the individualistic approach and the collectivist approach are extended mind views that, in some sense, borrow from both. From individualistic approaches, they accept that remembering is an activity that is done by individuals, and from collectivist approaches they take the idea that this activity is not bounded by what goes on in the head of the individual, and so encompasses commemorative objects and practices, mnemonic devices and strategies, external symbols

and structures. If Olick's dichotomy in fact accurately characterizes the work in the field that he summarizes (see also Olick 2003), then the social manifestation and extended mind theses about memory offer only a framework for undermining the putative conflict between the "two cultures", but the basis for constructive work on the sociology of memory.

History and memory

Although history has provided one of the original sites at which the issue of methodological individualism has been played out (e.g., Popper 1945, Watkins 1957), until relatively recently historians had paid little attention to the relationship between history and memory per se, content largely to echo the ancients, such as Cicero (history is "the life of memory") and Herodotus (historians as "the guardians of memory") in viewing history and memory as continuous with one another. The relationship between memory and history has come to be seen as more problematic and complicated, however, in contemporary historiography. Here is one (admittedly, caricatured) starting point for describing the relationship. Memory is viewed as private, subjective, unverified, and personal, while history, armed with archives, source documents, and independent corroboration, is public, objective, verified, and interpersonal. History "tells it as it really is", while memory can provide at best a partial view of how it seems to one participant. Individual memories, then, can contribute to a history but will feature primarily as source material that itself needs to be integrated into a larger historical analysis; memory is no substitute for the writing of history. On this view, oral histories are likely to be seen as lacking in credibility, and the idea of collective memory as a way of thinking about history viewed with some skepticism.

One might well complain, as some have (Burke 1989) that such an endpoint is simply a function of a mistaken starting point, insofar as it is premised on a misleading contrast between the reliability and objectivity of history and the unreliability and partiality of memory (Burke himself assimilates history to memory, on this point). That may be true, but not because, as Burke himself suggests, that history is as partial and unreliable as memory. Rather, it rests on a view of memory that is "individual" in one of the senses that Halbwachs considered it "individual": in abstraction from any social context. If individual memory is socially manifested, however, and if we construe collective memory in terms of the notion of an extended mind, then we could expect to find much more rapprochement between history and memory.

For example, collective memory itself can be a subject of history, involving the exploration of various modes of collective memory over time and place, as Le Goff (1992) and Burke (1989) have, in different ways, suggested. In the third chapter of his "History and Memory", Le Goff

provides a taxonomic outline of the kinds of sites available for a systematic study of collective memory that would include topographical studies of archives, libraries, and museums; monumental studies of cemeteries and buildings; symbolic studies of ceremonies, pilgrimages, anniversaries and emblems; functional studies of manuals, autobiographies and associations; and a variety of further phenomena, including souvenirs, photo albums, the techno-enhancement of memory, and the development of biological and other metaphors for the transmission of information from past to future. A view of memory as a capacity that extends beyond the boundary of the individual facilitates the study of such "sites of collective memory" as integral to studies of memory as an individual-level phenomenon, and viceversa. Memory is an individual-level capacity that takes on some of its most meaningful and significant forms only in certain kinds of social contexts, contexts that constitute the very capacity to remember.

In "History as Social Memory", Peter Burke concentrates on the modes and functions of social and public memories, emphasizing in particular the political uses not only of remembering but of forgetting. At both the individual and the collective level, the parameters to the phenomenon of forgetting potentially reveal much about the processes of remembering. When do "we" forget, and why, and what does this tell us about our remembering? Just as forgetting has been construed primarily as a pathology of the individual in approaches ranging from the psychotherapeutic (say, in the study of repression and trauma) to the pharmacological (say, in the study of Alzheimer's disease), so too has collective forgetting been viewed as a social pathology, one tied to the denial of (or refusal to acknowledge) the past of one's own society or the systematic distortion of claims about a nation's past either through civil or political means. The collective erasure or manipulation of the past provides one means by which group identities can be consolidated or weakened, and as Ricoeur (2003) has recently emphasized, the linkage between forgetting and forgiveness—as well as with a fuller range of moral emotions, such as guilt, shame, and elation or triumph—makes the study of forgetting a potentially rich source of insight to the relationship between history and memory (see also Chaps. 1 and 2 in LaCapra 1998).

Commemoration and nationalism

Perhaps the most heavily trafficked point of intersection between history, sociology, and political science that appeals to collective or social memory concerns the place of commemoration in the construction of group, especially national, identity, and it is here that the kind of deflationary reading I have been giving to talk of collective memory comes under greatest pressure. The focus in the study of commemoration and group identity is on the kinds of event that become commemorated in various groups (religious, ethnic, national), the ways in

which such events are given broader significance in the identity of the group through commemoration, and comparisons and contrasts between the patterns in these forms of collective remembrance across different social groups. The commemoration of both the traumas and triumphs of war play a central role in these debates, in part because of their importance to national identity and in part because they represent—through war memorials, public holidays, ceremonies, and other forms of public recognition—a key way in which government policies and actions not only shape our view of a shared past but direct our collective views of a shared future. Consider two recent anthologies studying commemoration, Jay Winter and Emmanuel Sivan's "War and Remembrance in the Twentieth Century" (Winter and Sivan 1999), organized around war and memory, and Jeffrey K. Olick's "States of Memory", which focuses on nation-

In their preface and introduction to "War and Remembrance in the Twentieth Century", Winter and Sivan are explicit in their adoption of what they call a social agency approach to understanding war and memory, situating themselves in opposition to both the focus on elite groups that they find in Nora's (1996) "realms of memory" approach to history and memory, and to the Durkheimian strand they detect in Halbwachs's own appeal to collective memory. While engaging with studies of collective memory, Winter and Sivan (1999) also aim to deflate and ground much of what is said about collective memory (which almost always occurs in "inverted quotes" in their introduction, as a kind of caution against reification) by emphasizing the activities that constitute the social remembering of various kinds of social groups. In discussing Halbwachs's work, they say that "memory does not exist outside of individuals, but it is never individual in character" (p 24), taking this to imply, in terms I have been using here, that it is individuals, rather than groups, that are the subjects of memory, but also that such individuals remember only or primarily as members of social groups.

One of the limitations of the viewpoint that Winter and Sivan adopt is that it simply adopts the individualistic view of cognition that we noted as being predominant in the cognitive sciences, using that as an analogical basis for the relevance of those sciences for studies of collective memory. For example, from such studies of cognition, Winter and Sivan (1999: p 12) extract the idea that individual memory traces naturally fade, and that autobiographical memory is more enduring than other forms that individual memory takes, transposing these ideas to the context of collective remembering. While for certain purposes such an approach can be useful, it stops short of providing a way to rethink the nature of individual memory itself. What I have been suggesting is that taking the extended mind seriously as a view of individual cognition, and so rejecting individualism as a view of cognition, constitutes the basis for a more integrative treatment of memory, one that begins, with Winter and Sivan, with the activity of remembering, but that bypasses the choice between individualistic minds and social activities.

Nations are perhaps the most important social group to which individuals belong, sometimes because they provide a primary way in which individuals identify themselves (e.g., "I'm an Australian"), but also because even when they do not, it is at the national level that governments are most able to concentrate resources in ways that reinforce national identity. This can be done through public holidays (Zerubavel 2003) or through centennial celebrations (Spillman 1997, 2003). Thus, public holidays typically commemorate events or people of significance in the history of the nation on an annual basic. They are often structured by rituals, ceremonies, and personal undertakings that reinforce the feeling of belonging to a particular national (or even sub-national) group, and governments command resources that can be selectively distributed to promote activities deemed appropriate. Centennial celebrations provide an opportunity to create, reinforce, or change the historical image that people have of themselves as members of a nation, and thus become major sites of contestation within a

This comparative literature on commemoration and nationalism largely takes for granted the need to attribute memory to collective subjects, and so to "go beyond the individual" in a more adventuresome way than I have been advocating. As such, this literature poses an interesting challenge to a framework structured by the social manifestation and extended mind theses. The challenge here is to show that one can provide an adequate explanatory account of the generalizations that emerge about how "different nations remember" that stops short of making nations themselves the subjects of memory, the units that do the remembering (see Chap. 7 in Fulbrook 1999). Whether or not the challenge can be met is a topic for another time.

Ethnographic and technological minds

The idea of group minds and collective memory has arisen in contemporary cognitive anthropology in at least two largely distinct sub-fields: within the anthropology of technology, where the concept used is that of distributed cognition, and within ethnographic studies of the relationship between culture and cognition. Exemplary in the former is "Cognition in the Wild" (Hutchins 1995), which focuses on the distributed cognitive system necessary to navigate a large military naval vessel, and in the latter is "Culture in Mind" (Shore 1996), organized around the problem of how to conceptualize the relationship between culture and mind. While neither book is primarily about memory, they do espouse views of memory that derive from their more general claims about cognition. As in the previous cases, I think that the distinction between the group mind hypothesis and the social manifestation thesis helps to

sharpen our view of just what Hutchins and Shore are claiming.

One of the central ideas in "Cognition in the Wild" is that the kind of cognitive activity necessary to successfully navigate a military naval vessel is distributed both among individuals, and between individuals and the cognitive artifacts on which they rely, the various instruments, charts, and social structures that make possible the range of cognitive tasks that must be completed. Developed as a view that presents a conception of cognition that departs from that within standard cognitive science, where cognition is principally the manipulation of symbols contained within the heads of individuals, Hutchins sometimes presents his view in ways that suggest that groups are the subjects of cognition, rather than the context in which individual cognition takes place. While such a view may best characterize some of the cognitive activities that take place on the ship, it seems problematic when articulated as a view specifically of memory, in this context. For while the storage and recall of information do require interactions between individuals (e.g., calling out bearings aloud before plotting them), and the integration of individuals with their technospace (e.g., specially located and structured log books), these are most readily conceptualized as examples of socially manifested memory, or more specifically as cases of extended individual memory. Missing here is just the kind of group-level activity that one finds in cases of commemoration and identity consolidation that we discussed in the previous examples, and it seems misleading to assimilate the two cases, especially if commemoration and identity consolidation cannot be accounted for with the resources of the extended mind thesis.

The main construct that Shore makes use of in "Culture in Mind" is that of a model, a schematic representation that can be inter-subjectively shared by a group. Models can be either cognitive or cultural (and institutional), and the process whereby cultural models become cognitive models is what he calls analogical schematization, a process that unites cultural representations with cognitive representations, and in so doing provides the key to understanding "culture in mind". Cognitive models are, in Shore's view, always "part memory, part invention" (Shore 1996: p 47) in that they provide a stored framework for interpreting incoming information and for going beyond it. But we should consider just what analogical schematization amounts to in the light of our discussion thus far.

This could be understood along the kinds of lines that Sperber (1996) has advocated, with cognitive representations being an entirely intracranial matter and cultural representations serving as prompts or inputs to cognition proper. Analogical schematization would then essentially be a process for turning cultural stuff "out there" into cognitive stuff "in here". Alternatively, analogical schematization could be understood within the externalist framework I have outlined in the preceding sections, whereby it views external, cultural rep-

resentations and internal, "cognitive" representations becoming integrated into an extended cognitive system. On this latter view, talk of the internalization of cultural models is no more (and no less) appropriate than talk of the externalization of cognitive models, and analogical schematization is a two-way street between culture and cognition. Here, individual memory extends itself into shared public culture and there is, in effect, no gap between culture and mind to be bridged at all.

Why appeal to collective memory at all?

I have presented the social manifestation and extended mind theses, as providing a way of understanding collective minds in general that falls between the traditional individualistic view of the mind and the endorsement of distinctively group-level cognition. This view receives support from the sample of contemporary work on collective memory that I have summarized from the social sciences. Insofar as it sheds light on how such researchers conceptualize (or perhaps should conceptualize) their appeals to collective memory, it earns its keep. I want to conclude by posing and then answering a different kind of question about collective memory.

At the outset of the paper, I noted the prevalence of cognitive metaphors across the biological and social sciences. The question I want to address is why such metaphors are so prevalent, both in common sense and in academic discourse, and in particular why talk of the memory of groups of various kinds (families, generations, classes, races and ethnic groups, nations) is so prevalent. What is it that this kind of cognitive metaphor adds to discourse about (say) the commemoration of war or knowledge of historical events? The question is one facing anyone who holds that groups do not literally have minds in the sense in which individuals do.

The very short answer to this question is this: that the cognitive metaphors crystallize agency. But that is simply to answer a question about one metaphor by invoking another, and we can do better than that. The idea is that since human beings with minds are paradigms of agents, we can make the agency of non-human entities more perspicuous by attributing cognitive capacities to them. In effect, adopting the cognitive metaphor with respect to groups assimilates those groups to our paradigmatic agents, human beings, and so allows us more easily to see them as agents in their own right, and view them accordingly. Thus, the cognitive metaphor makes more vivid the competing claims that groups make, the ways in which groups can be both causally and morally responsible for certain actions, and the justifications given for treating groups in certain ways.

This is a view that I have defended elsewhere (Chaps. 3 and 4 in Wilson 2005) in discussing the role of the cognitive metaphor in the biological sciences. In particular, I have argued that cognitive metaphors crystallize the agency of organisms (many of which, like groups, do not

literally have minds). A distinction that I introduced in making this claim may be of use in understanding further what the crystallization of group agency amounts to.

We can distinguish between a minimal notion of agency, what I have called functional agency, and a richer notion of agency, cognitive agency, one that adds to that minimal notion cognitive capacities. Something has functional agency, or is an agent simpliciter, if it is a physically bounded entity that has inner control and outer autonomy. Put simply, an agent is something that can control what lies within its physical boundaries, and that has autonomy from what lies beyond those boundaries. As the characterization of this view of agency as minimal might suggest, many kinds of things are agents: for example, there are physical agents (from molecules to planets), biological agents (from genes to organisms), and artifactual agents (from tools to computers). The claim made by the crystallization thesis is that by attributing cognitive agency to things that merely have functional agency, we magnify or heighten our sense of what those agents can do, resolving the indeterminacies and unclarities that pervade our understanding of functional agency.

The same is true, I am suggesting, of groups. We often naturally talk of groups of people as having intentions, beliefs, goals, and memories. My claim is that what such talk does is add intelligibility to the actions of those groups, and a greater sense of their place in the causal and normative nexus, through their assimilation to human agents. Without the attribution of cognitive agency, the agency of groups can seem puzzling, unclear, and even mysterious. Cognitive agency removes this puzzlement, unclarity, and mystery.

One of my main points, however, and one to which there is much sensitivity in the contemporary literature we have briefly touched on, is that the appeal to cognitive agency at the group-level—to, for example, "collective memory"—can create its own puzzles and mysteries. Whether or not the social manifestation and extended mind theses ultimately provide the basis for furthering constructive projects in the humanities and social sciences that appeal to collective memory, they should at least take much of the sting out of these puzzles and mysteries.

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