

Chapter 9

Transactive Memory: A Contemporary Analysis of the Group Mind

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The most influential theory of group behavior that has ever been developed is currently in disfavor. This is the theory of the *group mind*. Social commentators once found it very useful to analyze the behavior of groups by the same expedient used in analyzing the behavior of individuals. The group, like the person, was assumed to be sentient, to have a form of mental activity that guides action. Rousseau (1767) and Hegel (1807) were the early architects of this form of analysis, and it became so widely used in the 19th and early 20th centuries that almost every early social theorist we now recognize as a contributor to modern social psychology held a similar view. McDougall, Ross, Durkheim, Wundt, and LeBon, to name just a few, were willing to assume that the group has a mental life that plays a part in the patterning of group behavior.

Theories of the group mind fell victim to the behavioral revolution in psychology and have not yet returned. Even as research in cognition, memory, artificial intelligence, and information processing reaches feverish intensity in the field, group mind ideas seem generally ignored, perhaps because the group mind concept still reminds many of the worst excesses of mentalistic theorizing—from genetic theories of thought content (e.g., Pareto, 1935) to explanations based on telepathy and the supernatural (e.g., Jung, 1922). Obviously, these ideas do not represent the only direction in which group mind theories may develop (cf. Bartlett, 1932), and this chapter presents a fresh start toward a more useful formulation. The study of transactive memory is concerned with the prediction of group (and individual) behavior through an understanding of the manner in which groups process and structure information. Like early theories of the group mind, transactive memory draws deeply on the analogy between the mental operations of the individual and the processes of the group. Unlike early theories of group mind, the new notion of transactive memory benefits from recent advances in the study of the thinking processes of the individual.

General Principles

A transactive memory system is a set of individual memory systems in combination with the communication that takes place between individuals (Wegner, Giuliano, & Hertel, 1985). To understand how such a system operates, it is useful to consider its components. We begin, then, by looking at the individual's memory system and turn subsequently to see how this system becomes connected with those of other individuals.

Individual Memory

The processes of a person's memory are commonly understood to occur at three different stages. Information is entered into memory at the *encoding* stage, it resides in memory during a *storage* stage, and it is brought back during the *retrieval* stage. This breakdown of stages is useful for analysis because the successful operation of memory at one stage may have little consequence for the operation of memory at another. We have all had the experience of feeling we had encoded something, for instance, but found it impossible to retrieve. When this happens, it is not obvious where the memory failure has occurred. Did the item get into memory but somehow fall out? Did it get in and stay in, but we could not find it? Or did it really never get in at all? These questions highlight the possibility that separate processes may operate on information at each of these junctures. We may witness a robbery and, in the excitement, fail to encode the robber's face or clothing; we may fail in storing this information because someone asks us confusing questions about the robbery and suggests things to us we did not even see; we may fail to retrieve the information because later the prosecutor does not jog our memory by asking us the proper questions.

A further set of issues in individual memory centers on how the stored information is organized. Obviously, it takes a marvelous filing system to retrieve the color of a tomato in under a second—when one considers the millions of other questions that can be answered successfully by most people in the same short interval. Memory theorists have proposed a variety of organizational processes whereby items of information are not merely stored one by one but are stored as connected sets. This means that whole sentences may be stored as connected sets of items or, in the case at hand, that *tomatoes* may be stored with the color *red*. Processes that make or break such connections can occur during encoding to create organization, and complementary processes that operate at retrieval can locate the item by taking advantage of the organized storage that has been produced. By this logic, at some point early in one's experience with vegetables, the words *tomato* and *red* were encoded and the connection between them was encoded as well. Subsequent retrieval of either one then is often accompanied by retrieval of the other. At the same time, retrieval of one of these items very seldom yields the memory of a *waterfowl*, allowing us to recognize